# Monitoring Agent for Microsoft Exchange Server
Version 08.20.03.00

*Reference*

**Note**

Before using this information and the product it supports, read the information in “Notices” on page 331.

This edition applies to version 08.20.03.00 of the Monitoring Agent for Microsoft Exchange Server and to all subsequent releases and modifications until otherwise indicated in new editions.

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# Chapter 1. Monitoring Agent for Microsoft Exchange Server

The Monitoring Agent for Microsoft Exchange Server offers a central point of management for your Microsoft Exchange Server environment or application.

The software provides a comprehensive means for gathering the information that is required to detect problems early and to prevent them. Information is standardized across the system. You can monitor multiple servers from a single console. By using the Microsoft Exchange Server agent you can easily collect and analyze Microsoft Exchange Server specific information.

**Installing and configuring the agent**

Install the monitoring agent on the system where the application that you want to monitor is located.

For more information, see the agent installation and configuration topics in IBM Knowledge Center:

- IBM Cloud Application Performance Management
- IBM Cloud Application Performance Management, Private

For supported operating systems, see System Requirements in the APM Developer Center.

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# Chapter 2. Dashboard

Open the Application Performance Dashboard in the Cloud APM console to see a status summary of all your applications. As you drill down to dashboard pages for specific applications and their supporting elements, more details are available about the selected item. Use the Microsoft Exchange Server agent dashboard pages to proactively monitor your Microsoft Exchange Server deployment. Each page contains views with key performance indicators.

When an application that includes Microsoft Exchange Server *managed resources* is selected, the navigator and the **Status Overview** tab show Microsoft Exchange Server in the Components group:

- Click **Components** to see a single Microsoft Exchange Server group widget that is displayed along with a group widget for every other data source type in the application.
- Click the Microsoft Exchange Server subgroup to see a group widget for each managed resource in the application.
- Click inside a Microsoft Exchange Server group widget or click a Microsoft Exchange Server managed resource from the navigator **Instances** section to open a dashboard page with KPIs from the selected managed resource.

For more information about the KPIs, click ? in the view or click ? in the dashboard banner.

## Default dashboard pages

**Exchange Component Dashboard**
Description needed in JSON

**Exchange Replication Detail**
Use the Exchange Replication Detail dashboard to monitor the replication activities of databases.

**Exchange Replication Detail**
Use the Exchange Replication Detail dashboard to monitor the replication activities of databases.

**Exchange Server Detail**
Use the Overview dashboard to know the overall status of the following Exchange Server resources:

- Mailbox databases and services
- Mailbox reachability
- Information Store and replication of databases
- Message queues and message delivery
- Outlook Web Access (OWA) and ActiveSync activities

**Information Store**
Use the Information Store Detail dashboard to monitor the activities in the Information Store.

**Mailbox Reachability Detail**
Use the Mailbox Reachability Detail dashboard to know the following details:

- Historical trend of inbound and outbound times for the selected email address
- The database name and the mailbox server name for the user

**Mailbox Reachability Detail**
Use the Mailbox Reachability Detail dashboard to know the following details:

- Historical trend of inbound and outbound times for the selected email address
- The database name and the mailbox server name for the user

**MS Exchange Server**
The summary dashboard shows the overall status and availability of each monitored Exchange Server. Review the resource usage and investigate any warning or critical thresholds. If the Events tab shows

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a warning or critical status indicator, open the tab to see the open events and status for the application. Click anywhere on the group widget to drill down to the detailed dashboard.

**MS Exchange Server**
The summary dashboard shows the overall status and availability of each monitored Exchange Server. Review the resource usage and investigate any warning or critical thresholds. If the Events tab shows a warning or critical status indicator, open the tab to see the open events and status for the application. Click anywhere on the group widget to drill down to the detailed dashboard.

**Overview**
Use the Overview dashboard to know the overall status of the following Exchange Server resources:

- Mailbox databases and services
- Mailbox reachability
- Information Store and replication of databases
- Message queues and message delivery
- Outlook Web Access (OWA) and ActiveSync activities

**Additional group widgets**
These pop-up group widgets are displayed after you click a group widget for more details. Some group widgets have links to more granular information in a popup widget, described here.

## Widgets for the Default dashboard pages

**Exchange Component Dashboard**
Description needed in JSON

The following widgets are available in this dashboard page:

**Exchange Server Status**
The Exchange Server Status group widget provides a status gauge and HTML tables that show the overall status of the following resources of Exchange Server:

- Exchange databases and services
- Mailbox reachability
- Exchange store
- Outlook Web Access activities
- Messages queued

**Remember:** This dashboard is used to monitor Exchange Server 2007 and 2010. If you want to monitor Exchange Server 2013, select the Microsoft Exchange Server 2013 component when you create your application.

The following KPIs for the widget are derived from the attributes as described:

- ActiveSync requests queued: The number of HTTP requests that are waiting to be assigned to a thread. This attribute is not available in Exchange Server 2010 Service Pack 1 and 2013. This data is derived from the Requests Queued attribute in the MS Exchange Active Sync data set.
- Databases (critical): The critical state of databases.
- Databases (normal): The up and running state of databases.
- Databases (warning): The warning state of databases.
- Exchange services (critical): The critical state of the Exchange services.
- Exchange services (normal): The up and running state of the Exchange services. This data is derived from the Service State attribute in the MS Exchange Services Detail data set.
- Messages queued: The number of messages that are queued for delivery.

- OWA average response time (ms): The average time (in milliseconds) between the beginning and the end of an OEH or an ASPX request. The value should be less than 100 milliseconds. This data is derived from the Average Response Time attribute in the MS Exchange OWA data set.
- OWA average search time (ms): The average time (in milliseconds) that is required for a search to complete. The value should be less than 5000 milliseconds. This data is derived from the Average Search Time attribute in the MS Exchange OWA data set.
- Reachable: An alphabetic value that indicates whether an email address is reachable. This data is derived from the Reachable attribute in the MS Exchange Reachability data set.
- Store status: The status of the Exchange Information Store.
- Unreachable: An alphabetic value that indicates whether an email address is reachable. This data is derived from the Reachable attribute in the MS Exchange Reachability data set.

**Exchange Server Status**

The Exchange Server Status group widget provides a status gauge and HTML tables that show the overall status of the following resources of Exchange Server:

- Exchange databases and services
- Mailbox reachability
- Exchange store
- Outlook Web Access activities
- Messages queued

**Remember:** This dashboard is used to monitor Exchange Server 2013. If you want to monitor Exchange Server 2007 or 2010, select the Microsoft Exchange Server component when you create your application.

The following KPIs for the widget are derived from the attributes as described:

- ActiveSync current requests: The number of HTTP requests that are received from ASP NET. This data is derived from the Current Requests attribute in the MS Exchange Active Sync data set.
- Databases (critical): The critical state of Exchange databases. This data is derived from the Mailbox Database Name attribute in the MS Exchange IS Store data set.
- Databases (normal): The up and running state of Exchange databases. This data is derived from the Mailbox Database Name attribute in the MS Exchange IS Store data set.
- Databases (warning): The warning state of Exchange databases.
- Exchange services (critical): The critical state of the Exchange services.
- Exchange services (normal): The up and running state of the Exchange services. This data is derived from the Service State attribute in the MS Exchange Services Detail data set.
- Messages queued: The number of messages that are queued for delivery.
- OWA average response time (ms): The average time (in milliseconds) between the beginning and the end of an OEH or an ASPX request. The value should be less than 100 milliseconds. This data is derived from the Average Response Time attribute in the MS Exchange OWA data set.
- OWA average search time (ms): The average time (in milliseconds) that is required for a search to complete. The value should be less than 5000 milliseconds. This data is derived from the Average Search Time attribute in the MS Exchange OWA data set.
- Reachable: An alphabetic value that indicates whether an email address is reachable. This data is derived from the Reachable attribute in the MS Exchange Reachability data set.
- Store status: The status of the Exchange Information Store.
- Unreachable: An alphabetic value that indicates whether an email address is reachable. This data is derived from the Reachable attribute in the MS Exchange Reachability data set.

**Exchange Replication Detail**

Use the Exchange Replication Detail dashboard to monitor the replication activities of databases.

The following widgets are available in this dashboard page:

**Database Copy Status**

The Database Copy Status group widget provides a grid widget that shows the status of Database Availability Group (DAG).

The following KPIs for the widget are derived from the attributes as described:

- Activation Preference: The numeric value used to break ties during database activation when multiple database copies meet the same criteria for activating. This data is derived from the Activation Preference attribute in the MS Exchange Database Availability Group data set.
- Mailbox: The list of mailbox database copies that are available on the monitored node of a database availability group setup. This data is derived from the Mailbox Database Copies attribute in the MS Exchange Database Availability Group data set.
- Replay Lag Time (minutes): The amount of time in minutes, to delay log replay for the database copy. This data is derived from the Replay Lag Time attribute in the MS Exchange Database Availability Group data set.
- Status: The copy status of mailbox databases that is available on the monitored node of a database availability group setup. This data is derived from the Database Copy Status attribute in the MS Exchange Database Availability Group data set.
- Truncation Lag Time (minutes): The amount of time (in minutes) to delay the truncation of log files that have been replayed into the database copy since the replication service was started. The time period starts after the log files are replayed into the database copy. This data is derived from the Truncation Lag Time attribute in the MS Exchange Database Availability Group data set.

**Information Store Public Replication Details**

The Information Store Public Replication Details group widget provides a grid widget that contains information about the replication activities of public mailboxes.

The following KPIs for the widget are derived from the attributes as described:

- Backfill Requests Received: The number of backfill request replication messages that were received from other servers since server startup. This data is derived from the Replication Backfill Requests Received attribute in the MS Exchange IS Public Replication data set.
- Backfill Requests Sent: The number of backfill request replication messages that were sent to other servers since server startup. This data is derived from the Replication Backfill Requests Sent attribute in the MS Exchange IS Public Replication data set.
- Messages Received: The number of replication messages received from other servers in response to backfill requests since server startup. This data is derived from the Replication Backfill Data Messages Received attribute in the MS Exchange IS Public Replication data set.
- Messages Sent: The number of replication messages sent in response to backfill requests from other servers since server startup. This data is derived from the Replication Backfill Data Messages Sent attribute in the MS Exchange IS Public Replication data set.
- Name: The name of the Microsoft Exchange IS Public Replication instance. This data is derived from the Name U attribute in the MS Exchange IS Public Replication data set.
- Status Messages Received: The number of replication status request or response messages that were received from other servers since server startup. This data is derived from the Replication Status Messages Received attribute in the MS Exchange IS Public Replication data set.
- Status Messages Sent: The number of replication status request or response messages that were sent to other servers since server startup. This data is derived from the Replication Status Messages Sent attribute in the MS Exchange IS Public Replication data set.

**Queue Lengths - Top 5**

The Queue Lengths - Top 5 group widget provides a bullet chart widget that contains information about the copy queue length and the replay queue length for the databases. This group widget displays the top five databases in the decreasing order of the copy queue and replay queue lengths. Click in the group widget to view details for all the databases.

The following KPIs for the widget are derived from the attributes as described:

- Copy: The number of log files in a queue that are waiting to be copied and inspected. This data is derived from the Copy Queue Length attribute in the MS Exchange Replication Version630 data set.
- Instance: The name of the instance. This data is derived from the MS Exchange Replication Instance Name attribute in the MS Exchange Replication Version630 data set.
- Replay: The number of log files that are waiting to be replayed. This data is derived from the Replay Queue Length attribute in the MS Exchange Replication Version630 data set.

**Replication Details**

The Replication Details group widget provides a grid widget that contains information about the replication activities of databases.

The following KPIs for the widget are derived from the attributes as described:

- Copy Generation Number: The generation sequence number of the last log file that has been copied. This data is derived from the Copy Generation Number attribute in the MS Exchange Replication Version630 data set.
- Copy Notification Generation Number: The generation sequence number of the last log file that is known to the Microsoft Exchange Replication service. This data is derived from the Copy Notification Generation Number attribute in the MS Exchange Replication Version630 data set.
- Name: The storage group instance name of the Microsoft Exchange Server. This data is derived from the MS Exchange Replication Instance Name attribute in the MS Exchange Replication Version630 data set.
- Replay Generations Complete: The number of log files that have been replayed in the current replay batch. This attribute is not available in Exchange Server 2013. This data is derived from the Replay Generations Complete attribute in the MS Exchange Replication Version630 data set.
- Replay Generations Remaining: The number of log files that remain to be replayed in the current replay batch. This attribute is not available in Exchange Server 2013. This data is derived from the Replay Generations Remaining attribute in the MS Exchange Replication Version630 data set.
- Status: The replication status of the storage group. This data is derived from the Replication Status attribute in the MS Exchange Replication Version630 data set.

**Exchange Replication Detail**

Use the Exchange Replication Detail dashboard to monitor the replication activities of databases.

The following widgets are available in this dashboard page:

**Database Copy Status**

The Database Copy Status group widget provides a grid widget that shows the status of Database Availability Group (DAG).

The following KPIs for the widget are derived from the attributes as described:

- Activation Preference: The numeric value used to break ties during database activation when multiple database copies meet the same criteria for activating. This data is derived from the Activation Preference attribute in the MS Exchange Database Availability Group data set.
- Mailbox: The list of mailbox database copies that are available on the monitored node of a database availability group setup. This data is derived from the Mailbox Database Copies attribute in the MS Exchange Database Availability Group data set.
- Replay Lag Time (minutes): The amount of time in minutes, to delay log replay for the database copy. This data is derived from the Replay Lag Time attribute in the MS Exchange Database Availability Group data set.
- Status: The copy status of mailbox databases that is available on the monitored node of a database availability group setup. This data is derived from the Database Copy Status attribute in the MS Exchange Database Availability Group data set.

- Truncation Lag Time (minutes): The amount of time (in minutes) to delay the truncation of log files that have been replayed into the database copy since the replication service was started. The time period starts after the log files are replayed into the database copy. This data is derived from the Truncation Lag Time attribute in the MS Exchange Database Availability Group data set.

**Information Store Public Replication Details**

The Information Store Public Replication Details group widget provides a grid widget that contains information about the replication activities of public folders.

The following KPIs for the widget are derived from the attributes as described:

- Backfill Requests Received: The number of backfill request replication messages that were received from other servers since server startup. This data is derived from the Replication Backfill Requests Received attribute in the MS Exchange IS Public Replication data set.
- Backfill Requests Sent: The number of backfill request replication messages that were sent to other servers since server startup. This data is derived from the Replication Backfill Requests Sent attribute in the MS Exchange IS Public Replication data set.
- Messages Received: The number of replication messages received from other servers in response to backfill requests since server startup. This data is derived from the Replication Backfill Data Messages Received attribute in the MS Exchange IS Public Replication data set.
- Messages Sent: The number of replication messages sent in response to backfill requests from other servers since server startup. This data is derived from the Replication Backfill Data Messages Sent attribute in the MS Exchange IS Public Replication data set.
- Name: The name of the Microsoft Exchange IS Public Replication instance. This data is derived from the Name U attribute in the MS Exchange IS Public Replication data set.
- Status Messages Received: The number of replication status request or response messages that were received from other servers since server startup. This data is derived from the Replication Status Messages Received attribute in the MS Exchange IS Public Replication data set.
- Status Messages Sent: The number of replication status request or response messages that were sent to other servers since server startup. This data is derived from the Replication Status Messages Sent attribute in the MS Exchange IS Public Replication data set.

**Queue Lengths - Top 5**

The Queue Lengths - Top 5 group widget provides a bullet chart widget that contains information about the copy queue length and the replay queue length for the databases. This group widget displays the top five databases in the decreasing order of the copy queue and replay queue lengths. Click in the group widget to view details for all the databases.

The following KPIs for the widget are derived from the attributes as described:

- Copy: The number of log files in a queue that are waiting to be copied and inspected. This data is derived from the Copy Queue Length attribute in the MS Exchange Replication Version630 data set.
- Instance: The storage group instance name of the Microsoft Exchange Server. This data is derived from the MS Exchange Replication Instance Name attribute in the MS Exchange Replication Version630 data set.
- Replay: The number of log files that are waiting to be replayed. This data is derived from the Replay Queue Length attribute in the MS Exchange Replication Version630 data set.

**Replication Details**

The Replication Details group widget provides a grid widget that contains information about the replication activities of databases.

The following KPIs for the widget are derived from the attributes as described:

- Copy Generation Number: The generation sequence number of the last log file that has been copied. This data is derived from the Copy Generation Number attribute in the MS Exchange Replication Version630 data set.

- Copy Notification Generation Number: The generation sequence number of the last log file that is known to the Microsoft Exchange Replication service. This data is derived from the Copy Notification Generation Number attribute in the MS Exchange Replication Version630 data set.
- Name: The storage group instance name of the Microsoft Exchange Server. This data is derived from the MS Exchange Replication Instance Name attribute in the MS Exchange Replication Version630 data set.
- Replay Generations Complete: The number of log files that have been replayed in the current replay batch. This attribute is not available in Exchange Server 2013. This data is derived from the Replay Generations Complete attribute in the MS Exchange Replication Version630 data set.
- Replay Generations Remaining: The number of log files that remain to be replayed in the current replay batch. This attribute is not available in Exchange Server 2013. This data is derived from the Replay Generations Remaining attribute in the MS Exchange Replication Version630 data set.
- Status: The replication status of the storage group. This data is derived from the Replication Status attribute in the MS Exchange Replication Version630 data set.

**Exchange Server Detail**

Use the Overview dashboard to know the overall status of the following Exchange Server resources:

- Mailbox databases and services
- Mailbox reachability
- Information Store and replication of databases
- Message queues and message delivery
- Outlook Web Access (OWA) and ActiveSync activities

The following widgets are available in this dashboard page:

**Client Access (history)**

The Client Access (history) group widget provides line charts that contain information about the Exchange ActiveSync requests and activities of the Outlook Web Access (OWA) client, such as average response time and search time.

The following KPIs for the widget are derived from the attributes as described:

- Current Requests: The number of HTTP requests that are received from ASP NET. This data is derived from the Current Requests attribute in the MS Exchange Active Sync data set.
- OWA Average Response Time: The average time (in milliseconds) between the beginning and the end of an OEH or an ASPX request. The value should be less than 100 milliseconds. This data is derived from the Average Response Time attribute in the MS Exchange OWA data set.
- OWA Average Search Time: The average time (in milliseconds) that is required for a search to complete. The value should be less than 5000 milliseconds. This data is derived from the Average Search Time attribute in the MS Exchange OWA data set.
- Timestamp (ActiveSync): The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange Active Sync data set.
- Timestamp (OWA): The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange OWA data set.

**DLP Policy Tips**

The DLP Policy Tips group widget provides details about Total server Failed DlpPolicyTips requests received.

The following KPIs for the widget are derived from the attributes as described:

- Requests (critical): Total server Failed DlpPolicyTips requests received. This data is derived from the Total server Failed DlpPolicyTips requests received attribute in the MS Exchange DlpPolicyTips data set.

**Mailbox Databases**

The Mailbox Databases group widget provides a grid widget that contains information about mailbox databases, such as name, state, Information Store space usage, and messages that are submitted and delivered.

**Remember:** When you select a database name in this group widget, the RPC Average Latency (history) group widget shows the line chart for the selected database.

The following KPIs for the widget are derived from the attributes as described:

- Mailbox: The name of the mailbox database. This data is derived from the Mailbox Database Name attribute in the MS Exchange IS Store data set.
- Messages Delivered Per Second: The number of messages that are currently delivered per second to the database. This data is derived from the Messages Delivered/Sec attribute in the MS Exchange IS Store data set.
- Messages Submitted Per Second: The number of messages that are currently submitted per second from the database. This data is derived from the Messages Submitted/Sec attribute in the MS Exchange IS Store data set.
- Space Used (%): The percentage of Information Store space that is currently used by the mailbox database. This data is derived from the Mailbox Database Percent Space Used attribute in the MS Exchange IS Store data set.
- State: The state of the mailbox store, such as mounted or dismounted. This data is derived from the Mailbox Database State attribute in the MS Exchange IS Store data set.

**Mailbox Reachability**

The Mailbox Reachability group widget provides a table that shows the reachability status of the configured email addresses.

The following KPIs for the widget are derived from the attributes as described:

- Email Address: The target email address to which a test email is sent. This data is derived from the Target Email Address attribute in the MS Exchange Reachability data set.
- Round Trip Time(seconds): The time (in milliseconds) that is taken to respond to an email that is sent to a target email address. If the email address is not reachable, the response time is zero. This data is derived from the Round Trip Response Time attribute in the MS Exchange Reachability data set.
- Status: An alphabetic value that indicates whether an email address is reachable. This data is derived from the Reachable attribute in the MS Exchange Reachability data set.

**MAPI Connections - Average Latency (history)**

The Average Latency (history) group widget provides a line chart that contains information about average latency of the MAPI Connections

The following KPIs for the widget are derived from the attributes as described:

- Average Latency: Averaged Latency is the latency, in milliseconds, averaged for the past 1024 packets. This data is derived from the Averaged Latency attribute in the MS Exchange MAPIOVERHTTP data set.
- Timestamp: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange MAPIOVERHTTP data set.

**Message Queue Summary**

The Message Queue Summary group widget provides HTML tables that show the status of different message queues. Click in the group widget to view the historical data about number of messages in different queues.

The following KPIs for the widget are derived from the attributes as described:

- Active mailbox delivery queue length: The number of messages queued for delivery to an active mailbox. The value should be less than 250. This data is derived from the Active Mailbox Delivery Queue Length attribute in the MS Exchange Transport Queues data set.

- Active non-SMTP delivery queue length: The number of messages queued for delivery to a Non-SMTP transport. The value should be less than 250. This data is derived from the Active Non-SMTP Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Poison queue length: The number of messages in the poison message queue. The value should always be zero. This data is derived from the Poison Queue Length attribute in the MS Exchange Transport Queues data set.
- Retry mailbox delivery queue length: The number of messages queued for retry delivery to active mailbox since the server was started. The value should be less than 100. This data is derived from the Retry Mailbox Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Retry non-SMTP delivery queue length: The number of messages queued for delivery retry to a Non-SMTP transport since the server was started. The value should be less than 100. This data is derived from the Retry Non-SMTP Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Submission queue length: The number of items in the submission queue when sample was taken. The value should be less than 100. This data is derived from the Submission Queue Length attribute in the MS Exchange Transport Queues data set.
- Unreachable queue length: The number of messages in Unreachable Queue when sample was taken. The value should be less than 100. This data is derived from the Unreachable Queue Length attribute in the MS Exchange Transport Queues data set.

**RPC Average Latency (history)**

The RPC Average Latency (history) group widget provides a line chart that contains information about average latency of the database remote procedure calls (RPC) for the selected mailbox database.

The following KPIs for the widget are derived from the attributes as described:

- RPC Average Latency: The average time (in milliseconds) of the MAPI RPC latency. This data is derived from the RPC Average Latency attribute in the MS Exchange IS Store data set.
- Timestamp: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange IS Store data set.

**Service Status**

The Service Status group widget provides a grid widget that shows the status of Exchange services.

The following KPIs for the widget are derived from the attributes as described:

- Name: The name of the Exchange service. This data is derived from the Service Name attribute in the MS Exchange Services Detail data set.
- State: The current state of the service, such as stopped, start pending, stop pending, running, continue pending, pause pending, paused, and unknown.

**Store Status**

The Store Status group widget provides an HTML table and grid widgets that show the replication status of databases and the RPC status for the top five clients that are arranged in the descending order of RPC latency and RPC operations.

Click High Availability to view the replication details. Click in the Client RPC Latency - Top 5 grid widget to view the details for all clients according to RPC latency. Click in the Client RPC operations per second - Top 5 grid widget to view the details for all clients according to RPC operations.

The following KPIs for the widget are derived from the attributes as described:

- Client Name: The name of the client instance. This data is derived from the Client Name U attribute in the MS Exchange IS Client data set.
- High availability: The current replication status of the storage group.

- RPC Latency (ms): The average server RPC latency (in milliseconds) for the last 1024 packets. This data is derived from the RPC Average Latency attribute in the MS Exchange IS Client data set.
- RPC Operations Per Second: The number of RPC operations that are currently requested per second from the server. This data is derived from the RPC Operations/Sec attribute in the MS Exchange IS Client data set.

**Transport SMTP Receive**

The Transport SMTP Receive group widget provides details about SMTP inbound message traffic.

The following KPIs for the widget are derived from the attributes as described:

- Bytes Received Total: Total bytes received by SMTP Receive Service since the server was started. This data is derived from the Bytes Received Total attribute in the MS Exchange Transport SmtpReceive data set.
- Bytes Received/sec: The number of bytes received by SMTP Receive Service per second since the server was started. This data is derived from the Bytes Received/Sec attribute in the MS Exchange Transport SmtpReceive data set.
- Connections Total: The total number of connections to SMTP Receive Service since the server was started. This data is derived from the Connections Total attribute in the MS Exchange Transport SmtpReceive data set.
- SMTP Receive Instance Name: The network name of the source of this information. This data is derived from the SMTP Receive Instance Name attribute in the MS Exchange Transport SmtpReceive data set.

**Information Store**

Use the Information Store Detail dashboard to monitor the activities in the Information Store.

The following widgets are available in this dashboard page:

**Client Request (history)**

The Client Request (history) group widget provides a line chart that contains information about the client requests that the Information Store processed during a specified period.

The following KPIs for the widget are derived from the attributes as described:

- RPC Request: The number of client requests that the Information Store currently processed. The value should be less than 70. This data is derived from the RPC Requests attribute in the MS Exchange IS data set.
- Timestamp: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange IS data set.

**Information Store Details**

The Information Store Details group widget provides an HTML table that contains the details of activities that are related to the virtual memory and RPC operations in the Information Store.

The following KPIs for the widget are derived from the attributes as described:

- RPC operations failed: The number of RPC operations that failed because the server was too busy since the mailbox store was started. This data is derived from the Client RPCs Failed Server Too Busy attribute in the MS Exchange IS data set.
- Slow search threads: The number of search threads that currently run queries, which are not optimized. This data is derived from the Slow Search Threads attribute in the MS Exchange IS data set.
- VM free blocks: The total number of free virtual memory blocks. This data is derived from the VM Total Free Blocks attribute in the MS Exchange IS data set.
- VM free blocks (>=16MB): The total number of free virtual memory blocks that are larger than or equal to 16 MB. This data is derived from the VM Total 16MB Free Blocks attribute in the MS Exchange IS data set.

- VM large free blocks bytes (MB): The total number of megabytes in free virtual memory blocks that are larger than or equal to 16 MB. This data is derived from the VM Total Large Free Block Bytes attribute in the MS Exchange IS data set.
- VM largest block size (MB): The size of the largest free virtual memory block in megabytes. This data is derived from the VM Largest Block Size attribute in the MS Exchange IS data set.

**Remote Procedure Call (history)**

The Remote Procedure Call (history) group widget provides line charts that contain information about the RPC operations that are processed during a specified period.

The following KPIs for the widget are derived from the attributes as described:

- Average Delay in Requests: The average RPC latency in milliseconds for the past 1024 packets. The value should be less than 100 milliseconds. This data is derived from the RPC Averaged Latency attribute in the MS Exchange IS data set.
- RPC Operations Per Second: The number of times the RPC operations occur per second since the server was started. The value should be less than 100. This data is derived from the RPC Operations/sec attribute in the MS Exchange IS data set.
- Timestamp: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange IS data set.

**Storage Group Summary**

The Storage Group Summary group widget provides a grid widget that shows the details of storage groups, such as name, size, and number of databases in a storage group.

**Remember:** This group widget displays data only for Exchange Server 2007.

The following KPIs for the widget are derived from the attributes as described:

- Free Space (%): The percent of free space available on the logical drive where the Exchange Server application is installed. The agent will use the Exchange Home directory to determine the root directory for the Exchange Application. The agent will then determine the size of the disk and amount of free space from performance objects to determine the free space available to the Exchange storage group. This data is derived from the Storage Group Percent Free Space attribute in the MS Exchange Storage Group Detail data set.
- Growth (%): The growth (in percentage) of the storage group between the current sample and previous sample. This data is derived from the Storage Group Percent Growth attribute in the MS Exchange Storage Group Detail data set.
- Name: The name assigned to Exchange storage group by system or selected at installation. This data is derived from the Storage Group Name attribute in the MS Exchange Storage Group Detail data set.
- Number of Mailboxes Per Storage Group: The number of mailboxes in a particular storage group. This data is derived from the No Of MailBoxes in Storage Group attribute in the MS Exchange Storage Group Detail data set.
- Storage Group Size (MB): The size in megabytes of storage group. This data is derived from the Storage Group Size attribute in the MS Exchange Storage Group Detail data set.

**User and Connection Activity**

The User and Connection Activity group widget provides an HTML table and a line chart that contain information about the total and active number of users and user connections.

The following KPIs for the widget are derived from the attributes as described:

- Active connection count: The number of connections that have shown some activity in the last 10 minutes. This data is derived from the Active Connection Count attribute in the MS Exchange IS data set.
- Active user count: The number of user connections that have shown some activity in the last 10 minutes. This data is derived from the Active User Count attribute in the MS Exchange IS data set.

- Connection count: The number of client processes that are connected to the information store. This data is derived from the Connection Count attribute in the MS Exchange IS data set.
- Timestamp: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange IS data set.
- User count: The number of users that are connected to the information store. This data is derived from the User Count attribute in the MS Exchange IS data set.

**Mailbox Reachability Detail**

Use the Mailbox Reachability Detail dashboard to know the following details:

- Historical trend of inbound and outbound times for the selected email address
- The database name and the mailbox server name for the user

The following widgets are available in this dashboard page:

**Database Details**

The Database Details group widget provides the html table that shows the details, such as user name, mailbox database name, and the sever that hosts the mailbox of the selected email address.

The following KPIs for the widget are derived from the attributes as described:

- Database name: The name of the database. This data is derived from the Database Name attribute in the MS Exchange Reachability data set.
- Mailbox server name: Target server name test email is sent to. When the Target E-mail Address is unreachable, the Target Server Name is set to "unknown. ". This data is derived from the Target Server attribute in the MS Exchange Reachability data set.
- Username: The name of the user. This data is derived from the User Name attribute in the MS Exchange Reachability data set.

**Inbound and Outbound Time (history)**

The Inbound and Outbound Time (history) group widget provides line charts that display the historical trend of inbound and outbound times for the selected email address.

The following KPIs for the widget are derived from the attributes as described:

- Inbound Time: The time (in seconds) that a message for verifying reachability takes to reach the selected email address. This data is derived from the Inbound Time attribute in the MS Exchange Reachability data set.
- Outbound Time: The time (in seconds) that is taken to receive a reachability confirmation message from the selected email address. This data is derived from the Outbound Time attribute in the MS Exchange Reachability data set.
- Time: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange Reachability data set.

**Mailbox Reachability Detail**

Use the Mailbox Reachability Detail dashboard to know the following details:

- Historical trend of inbound and outbound times for the selected email address
- The database name and the mailbox server name for the user

The following widgets are available in this dashboard page:

**Database Details**

The Database Details group widget provides the html table that shows the details, such as user name, mailbox database name, and the sever that hosts the mailbox of the selected email address.

The following KPIs for the widget are derived from the attributes as described:

- Database name: The name of the database. This data is derived from the Database Name attribute in the MS Exchange Reachability data set.

- Mailbox server name: Target server name test email is sent to. When the Target E-mail Address is unreachable, the Target Server Name is set to "unknown. ". This data is derived from the Target Server attribute in the MS Exchange Reachability data set.
- Username: The name of the user. This data is derived from the User Name attribute in the MS Exchange Reachability data set.

**Inbound and Outbound Time (history)**

The Inbound and Outbound Time (history) group widget provides line charts that display the historical trend of inbound and outbound times for the selected email address.

The following KPIs for the widget are derived from the attributes as described:

- Inbound Time: The time (in seconds) that a message for verifying reachability takes to reach the selected email address. This data is derived from the Inbound Time attribute in the MS Exchange Reachability data set.
- Outbound Time: The time (in seconds) that is taken to receive a reachability confirmation message from the selected email address. This data is derived from the Outbound Time attribute in the MS Exchange Reachability data set.
- Time: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange Reachability data set.

**MS Exchange Server**

The summary dashboard shows the overall status and availability of each monitored Exchange Server. Review the resource usage and investigate any warning or critical thresholds. If the Events tab shows a warning or critical status indicator, open the tab to see the open events and status for the application. Click anywhere on the group widget to drill down to the detailed dashboard.

The following widgets are available in this dashboard page:

**Exchange Server Status**

The Exchange Server Status group widget provides a status gauge and HTML tables that show the overall status of the following resources of Exchange Server:

- Exchange databases and services
- Mailbox reachability
- Exchange store
- Outlook Web Access activities
- Messages queued

**Remember:** This dashboard is used to monitor Exchange Server 2013. If you want to monitor Exchange Server 2007 or 2010, select the Microsoft Exchange Server component when you create your application.

The following KPIs for the widget are derived from the attributes as described:

- ActiveSync current requests: The number of HTTP requests that are received from ASP NET. This data is derived from the Current Requests attribute in the MS Exchange Active Sync data set.
- Databases (critical): The critical state of Exchange databases. This data is derived from the Mailbox Database Name attribute in the MS Exchange IS Store data set.
- Databases (normal): The up and running state of Exchange databases. This data is derived from the Mailbox Database Name attribute in the MS Exchange IS Store data set.
- Databases (warning): The warning state of Exchange databases.
- Exchange services (critical): The critical state of the Exchange services.
- Exchange services (normal): The up and running state of the Exchange services. This data is derived from the Service State attribute in the MS Exchange Services Detail data set.
- Messages queued: The number of messages that are queued for delivery.

- OWA average response time (ms): The average time (in milliseconds) between the beginning and the end of an OEH or an ASPX request. The value should be less than 100 milliseconds. This data is derived from the Average Response Time attribute in the MS Exchange OWA data set.
- OWA average search time (ms): The average time (in milliseconds) that is required for a search to complete. The value should be less than 5000 milliseconds. This data is derived from the Average Search Time attribute in the MS Exchange OWA data set.
- Reachable: An alphabetic value that indicates whether an email address is reachable. This data is derived from the Reachable attribute in the MS Exchange Reachability data set.
- Store status: The status of the Exchange Information Store.
- Unreachable: An alphabetic value that indicates whether an email address is reachable. This data is derived from the Reachable attribute in the MS Exchange Reachability data set.

**MS Exchange Server**

The summary dashboard shows the overall status and availability of each monitored Exchange Server. Review the resource usage and investigate any warning or critical thresholds. If the Events tab shows a warning or critical status indicator, open the tab to see the open events and status for the application. Click anywhere on the group widget to drill down to the detailed dashboard.

The following widgets are available in this dashboard page:

**Exchange Server Status**

The Exchange Server Status group widget provides a status gauge and HTML tables that show the overall status of the following resources of Exchange Server:

- Exchange databases and services
- Mailbox reachability
- Exchange store
- Outlook Web Access activities
- Messages queued

**Remember:** This dashboard is used to monitor Exchange Server 2007 and 2010. If you want to monitor Exchange Server 2013, select the Microsoft Exchange Server 2013 component when you create your application.

The following KPIs for the widget are derived from the attributes as described:

- ActiveSync requests queued: The number of HTTP requests that are waiting to be assigned to a thread. This attribute is not available in Exchange Server 2010 Service Pack 1 and 2013. This data is derived from the Requests Queued attribute in the MS Exchange Active Sync data set.
- Databases (critical): The critical state of databases.
- Databases (normal): The up and running state of databases.
- Databases (warning): The warning state of databases.
- Exchange services (critical): The critical state of the Exchange services.
- Exchange services (normal): The up and running state of the Exchange services. This data is derived from the Service State attribute in the MS Exchange Services Detail data set.
- Messages queued: The number of messages that are queued for delivery.
- OWA average response time (ms): The average time (in milliseconds) between the beginning and the end of an OEH or an ASPX request. The value should be less than 100 milliseconds. This data is derived from the Average Response Time attribute in the MS Exchange OWA data set.
- OWA average search time (ms): The average time (in milliseconds) that is required for a search to complete. The value should be less than 5000 milliseconds. This data is derived from the Average Search Time attribute in the MS Exchange OWA data set.
- Reachable: An alphabetic value that indicates whether an email address is reachable. This data is derived from the Reachable attribute in the MS Exchange Reachability data set.
- Store status: The status of the Exchange Information Store.

- Unreachable: An alphabetic value that indicates whether an email address is reachable. This data is derived from the Reachable attribute in the MS Exchange Reachability data set.

**Overview**

Use the Overview dashboard to know the overall status of the following Exchange Server resources:

- Mailbox databases and services
- Mailbox reachability
- Information Store and replication of databases
- Message queues and message delivery
- Outlook Web Access (OWA) and ActiveSync activities

The following widgets are available in this dashboard page:

**Average Delivery Time (history)**

The Average Delivery Time (history) group widget provides a line chart that contains information about the average delivery time of the messages during a specified period for the selected mailbox database.

The following KPIs for the widget are derived from the attributes as described:

- Average Delivery Time: The average time in milliseconds between the submission of a message to the mailbox store and submission to other storage providers for the last 10 messages. The value should be less than 3000 milliseconds. This data is derived from the Average Delivery Time attribute in the MS Exchange IS Private data set.
- Timestamp: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange IS Private data set.

**Client Access (history)**

The Client Access (history) group widget provides line charts that contain information about the Exchange ActiveSync requests and activities of the Outlook Web Access (OWA) client, such as average response time and search time.

The following KPIs for the widget are derived from the attributes as described:

- ActiveSync Requests Queued: The number of HTTP requests that are waiting to be assigned to a thread. This attribute is not available in Exchange Server 2010 Service Pack 1 and 2013. This data is derived from the Requests Queued attribute in the MS Exchange Active Sync data set.
- OWA Average Response Time: The average time (in milliseconds) between the beginning and the end of an OEH or an ASPX request. The value should be less than 100 milliseconds. This data is derived from the Average Response Time attribute in the MS Exchange OWA data set.
- OWA Average Search Time: The average time (in milliseconds) that is required for a search to complete. The value should be less than 5000 milliseconds. This data is derived from the Average Search Time attribute in the MS Exchange OWA data set.
- Timestamp (ActiveSync): The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange Active Sync data set.
- Timestamp (OWA): The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange OWA data set.

**Mailbox Databases**

The Mailbox Databases group widget provides a grid widget that contains information about mailbox databases, such as name, state, Information Store space usage, and messages that are queued and delivered.

**Remember**: When you select a database name in this group widget, the Average Delivery Time (history) and RPC Average Latency (history) group widgets show the line charts for the selected database.

The following KPIs for the widget are derived from the attributes as described:

- Mailbox: The name of the mailbox. This data is derived from the Mailbox Name U attribute in the MS Exchange IS Private data set.
- Messages Delivered Per Minute: The number of messages delivered to all recipients per minute since the server was started. This data is derived from the Messages Delivered/min attribute in the MS Exchange IS Private data set.
- Messages Queued For Submission: The current number of submitted messages that are not processed by transport. This data is derived from the Messages Queued For Submission attribute in the MS Exchange IS Private data set.
- Space Used (%): The percent of the total space the Mailbox Database is using. Mailbox Information Store Database takes up a percentage of the total Information Store space used. This data is derived from the Mailbox IS Database Percent Space Used attribute in the MS Exchange IS Private data set.
- State: The state of the mailbox store, such as mounted or demounted. The mailbox store can be demounted for maintenance. This data is derived from the Mailbox Store State attribute in the MS Exchange IS Private data set.

**Mailbox Reachability**

The Mailbox Reachability group widget provides a table that shows the reachability status of the configured email addresses.

The following KPIs for the widget are derived from the attributes as described:

- Email Address: The target email address to which a test email is sent. This data is derived from the Target Email Address attribute in the MS Exchange Reachability data set.
- Round Trip Time (seconds): The time (in milliseconds) that is taken to respond to an email that is sent to a target email address. If the email address is not reachable, the response time is zero. This data is derived from the Round Trip Response Time attribute in the MS Exchange Reachability data set.
- Status: An alphabetic value that indicates whether an email address is reachable. This data is derived from the Reachable attribute in the MS Exchange Reachability data set.

**Message Queue Summary**

The Message Queue Summary group widget provides HTML tables that show the status of different message queues. Click in the group widget to view the historical data about number of messages in different queues.

The following KPIs for the widget are derived from the attributes as described:

- Active mailbox delivery queue length: The number of messages queued for delivery to an active mailbox. The value should be less than 250. This data is derived from the Active Mailbox Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Active non-SMTP delivery queue length: The number of messages queued for delivery to a Non-SMTP transport. The value should be less than 250. This data is derived from the Active Non-SMTP Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Active remote delivery queue length: The number of messages queued for remote delivery. This attribute is not available in Exchange Server 2013. The value should be less than 250. This data is derived from the Active Remote Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Poison queue length: The number of messages in the poison message queue. The value should always be zero. This data is derived from the Poison Queue Length attribute in the MS Exchange Transport Queues data set.
- Retry mailbox delivery queue length: The number of messages queued for retry delivery to active mailbox since the server was started. The value should be less than 100. This data is derived from the Retry Mailbox Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Retry non-SMTP delivery queue length: The number of messages queued for delivery retry to a Non-SMTP transport since the server was started. The value should be less than 100. This data

is derived from the Retry Non-SMTP Delivery Queue Length attribute in the MS Exchange Transport Queues data set.

- Retry remote delivery queue length: The number of messages queued for delivery retry since the server was started. This attribute is not available in Exchange Server 2013. The value should be less than 100. This data is derived from the Retry Remote Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Submission queue length: The number of items in the submission queue when sample was taken. The value should be less than 100. This data is derived from the Submission Queue Length attribute in the MS Exchange Transport Queues data set.
- Unreachable queue length: The number of messages in Unreachable Queue when sample was taken. The value should be less than 100. This data is derived from the Unreachable Queue Length attribute in the MS Exchange Transport Queues data set.

**Public Folder Database**

The Public Folder Database group widget contains HTML tables and a bullet widget that show the details of public folder databases, such as state, size, and database space used.

The following KPIs for the widget are derived from the attributes as described:

- Average delivery time: The average time in seconds between the submission of a message to the public folder store and submission to other storage providers for the last 10 messages. This data is derived from the Average Delivery Time attribute in the MS Exchange IS Public data set.
- Database: The name of Microsoft Exchange public folder store. This data is derived from the Name U attribute in the MS Exchange IS Public data set.
- Replication receive queue size: The number of copied messages that are to be processed. This data is derived from the Replication Receive Queue Size attribute in the MS Exchange IS Public data set.
- Space used (%): The percentage of the total Information Store space that is used by the public folder database. This attribute reports what percent of the total space the Public Folder Database is using. This data is derived from the Public IS Database Percent Space Used attribute in the MS Exchange IS Public data set.
- State: The state of the public folder, such as mounted or demounted. The public folder can be demounted for maintenance. This data is derived from the Public Store State attribute in the MS Exchange IS Public data set.
- Submission queue size: The current number of submitted messages that are not processed by transport. This data is derived from the Messages Queued For Submission attribute in the MS Exchange IS Public data set.

**RPC Average Latency (history)**

The RPC Average Latency (history) group widget provides a line chart that contains information about average latency of the database remote procedure calls (RPC) for the selected mailbox database.

The following KPIs for the widget are derived from the attributes as described:

- RPC Average Latency: The average time (in milliseconds) of the database RPC latency for the last 1024 packets. The value should be less than 100 milliseconds. This data is derived from the RPC Average Latency attribute in the MS Exchange IS Private data set.
- Timestamp: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange IS Private data set.

**Service Status**

The Service Status group widget provides a grid widget that shows the status of Exchange services.

The following KPIs for the widget are derived from the attributes as described:

- Name: The name of the Exchange service. This data is derived from the Service Name attribute in the MS Exchange Services Detail data set.

- State: The current state of the service, such as stopped, start pending, stop pending, running, continue pending, pause pending, paused, and unknown.

**Store Status**

The Store Status group widget provides an HTML table that shows the status of Information Store and replication status of databases.

Click High Availability to view the replication details. Click Information Store to view the Information Store details.

The following KPIs for the widget are derived from the attributes as described:

- High availability: The current replication status of the storage group.
- Information Store: The status of the Exchange Information Store.

**Transport SMTP Receive**

The Transport SMTP Receive group widget provides details about SMTP inbound message traffic.

The following KPIs for the widget are derived from the attributes as described:

- Bytes Received Total: Total bytes received by SMTP Receive Service since the server was started. This data is derived from the Bytes Received Total attribute in the MS Exchange Transport SmtpReceive data set.
- Bytes Received/sec: The number of bytes received by SMTP Receive Service per second since the server was started. This data is derived from the Bytes Received/Sec attribute in the MS Exchange Transport SmtpReceive data set.
- Connections Total: The total number of connections to SMTP Receive Service since the server was started. This data is derived from the Connections Total attribute in the MS Exchange Transport SmtpReceive data set.
- SMTP Receive Instance Name: The network name of the source of this information. This data is derived from the SMTP Receive Instance Name attribute in the MS Exchange Transport SmtpReceive data set.

**Additional group widgets**

These pop-up group widgets are displayed after you click a group widget for more details. Some group widgets have links to more granular information in a popup widget, described here.

The following widgets are available in this dashboard page:

**DLP Policy Tips Summary (history)**

The DLP Policy Tips Summary History group widget provides historical information about DLP Policy Tips. First chart widget shows historical data about number of Total, Current and Successful DLP policy Tips. Second chart shows DLP Policy Tips requests with Latency more than 1 minute.

The following KPIs for the widget are derived from the attributes as described:

- Current Pending: Current Pending DlpPolicyTips requests. This data is derived from the Current Pending DlpPolicyTips requests attribute in the MS Exchange DlpPolicyTips data set.
- Requests: Number of DlpPolicyTips requests with latency more than 1 minute. This data is derived from the Number of requests with latency more than 1 minute attribute in the MS Exchange DlpPolicyTips data set.
- Succesful: Successful DlpPolicyTips requests. This data is derived from the Successful DlpPolicyTips requests attribute in the MS Exchange DlpPolicyTips data set.
- Timestamp: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange DlpPolicyTips data set.
- Total: Total DlpPolicyTips requests processed. This data is derived from the Total DlpPolicyTips requests processed attribute in the MS Exchange DlpPolicyTips data set.

**Exchange Server Attributes**

The Exchange Server Status group widget provides attribute groups

The following KPIs for the widget are derived from the attributes as described:

**Exchange Server Attributes**

The Exchange Server Status group widget provides attribute groups

The following KPIs for the widget are derived from the attributes as described:

**IS Client RPC Detail**

The IS Client RPC Detail group widget provides a grid widget that shows the RPC status for all clients according to RPC latency.

The following KPIs for the widget are derived from the attributes as described:

- Client name: The name of the client instance. This data is derived from the Client Name U attribute in the MS Exchange IS Client data set.
- RPC Bytes Receive Rate: The number of times that bytes are received from RPC clients per second. This data is derived from the RPC Bytes Received/sec attribute in the MS Exchange IS Client data set.
- RPC Bytes Sent Rate: The number of times that bytes are sent to RPC clients per second. This data is derived from the RPC Bytes Sent/sec attribute in the MS Exchange IS Client data set.
- RPC Latency (ms): The average server RPC latency in milliseconds for the past 1024 packets. This data is derived from the RPC Average Latency attribute in the MS Exchange IS Client data set.
- RPC Operations Per Second: The number of RPC operations that are currently requested per second from the server. This data is derived from the RPC Operations/Sec attribute in the MS Exchange IS Client data set.

**IS Client RPC Detail**

The IS Client RPC Detail group widget provides a grid widget that shows the RPC status for all clients according to RPC operations.

The following KPIs for the widget are derived from the attributes as described:

- Client name: The name of the client instance. This data is derived from the Client Name U attribute in the MS Exchange IS Client data set.
- RPC Bytes Receive Rate: The number of times that bytes are received from RPC clients per second. This data is derived from the RPC Bytes Received/sec attribute in the MS Exchange IS Client data set.
- RPC Bytes Sent Rate: The number of times that bytes are sent to RPC clients per second. This data is derived from the RPC Bytes Sent/sec attribute in the MS Exchange IS Client data set.
- RPC Latency (ms): The average server RPC latency in milliseconds for the past 1024 packets. This data is derived from the RPC Average Latency attribute in the MS Exchange IS Client data set.
- RPC Operations Per Second: The number of RPC operations that are currently requested per second from the server. This data is derived from the RPC Operations/Sec attribute in the MS Exchange IS Client data set.

**Message Queue Summary (history)**

The Message Queue Summary (history) group widget provides line charts that show the historical data about number of messages in different queues.

The following KPIs for the widget are derived from the attributes as described:

- Active: The number of messages queued for delivery to an active mailbox. The value should be less than 250. This data is derived from the Active Mailbox Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Active: The number of messages queued for delivery to a Non-SMTP transport. The value should be less than 250. This data is derived from the Active Non-SMTP Delivery Queue Length attribute in the MS Exchange Transport Queues data set.

- Poison: The number of messages in the poison message queue. The value should always be zero. This data is derived from the Poison Queue Length attribute in the MS Exchange Transport Queues data set.
- Retry: The number of messages queued for retry delivery to active mailbox since the server was started. The value should be less than 100. This data is derived from the Retry Mailbox Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Retry: The number of messages queued for delivery retry to a Non-SMTP transport since the server was started. The value should be less than 100. This data is derived from the Retry Non-SMTP Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Submission: The number of items in the submission queue when sample was taken. The value should be less than 100. This data is derived from the Submission Queue Length attribute in the MS Exchange Transport Queues data set.
- Timestamp: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange Transport Queues data set.
- Unreachable: The number of messages in Unreachable Queue when sample was taken. The value should be less than 100. This data is derived from the Unreachable Queue Length attribute in the MS Exchange Transport Queues data set.

**Message Queue Summary (history)**

The Message Queue Summary (history) group widget provides line charts that show the historical data about number of messages in different queues.

The following KPIs for the widget are derived from the attributes as described:

- Active: The number of messages queued for delivery to an active mailbox. The value should be less than 250. This data is derived from the Active Mailbox Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Active: The number of messages queued for delivery to a Non-SMTP transport. The value should be less than 250. This data is derived from the Active Non-SMTP Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Active: The number of messages queued for remote delivery. This attribute is not available in Exchange Server 2013. The value should be less than 250. This data is derived from the Active Remote Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Poison: The number of messages in the poison message queue. The value should always be zero. This data is derived from the Poison Queue Length attribute in the MS Exchange Transport Queues data set.
- Retry: The number of messages queued for retry delivery to active mailbox since the server was started. The value should be less than 100. This data is derived from the Retry Mailbox Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Retry: The number of messages queued for delivery retry to a Non-SMTP transport since the server was started. The value should be less than 100. This data is derived from the Retry Non-SMTP Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Retry: The number of messages queued for delivery retry since the server was started. This attribute is not available in Exchange Server 2013. The value should be less than 100. This data is derived from the Retry Remote Delivery Queue Length attribute in the MS Exchange Transport Queues data set.
- Submission: The number of items in the submission queue when sample was taken. The value should be less than 100. This data is derived from the Submission Queue Length attribute in the MS Exchange Transport Queues data set.
- Timestamp: The local time at the agent when the data was collected. This data is derived from the Timestamp attribute in the MS Exchange Transport Queues data set.
- Unreachable: The number of messages in Unreachable Queue when sample was taken. The value should be less than 100. This data is derived from the Unreachable Queue Length attribute in the MS Exchange Transport Queues data set.

**Queue Lengths**

The Queue Lengths group widget provides a grid widget that contains information about the copy and replay queue lengths for all databases.

The following KPIs for the widget are derived from the attributes as described:

- Copy: The number of log files that are waiting to be copied and inspected. This data is derived from the Copy Queue Length attribute in the MS Exchange Replication Version630 data set.
- Instance: The storage group instance name of the Microsoft Exchange Server. This data is derived from the MS Exchange Replication Instance Name attribute in the MS Exchange Replication Version630 data set.
- Replay: The number of log files that are waiting to be replayed. This data is derived from the Replay Queue Length attribute in the MS Exchange Replication Version630 data set.

**Queue Lengths**

The Queue Lengths group widget provides a grid widget that contains information about the copy and replay queue lengths for all databases.

The following KPIs for the widget are derived from the attributes as described:

- Copy: The number of log files that are waiting to be copied and inspected. This data is derived from the Copy Queue Length attribute in the MS Exchange Replication Version630 data set.
- Instance: The storage group instance name of the Microsoft Exchange Server. This data is derived from the MS Exchange Replication Instance Name attribute in the MS Exchange Replication Version630 data set.
- Replay: The number of log files that are waiting to be replayed. This data is derived from the Replay Queue Length attribute in the MS Exchange Replication Version630 data set.

## Custom views

After you select an application that includes a Microsoft Exchange Server managed resource, the **Custom Views** tab is available for displaying and building custom dashboard pages with attribute values from the Microsoft Exchange Server agent. You can quickly build monitoring pages for an application and save them for viewing.

Only a subset of Microsoft Exchange Server agent attributes, which are the most useful for reporting, are available for custom views. These attributes are shown in *italic* in Chapter 4, “Attributes,” on page 49.

# Chapter 3. Thresholds

Thresholds test for certain conditions on your managed resources, such as memory usage over 95%, and raise an event when the conditions have been met. The agent comes with predefined thresholds that you can use to monitor your Microsoft Exchange Server environment. You can create additional thresholds for the areas of interest.

After you click **System Configuration** > **Threshold Manager**, select **Microsoft Exchange Server** as the data source type to see all the available thresholds.

## Predefined thresholds

The thresholds are organized in the Cloud APM console **Threshold Manager** by the data set for which they were written. The Microsoft Exchange Server agent has the following predefined thresholds:

The number of database page requests per second has exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_DB.Cache_Page_Faults/sec *GT 20.0
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_DB.Cache_Page_Faults/sec [MSEDB.CACHFAULT] (not visible in the UI).

The number of database page requests per second has exceeded a warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_DB.Cache_Page_Faults/sec *GT 10.0 *AND *VALUE
MS_Exchange_DB.Cache_Page_Faults/sec *LE 20.0
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_DB.Cache_Page_Faults/sec [MSEDB.CACHFAULT] (not visible in the UI).

Indicates the number of page faults per second that cannot be serviced has exceeded a warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_DB.Cache_Page_Fault_Stalls/sec *GT 0.0
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_DB.Cache_Page_Fault_Stalls/sec [MSEDB.CACHSTALL] (not visible in the UI).

Indicates that the number of RPC requests that are processed by the RPC Client Access service has exceeded the critical threshold.

The default configuration has the following SQL syntax:

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```
*IF *VALUE MS_Exchange_Rpc_Client_Access.RPC_Requests *GE 40
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Rpc_Client_Access.RPC_Requests [MSERPCCA.RPCREQ] (not visible in the UI).

Indicates that the number of RPC requests that are processed by the RPC Client Access service has exceeded the warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Rpc_Client_Access.RPC_Requests *GE 35 *AND *VALUE
MS_Exchange_Rpc_Client_Access.RPC_Requests *LT 40
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Rpc_Client_Access.RPC_Requests [MSERPCCA.RPCREQ] (not visible in the UI).

The transaction log files have exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_DB_Instance.Log_Generation_Checkpoint_Depth *GT 60000
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_DB_Instance.Log_Generation_Checkpoint_Depth [MSEDBINS.LOGCKPDEPT] (not visible in the UI).

The transaction log files have exceeded a warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_DB_Instance.Log_Generation_Checkpoint_Depth *GT 50000
*AND *VALUE MS_Exchange_DB_Instance.Log_Generation_Checkpoint_Depth *LE
60000
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_DB_Instance.Log_Generation_Checkpoint_Depth [MSEDBINS.LOGCKPDEPT] (not visible in the UI).

Indicates there are database log threads that are in the waiting state.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_DB.Log_Threads_Waiting *GT 25
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_DB.Log_Threads_Waiting [MSEDB.LOGWAIT] (not visible in the UI).

Indicates that the number of failed backend connection attempts has exceeded critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE RPC_HTTP_Proxy.Number_of_Failed_BackEnd_Connection_Attempts/
Second *GT 0
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: RPC_HTTP_Proxy.Number_of_Failed_BackEnd_Connection_Attempts/Second [MSEPRXY.NFBCAPS] (not visible in the UI).

Indicates that some RPC requests have failed because the RPC server is too busy.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS.Client_RPCs_Failed_Server_Too_Busy *GT 0
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS.Client_RPCs_Failed_Server_Too_Busy [MSEIS.SERBSY].

Indicates that the number of messages in the mailbox store have been queued for submission to the Transport Server and have exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Private.Messages_Queued_For_Submission *GE 50
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Mailbox_Name_U attribute.

This threshold uses the following attributes: MS_Exchange_IS_Private.Messages_Queued_For_Submission [MSEISPRI.MSGQUFSUB], MS_Exchange_IS_Private.Mailbox_Name_U [MSEISPRI.MBNAME].

Indicates the number of messages in the mailbox store's receive queue is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Private.Receive_Queue_Size *GT 50
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Private.Receive_Queue_Size [MSEISPRI.RECQSIZE] (not visible in the UI).

Indicates that the number of search tasks that are created per second has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Private.Search_Task_Rate *GE 10.00
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Mailbox_Name_U attribute.

This threshold uses the following attributes: MS_Exchange_IS_Private.Search_Task_Rate [MSEISPRI.SRCHTSKR] (not visible in the UI), MS_Exchange_IS_Private.Mailbox_Name_U [MSEISPRI.MBNAME].

Indicates the number of messages in the mailbox store's send queue is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Private.Send_Queue_Size *GT 100
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Private.Send_Queue_Size [MSEISPRI.SENDQSIZ] (not visible in the UI).

Indicates that the Slow FindRow Rate in the mailbox store has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Private.Slow_FindRow_Rate *GT 10.00
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Mailbox_Name_U attribute.

This threshold uses the following attributes: MS_Exchange_IS_Private.Slow_FindRow_Rate [MSEISPRI.SLFRRATE] (not visible in the UI), MS_Exchange_IS_Private.Mailbox_Name_U [MSEISPRI.MBNAME].

Indicates that the number of replication messages in the public store that have been queued for submission to the Transport Server and have exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Public.Messages_Queued_For_Submission *GE 20
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Name_U attribute.

This threshold uses the following attributes: MS_Exchange_IS_Public.Messages_Queued_For_Submission [MSEISPUB.MSGQUFSUB], MS_Exchange_IS_Public.Name_U [MSEISPUB.NAME].

Indicates the number of messages in the public store's receive queue is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Public.Receive_Queue_Size *GT 250
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Public.Receive_Queue_Size [MSEISPUB.RECQSIZE] (not visible in the UI).

Indicates the number of messages in the public store's send queue is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Public.Send_Queue_Size *GT 1000
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Public.Send_Queue_Size [MSEISPUB.SNDQSIZE].

Indicates the rate at which the Exchange store is servicing user requests is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS.RPC_Operations/sec *GT 100
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS.RPC_Operations/sec [MSEIS.RPCOPSEC].

Indicates that the number of client requests in the information store process has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS.RPC_Requests *GE 70
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS.RPC_Requests [MSEIS.RPCREQTS].

Indicates that the number of query processor threads, which contain queries that are not optimized, has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS.Slow_QP_Threads *GE 10.00
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS.Slow_QP_Threads [MSEIS.SLQOTHRD] (not visible in the UI).

Indicates that the number of search threads, which contain queries that are not optimized, has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS.Slow_Search_Threads *GE 10
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS.Slow_Search_Threads [MSEIS.SLST].

Cluster operations have stopped on at least one node.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_NLB_Status.NLB_Status *EQ Stopped
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_NLB_Status.NLB_Status [MSENLBS.NLBSTATUS] (not visible in the UI).

Indicates continuous replication is Failed for the selected storage group.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Replication_Version630.Replica_Instance_Failed *EQ
Replication_Failed
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Replication_Version630.Replica_Instance_Failed [MSEREPLI.RPLRINTFA] (not visible in the UI).

Indicates that continuous replication activity is suspended which means that the log files are not being copied or replayed into the passive copy.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Replication_Version630.Replication_Suspended *EQ
Replication_Suspended
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Replication_Version630.Replication_Suspended [MSEREPLI.RPLRSUSP] (not visible in the UI).

Indicates that the copy queue length has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Replication_Version630.Copy_Queue_Length *GE 1
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the MS_Exchange_Replication_Instance_Name attribute.

This threshold uses the following attributes: MS_Exchange_Replication_Version630.Copy_Queue_Length [MSEREPLI.RPLCQLEN], MS_Exchange_Replication_Version630.MS_Exchange_Replication_Instance_Name [MSEREPLI.MSERINSTN].

Indicates continuous replication is Failed for the selected storage group.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Replication.Replica_Instance_Failed *EQ 1
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Replication.Replica_Instance_Failed [MSEREPL.RPLRINTFA] (not visible in the UI).

Indicates that continuous replication activity is suspended which means that the log files are not being copied or replayed into the passive copy.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Replication.Replication_Suspended *EQ 1
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Replication.Replication_Suspended [MSEREPL.RPLRSUSP] (not visible in the UI).

Indicates that the Resource Booking Attendant has failed to process meeting requests.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Resource_Booking.Meetings_Requests_Failed *GT 0
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Resource_Booking.Meetings_Requests_Failed [MSERSCBK.REQFAIL] (not visible in the UI).

The percentage of free space available on the logical drive where the Exchange Server application is installed has exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Server.Application_Percent_Free_Space *LE 10.0
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Server.Application_Percent_Free_Space [MSESERVR.APPPCTFREE] (not visible in the UI).

The system attendant service status is critical.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Server.System_Attendant_Svc_Status *EQ Stopped
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Server.System_Attendant_Svc_Status [MSESERVR.SASTATUS] (not visible in the UI).

Indicates the Microsoft Exchange Server is down or unavailable.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Server.Server_Status *EQ down
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Server.Server_Status [MSESERVR.STATUS] (not visible in the UI).

The server IS service status is critical.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Server.Exchg_IS_Status *EQ Stopped
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Server.Exchg_IS_Status [MSESERVR.ISSTATUS] (not visible in the UI).

The available disk space available for Exchange Server logging has exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Server.Log_Percent_Free_Space *GE 0.00 *AND *VALUE
MS_Exchange_Server.Log_Percent_Free_Space *LE 10.00
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Server.Log_Percent_Free_Space [MSESERVR.LOGPCTFREE] (not visible in the UI).

The server MTA service status is critical.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Server.Exchg_MTA_Status *EQ Stopped
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Server.Exchg_MTA_Status [MSESERVR.MTASTATUS] (not visible in the UI).

The server Exchange Routing Engine service status is critical.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Server.Res_Status *EQ Stopped
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Server.Res_Status [MSESERVR.RESSTATUS] (not visible in the UI).

The server SMTP service status is critical.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Server.SMTP_Status *EQ Stopped
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Server.SMTP_Status [MSESERVR.SMTPSTATUS] (not visible in the UI).

The WWW service status is critical.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Server.WWW_Status *EQ Stopped
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Server.WWW_Status [MSESERVR.WWWSTATUS] (not visible in the UI).

The service status is critical.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Services_Detail.Service_Status *NE 0
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Services_Detail.Service_Status [MSESRVCD.SRVCSTATUS] (not visible in the UI).

Indicates that the average latency of RPC requests (in milliseconds) has exceeded the critical threshold. The average is calculated for all the RPC requests since the exrpc32.dll process has been loaded.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Store_Interface.RPC_Latency_average_msec *GE 100.00
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Store_Interface_Instance_Name attribute.

This threshold uses the following attributes: MS_Exchange_Store_Interface.RPC_Latency_average_msec [MSESTOINT.RPCLTAVG] (not visible in the UI), MS_Exchange_Store_Interface.Store_Interface_Instance_Name [MSESTOINT.STRINTIN] (not visible in the UI).

Indicates the percentage of RPC requests that have failed. The failed RPC requests are the requests with error codes and exceptions.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Store_Interface.RPC_Requests_failed_% *GT 0.00
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Store_Interface_Instance_Name attribute.

This threshold uses the following attributes: MS_Exchange_Store_Interface.RPC_Requests_failed_% [MSESTOINT.RPCREQF] (not visible in the UI), MS_Exchange_Store_Interface.Store_Interface_Instance_Name [MSESTOINT.STRINTIN] (not visible in the UI).

Indicates that some RPC requests are outstanding. The number of outstanding RPC requests must always be 0.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Store_Interface.RPC_Requests_outstanding *GT 0
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Store_Interface_Instance_Name attribute.

This threshold uses the following attributes: MS_Exchange_Store_Interface.RPC_Requests_outstanding [MSESTOINT.RPCREQO] (not visible in the UI), MS_Exchange_Store_Interface.Store_Interface_Instance_Name [MSESTOINT.STRINTIN] (not visible in the UI).

Indicates that the processing time for some RPC requests has exceeded the specified threshold. An RPC request with a processing time of more than 500 ms is called a slow RPC request.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Store_Interface.RPC_Slow_requests_% *GE 1.00
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Store_Interface_Instance_Name attribute.

This threshold uses the following attributes: MS_Exchange_Store_Interface.RPC_Slow_requests_% [MSESTOINT.RPCSREQP] (not visible in the UI), MS_Exchange_Store_Interface.Store_Interface_Instance_Name [MSESTOINT.STRINTIN] (not visible in the UI).

The number of messages awaiting delivery has exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Active_Mailbox_Delivery_Queue_Length
*GT 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Active_Mailbox_Delivery_Queue_Length [MSETRQUE.AMDQUELNG].

The number of active messages in the non SMTP Queue has exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Active_Non-
SMTP_Delivery_Queue_Length *GT 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Active_Non-SMTP_Delivery_Queue_Length [MSETRQUE.ANDQUELNG].

The number of active messages in the Remote Delivery Queue has exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Active_Remote_Delivery_Queue_Length
*GT 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Active_Remote_Delivery_Queue_Length [MSETRQUE.ARDQUELNG].

The number of active messages in the Remote Delivery Queue has exceeded a warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Active_Remote_Delivery_Queue_Length
*GT 500 *AND *VALUE
MS_Exchange_Transport_Queues.Active_Remote_Delivery_Queue_Length *LE 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Active_Remote_Delivery_Queue_Length [MSETRQUE.ARDQUELNG].

The number of messages awaiting delivery in all queues have exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Aggregate_Delivery_Queue_Length *GT
750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Aggregate_Delivery_Queue_Length [MSETRQUE.AGDQUELNG] (not visible in the UI).

The number of messages awaiting delivery in all queues have exceeded a warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Aggregate_Delivery_Queue_Length *GT
500 *AND *VALUE MS_Exchange_Transport_Queues.Aggregate_Delivery_Queue_Length
*LE 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Aggregate_Delivery_Queue_Length [MSETRQUE.AGDQUELNG] (not visible in the UI).

Indicates that the number of messages in the largest delivery queue has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Largest_Delivery_Queue_Length *GE
200
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Transport_Queue_Instance_Name attribute.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Largest_Delivery_Queue_Length [MSETRQUE.LDELQLEN] (not visible in the UI), MS_Exchange_Transport_Queues.Transport_Queue_Instance_Name [MSETRQUE.TRQUENAME].

Indicates that the number of messages in the largest delivery queue has exceeded the warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Largest_Delivery_Queue_Length *GE
190 *AND *VALUE MS_Exchange_Transport_Queues.Largest_Delivery_Queue_Length
*LT 200
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for each distinct value of the Transport_Queue_Instance_Name attribute.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Largest_Delivery_Queue_Length [MSETRQUE.LDELQLEN] (not visible in the UI), MS_Exchange_Transport_Queues.Transport_Queue_Instance_Name [MSETRQUE.TRQUENAME].

Indicates that the poison message queue contains some messages. The poison message queue must always be empty.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Poison_Queue_Length *GT 0
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Transport_Queue_Instance_Name attribute.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Poison_Queue_Length [MSETRQUE.POIQUELNG], MS_Exchange_Transport_Queues.Transport_Queue_Instance_Name [MSETRQUE.TRQUENAME].

The number of undelivered remote messages that are to be retried has exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Retry_Remote_Delivery_Queue_Length
*GT 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Retry_Remote_Delivery_Queue_Length [MSETRQUE.REDQUELNG].

The number of undelivered remote messages that are to be retried has exceeded a warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Retry_Remote_Delivery_Queue_Length
*GT 500 *AND *VALUE
MS_Exchange_Transport_Queues.Retry_Remote_Delivery_Queue_Length *LE 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes:
MS_Exchange_Transport_Queues.Retry_Remote_Delivery_Queue_Length [MSETRQUE.REDQUELNG].

The number of undelivered messages that are to be retried has exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Retry_Mailbox_Delivery_Queue_Length
*GT 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes:
MS_Exchange_Transport_Queues.Retry_Mailbox_Delivery_Queue_Length [MSETRQUE.RMDQUELNG].

The number of undelivered non-SMTP messages that are to be retried has exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Retry_Non-SMTP_Delivery_Queue_Length
*GT 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Retry_Non-SMTP_Delivery_Queue_Length [MSETRQUE.RNDQUELNG].

Indicates that the number of messages in the Submission queue has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Submission_Queue_Length *GE 100
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Transport_Queue_Instance_Name attribute.

This threshold uses the following attributes:
MS_Exchange_Transport_Queues.Submission_Queue_Length [MSETRQUE.SUBQUELNG],
MS_Exchange_Transport_Queues.Transport_Queue_Instance_Name [MSETRQUE.TRQUENAME].

Indicates that the number of messages in the Submission queue has exceeded the warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Submission_Queue_Length *GE 95 *AND
*VALUE MS_Exchange_Transport_Queues.Submission_Queue_Length *LT 100
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for each distinct value of the Transport_Queue_Instance_Name attribute.

This threshold uses the following attributes:
MS_Exchange_Transport_Queues.Submission_Queue_Length [MSETRQUE.SUBQUELNG],
MS_Exchange_Transport_Queues.Transport_Queue_Instance_Name [MSETRQUE.TRQUENAME].

Indicates that the number of messages in the Unreachable queue has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Unreachable_Queue_Length *GE 100
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Transport_Queue_Instance_Name attribute.

This threshold uses the following attributes:
MS_Exchange_Transport_Queues.Unreachable_Queue_Length [MSETRQUE.UNREQUELNG],
MS_Exchange_Transport_Queues.Transport_Queue_Instance_Name [MSETRQUE.TRQUENAME].

Indicates that the number of messages in the Unreachable queue has exceeded the warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Unreachable_Queue_Length *GE 95 *AND
*VALUE MS_Exchange_Transport_Queues.Unreachable_Queue_Length *LT 100
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for each distinct value of the Transport_Queue_Instance_Name attribute.

This threshold uses the following attributes:
MS_Exchange_Transport_Queues.Unreachable_Queue_Length [MSETRQUE.UNREQUELNG],
MS_Exchange_Transport_Queues.Transport_Queue_Instance_Name [MSETRQUE.TRQUENAME].

Indicates that the number of HTTP requests that are received from the client through ASP.NET has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Active_Sync.Requests_Queued *GE 100
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Active_Sync.Requests_Queued [MSEASYNC.REQQUEUED].

Indicates the rate at which messages being delivered to the Private Information Store is very high.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Private.Messages_Delivered/min *GT 3000
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Private.Messages_Delivered/min [MSEISPRI.MSGSDELM].

Indicates the rate at which messages being delivered to the Private Information Store is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Private.Messages_Delivered/min *GT 1000.0 *AND
*VALUE MS_Exchange_IS_Private.Messages_Delivered/min *LE 3000.0
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Private.Messages_Delivered/min [MSEISPRI.MSGSDELM].

Indicates that the average search time (in milliseconds) has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_OWA.Average_Search_Time *GE 5000
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_OWA.Average_Search_Time [MSEOWA.AVGST].

The service has entered a critical state.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Services_Detail.Service_State *NE Running *AND *VALUE
MS_Exchange_Services_Detail.Mandatory_Service *GT Non_Critical
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Services_Detail.Service_State [MSESRVCD.SRVCSTATE], MS_Exchange_Services_Detail.Mandatory_Service [MSESRVCD.MANDATESRV].

Indicates that the average response time of OWA requests (OEH or ASPX) has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_OWA.Average_Response_Time *GE 100
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_OWA.Average_Response_Time [MSEOWA.AVGRT].

Indicates that the number of current ActiveSync requests has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Active_Sync.Current_Requests *GE 100
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Active_Sync.Current_Requests [MSEASYNC.REQCURR].

Indicates that the number of messages that are delivered per second has exceeded the critical threshold in Exchange Server 2013.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Store.Messages_Delivered/Sec *GT 50
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Store.Messages_Delivered/Sec [MSEISSTR.MSGDLV].

Indicates that the number of messages that are delivered per second has exceeded the warning threshold in Exchange Server 2013.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Store.Messages_Delivered/Sec *GT 15 *AND *VALUE
MS_Exchange_IS_Store.Messages_Delivered/Sec *LE 50
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Store.Messages_Delivered/Sec [MSEISSTR.MSGDLV].

Indicates that the number of messages that are submitted per second has exceeded the critical threshold in Exchange Server 2013.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Store.Messages_Submitted/Sec *GE 50
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Store.Messages_Submitted/Sec [MSEISSTR.MSGSUB].

Indicates that the total number of messages in the Transport queues has exceeded the critical threshold in Exchange Server 2007.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Messages_Queued_Total *GE 1250 *AND
*VALUE MS_Exchange_Transport_Queues.Exchange_Version *EQ 2007
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Messages_Queued_Total [MSETRQUE.MSGQUETOT] (not visible in

the UI), MS_Exchange_Transport_Queues.Exchange_Version [MSETRQUE.VERSION] (not visible in the UI).

Indicates that the total number of messages in the Transport queues has exceeded the warning threshold in Exchange Server 2007.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Messages_Queued_Total *GE 800 *AND
*VALUE MS_Exchange_Transport_Queues.Messages_Queued_Total *LT 1250 *AND
*VALUE MS_Exchange_Transport_Queues.Exchange_Version *EQ 2007
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Messages_Queued_Total [MSETRQUE.MSGQUETOT] (not visible in the UI), MS_Exchange_Transport_Queues.Exchange_Version [MSETRQUE.VERSION] (not visible in the UI).

Indicates that the total number of messages in the Transport queues has exceeded the critical threshold in Exchange Server 2010.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Messages_Queued_Total *GE 1250 *AND
*VALUE MS_Exchange_Transport_Queues.Exchange_Version *EQ 2010
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Messages_Queued_Total [MSETRQUE.MSGQUETOT] (not visible in the UI), MS_Exchange_Transport_Queues.Exchange_Version [MSETRQUE.VERSION] (not visible in the UI).

Indicates that the total number of messages in the Transport queues has exceeded the warning threshold in Exchange Server 2010.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Messages_Queued_Total *GE 800 *AND
*VALUE MS_Exchange_Transport_Queues.Messages_Queued_Total *LT 1250 *AND
*VALUE MS_Exchange_Transport_Queues.Exchange_Version *EQ 2010
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Messages_Queued_Total [MSETRQUE.MSGQUETOT] (not visible in the UI), MS_Exchange_Transport_Queues.Exchange_Version [MSETRQUE.VERSION] (not visible in the UI).

Indicates that the total number of messages in the Transport queues has exceeded the critical threshold in Exchange Server 2013.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Messages_Queued_Total *GE 900 *AND
*VALUE MS_Exchange_Transport_Queues.Exchange_Version *EQ 2013
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Messages_Queued_Total [MSETRQUE.MSGQUETOT] (not visible in the UI), MS_Exchange_Transport_Queues.Exchange_Version [MSETRQUE.VERSION] (not visible in the UI).

Indicates that the total number of messages in the Transport queues has exceeded the warning threshold in Exchange Server 2013.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Transport_Queues.Messages_Queued_Total *GE 600 *AND
*VALUE MS_Exchange_Transport_Queues.Messages_Queued_Total *LT 900 *AND
*VALUE MS_Exchange_Transport_Queues.Exchange_Version *EQ 2013
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Transport_Queues.Messages_Queued_Total [MSETRQUE.MSGQUETOT] (not visible in the UI), MS_Exchange_Transport_Queues.Exchange_Version [MSETRQUE.VERSION] (not visible in the UI).

Server is offline. The clustered mailbox server and all storage groups and databases are offline.

The default configuration has the following SQL syntax:

```
*IF *VALUE Mailbox_Server_Cluster_State.Mailbox_State *EQ 3
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: Mailbox_Server_Cluster_State.Mailbox_State [MSMBSCS.MBXSTATE] (not visible in the UI).

Indicates that the average latency of NSPI RPC Browse Requests has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_AB.NSPI_RPC_Browse_Requests_Average_Latency *GE
1000.00
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_AB.NSPI_RPC_Browse_Requests_Average_Latency [MSEABK.NSRPCBRAV].

Indicates that the average latency of the NSPI RPC requests has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_AB.NSPI_RPC_Requests_Average_Latency *GE 1000.00
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_AB.NSPI_RPC_Requests_Average_Latency [MSEABK.NRPCRQAL].

Indicates that the average latency of the referral RPC requests has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_AB.Referral_RPC_Requests_Average_Latency *GE 1000.00
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_AB.Referral_RPC_Requests_Average_Latency [MSEABK.RRPCRAL].

Indicates that the average processing time of the selected events has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Assistants.Average_Event_Processing_Time_In_seconds
*GE 2.00
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Assistant_U attribute.

This threshold uses the following attributes: MS_Exchange_Assistants.Average_Event_Processing_Time_In_seconds [MSEASSIT.AVEVTPRCT] (not visible in the UI), MS_Exchange_Assistants.Assistant_U [MSEASSIT.ASTNAME] (not visible in the UI).

Indicates that the number of HTTP requests that are received from the client through ASP.NET has exceeded the warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Active_Sync.Requests_Queued *GE 95 *AND *VALUE
MS_Exchange_Active_Sync.Requests_Queued *LT 100
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Active_Sync.Requests_Queued [MSEASYNC.REQQUEUED].

Indicates that the average time to process a free or busy request has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE
MS_Exchange_Availability_Service.Average_Time_to_Process_Free_Busy_Request
*GE 5.00
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Availability_Service.Average_Time_to_Process_Free_Busy_Request [MSEAVSERV.AVFRBRQ] (not visible in the UI).

Indicates that the RPC average latency for the last 1024 packets has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Rpc_Client_Access.RPC_Averaged_Latency *GE 250.00
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Rpc_Client_Access.RPC_Averaged_Latency [MSERPCCA.RPCAVLAT] (not visible in the UI).

Indicates that the RPC average latency for the last 1024 packets has exceeded the warning threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Rpc_Client_Access.RPC_Averaged_Latency *GE 225.00
*AND *VALUE MS_Exchange_Rpc_Client_Access.RPC_Averaged_Latency *LT 250.00
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Rpc_Client_Access.RPC_Averaged_Latency [MSERPCCA.RPCAVLAT] (not visible in the UI).

The number of records that cannot be added to the log buffers has exceeded a critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_DB.Log_Record_Stalls/sec *GT 100.0
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_DB.Log_Record_Stalls/sec [MSEDB.LOGSTALL] (not visible in the UI).

Indicates that the average latency (in milliseconds) of database log write operations has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_DB.I/O_Log_Writes_Average_Latency *GE 10
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Database_Name_U_v622 attribute.

This threshold uses the following attributes: MS_Exchange_DB.I/O_Log_Writes_Average_Latency [MSEDB.IOLOGWRTL] (not visible in the UI), MS_Exchange_DB.Database_Name_U_v622 [MSEDB.DBSNAME] (not visible in the UI).

Indicates that the average latency (in milliseconds) of RPC requests for the past 1024 packets has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Client.RPC_Average_Latency *GE 50
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Client_Name_U attribute.

This threshold uses the following attributes: MS_Exchange_IS_Client.RPC_Average_Latency [MSEISCLI.RPCAVGLAT], MS_Exchange_IS_Client.Client_Name_U [MSEISCLI.CLINAME].

The mailbox store has attained a critical state. Therefore, the mailbox store has been dismounted.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Store.Mailbox_Database_State *EQ Dismounted
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Store.Mailbox_Database_State [MSEISSTR.MAILSTSTAT].

The mailbox store has entered a critical state. Mailbox Store can be dismounted for maintenace. This will report if the Mailbox Store is either mounted or dismounted.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS_Private.Mailbox_Store_State *EQ Dismounted
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS_Private.Mailbox_Store_State [MSEISPRI.MAILSTSTAT].

Indicates that the RPC average latency (in milliseconds) for the information store has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_IS.RPC_Averaged_Latency *GT 10
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_IS.RPC_Averaged_Latency [MSEIS.RPCAVGLA].

Indicates that the average completion time (in milliseconds) for the requests that are sent to the secondary Client Access Server during the sampling period has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Control_Panel_RBAC.Outbound_Proxy_Requests_-
_Average_Response_Time *GE 6000.00
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Control_Panel_RBAC.Outbound_Proxy_Requests_-_Average_Response_Time [MSERBAC.OPRARS] (not visible in the UI).

Indicates that the average time (in milliseconds) for the Exchange Control Panel to respond to a request during the sampling period has exceeded the critical threshold.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Control_Panel_RBAC.Requests_-_Average_Response_Time
*GE 6000.00
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Control_Panel_RBAC.Requests_-_Average_Response_Time [MSERBAC.REQAVGT] (not visible in the UI).

The service startup setting is critical.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Services_Detail.Service_Start_Mode *NE Automatic
```

This threshold is evaluated every 30 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Service_Name attribute.

This threshold uses the following attributes: MS_Exchange_Services_Detail.Service_Start_Mode [MSESRVCD.STARTMODE], MS_Exchange_Services_Detail.Service_Name [MSESRVCD.SRVCNAME].

Indicates that the critical event related to exchange server is triggered.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Event_Details.Type *EQ Failure_Audit *OR *VALUE
MS_Exchange_Event_Details.Type *EQ Error
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: MS_Exchange_Event_Details.Type [MSEEVNTD.EVENTTYP] (not visible in the UI).

Indicates that Email address is not reachable.

The default configuration has the following SQL syntax:

```
*IF *VALUE MS_Exchange_Reachability.Reachable *EQ No
```

This threshold is evaluated every 15 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for each distinct value of the Target_Email_Address attribute.

This threshold uses the following attributes: MS_Exchange_Reachability.Reachable [MSEREACH.REACHABLE], MS_Exchange_Reachability.Target_Email_Address [MSEREACH.TRGEADDRS].

Indicates that the Categorizer Queue Length is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE SMTP.Remote_Queue_Length *GT 50
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: SMTP.Remote_Queue_Length [KEXSMTP.REMQLEN] (not visible in the UI).

Indicates that the Directory Pickup Queue Length is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE SMTP.Directory_Pickup_Queue_Length *GT 25
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: SMTP.Directory_Pickup_Queue_Length [KEXSMTP.DIRPICQLEN] (not visible in the UI).

Indicates that the Messages Pending Routing is very high.

The default configuration has the following SQL syntax:

```
*IF *VALUE SMTP.Messages_Pending_Routing *GT 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Critical.

The threshold is evaluated for the table.

This threshold uses the following attributes: SMTP.Messages_Pending_Routing [KEXSMTP.MSGSPENROU] (not visible in the UI).

Indicates that the Messages Pending Routing is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE SMTP.Messages_Pending_Routing *GT 500 *AND *VALUE
SMTP.Messages_Pending_Routing *LE 750
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: SMTP.Messages_Pending_Routing [KEXSMTP.MSGSPENROU] (not visible in the UI).

Indicates that the Local Queue Length is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE SMTP.Local_Queue_Length *GT 25
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: SMTP.Local_Queue_Length [KEXSMTP.LOCQLEN] (not visible in the UI).

Indicates that the Remote Retry Queue Length is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE SMTP.Remote_Retry_Queue_Length *GT 25
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: SMTP.Remote_Retry_Queue_Length [KEXSMTP.REMRETQLEN] (not visible in the UI).

Indicates that the Local Retry Queue Length is high.

The default configuration has the following SQL syntax:

```
*IF *VALUE SMTP.Local_Retry_Queue_Length *GT 25
```

This threshold is evaluated every 5 minutes.

The severity of this threshold is Warning.

The threshold is evaluated for the table.

This threshold uses the following attributes: SMTP.Local_Retry_Queue_Length [KEXSMTP.LOCRETQLEN] (not visible in the UI).

## Customized thresholds

You can use the predefined thresholds as a starting point for event monitoring, and create your own thresholds as conditions arise that you want to monitor.

The Microsoft Exchange Server agent has many data sets that you can use to create thresholds to monitor for specific conditions. For descriptions of the data sets, see Chapter 4, “Attributes,” on page 49.

**Tip:** The hover help for the **Threshold Editor Data set** field has a *Learn more* link to the attribute descriptions for the selected data set.

# Chapter 4. Attributes

Attributes are the application properties that are being measured and reported by the Monitoring Agent for Microsoft Exchange Server. Attributes make up the key performance indicators (KPIs) that are reported, and you can use them to create thresholds for conditions that you want to monitor.

### About attributes

Attributes are organized into *data sets* (also referred to as *attribute groups*). The values can be selectively displayed in dashboard pages or used to define a threshold.

The most recent data sample of the attributes in the data set are used after you open a dashboard page or start a threshold.

**Dashboard pages**

Only a subset of Microsoft Exchange Server agent attributes is displayed in the dashboard pages. Queries to the dashboard data provider specify which attribute values to request from the managed resource. These attributes are shown in *italic* in this chapter. You can use these attributes to create the charts and tables in custom dashboard pages.

**Thresholds**

You can define thresholds that monitor the state of your operating system, database, or application and open an event when the threshold is exceeded. You use attributes to define thresholds that describe a condition that you want to test. After the threshold is started, the attribute values that are specified in the threshold are compared with the values collected by the Microsoft Exchange Server agent. After the condition is met, an event is registered and you are alerted by indicators in the Application Performance Dashboard navigator, **All My Applications** summary boxes, and the **Events** tab.

The Microsoft Exchange Server agent comes with *predefined thresholds* that are enabled and started with the agent. If you edit a predefined threshold, such as to change the condition or severity, it is no longer treated as a predefined threshold but considered a *custom threshold*.

All Microsoft Exchange Server agent attributes, unless otherwise noted, can be used to create custom thresholds. The **Events** tab has a table of open events with information, including threshold name, severity, source, and display item. You can expand an event row to see the formula and drill down to the dashboard page for the managed resource.

Some attributes names display differently in the Threshold Editor, as shown in parentheses after the name, such as "Object Count (OBJECT_COUNT)".

**Historical data configurations**

The Microsoft Exchange Server agent collects historical data for key data sets that are shown in the dashboard pages. A page that includes historical views from the managed resource instance has a time selector tool for adjusting the time range. With line charts, you can also compare the values with a previous day, up to the number of days that have been saved.

### Additional information about attributes

Note the following conditions:

- When no data can be collected for a data set, an empty result is returned (no rows of data)
- When a specific attribute cannot be collected, the value 0 or "" is returned unless otherwise specified in a particular attribute (for example, "N/A")
- Any numeric attribute value that is greater than the largest (positive or negative) number that can be represented by that type returns the corresponding maximum or minimum value (for example, the maximum value for a 32-bit number is 2,147,483,647). These values are displayed as text values that are defined by the data set, such as "Value Exceeds Maximum" or "Value Exceeds Minimum".

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Numeric attributes have characteristics that are indicated in parentheses after the data type, such as "(32-bit numeric property)". A numeric attribute value can be 32-bit or 64-bit or some other size. The value type can be gauge, which means it varies, like a speedometer; counter, which counts and always increases; or numeric property, such as disk size.

For a list of the data sets, a list of the attributes in each data set, and descriptions of the attributes in the Microsoft Exchange Server agent, see "Data sets for the monitoring agent" on page 50 and "Attribute descriptions" on page 58.

## Data sets for the monitoring agent

The Microsoft Exchange Server agent contains the following data sets.

- Data set name: Forefront Exchange On Demand Scanner
  - Table name: FFEXODS
  - Historical table name: KEX_FOREFRONT_EXCHANGE_ON_DEMAND_SCANNER or FFEXODS
- Data set name: Forefront Exchange Realtime Scanner
  - Table name: FFEXRTS
  - Historical table name: KEX_FOREFRONT_EXCHANGE_REALTIME_SCANNER or FFEXRTS
- Data set name: Forefront Exchange Scheduled Scanner
  - Table name: FFEXSCHS
  - Historical table name: KEX_FOREFRONT_EXCHANGE_SCHEDULED_SCANNER or FFEXSCHS
- Data set name: Forefront Exchange Transport Scanner
  - Table name: FFEXTRNSS
  - Historical table name: KEX_FOREFRONT_EXCHANGE_TRANSPORT_SCANNER or FFEXTRNSS
- Data set name: Mailbox Server Cluster State
  - Table name: MSMBSCS
  - Historical table name: KEX_MAILBOX_SERVER_CLUSTER_STATE or MSMBSCS
- Data set name: Microsoft Forefront Server Security Scan
  - Table name: MSFSSS
  - Historical table name: KEX_MICROSOFT_FOREFRONT_SERVER_SECURITY_SCAN or MSFSSS
- Data set name: MS Exchange AB
  - Table name: MSEABK
  - Historical table name: KEX_MS_EXCHANGE_AB or MSEABK
- Data set name: MS Exchange Active Manager
  - Table name: MSEAM
  - Historical table name: KEX_MS_EXCHANGE_ACTIVE_MANAGER or MSEAM
- Data set name: MS Exchange Active Manager Client
  - Table name: MSEAMC
  - Historical table name: KEX_MS_EXCHANGE_ACTIVE_MANAGER_CLIENT or MSEAMC
- Data set name: MS Exchange Active Manager Server
  - Table name: MSEAMS
  - Historical table name: KEX_MS_EXCHANGE_ACTIVE_MANAGER_SERVER or MSEAMS
- Data set name: MS Exchange Active Sync
  - Table name: MSEASYNC

  - Historical table name: KEX_MS_EXCHANGE_ACTIVE_SYNC or MSEASYNC
- Data set name: MS Exchange ADAccess Caches
  - Table name: MSEADCAH
  - Historical table name: KEX_MS_EXCHANGE_ADACCESS_CACHES or MSEADCAH
- Data set name: MS Exchange ADAccess Domain Controllers
  - Table name: MSEADDC
  - Historical table name: KEX_MS_EXCHANGE_ADACCESS_DOMAIN_CONTROLLERS or MSEADDC
- Data set name: MS Exchange ADAccess Forest Discovery
  - Table name: MSEADFD
  - Historical table name: KEX_MS_EXCHANGE_ADACCESS_FOREST_DISCOVERY or MSEADFD
- Data set name: MS Exchange ADAccess Processes
  - Table name: MSEADACP
  - Historical table name: KEX_MS_EXCHANGE_ADACCESS_PROCESSES or MSEADACP
- Data set name: MS Exchange Assistants
  - Table name: MSEASSIT
  - Historical table name: KEX_MS_EXCHANGE_ASSISTANTS or MSEASSIT
- Data set name: MS Exchange Assistants Per Database
  - Table name: MSEASSTDB
  - Historical table name: KEX_MS_EXCHANGE_ASSISTANTS_PER_DATABASE or MSEASSTDB
- Data set name: MS Exchange Attachment Filtering
  - Table name: MSEAF
  - Historical table name: KEX_MS_EXCHANGE_ATTACHMENT_FILTERING or MSEAF
- Data set name: MS Exchange Authentication
  - Table name: MSEAUTH
  - Historical table name: KEX_MS_EXCHANGE_AUTHENTICATION or MSEAUTH
- Data set name: MS Exchange Autodiscover
  - Table name: MSEATDCVR
  - Historical table name: KEX_MS_EXCHANGE_AUTODISCOVER or MSEATDCVR
- Data set name: MS Exchange Availability Service
  - Table name: MSEAVSERV
  - Historical table name: KEX_MS_EXCHANGE_AVAILABILITY_SERVICE or MSEAVSERV
- Data set name: MS Exchange Calendar Attendant
  - Table name: MSECALATD
  - Historical table name: KEX_MS_EXCHANGE_CALENDAR_ATTENDANT or MSECALATD
- Data set name: MS Exchange Connection Filtering Agent
  - Table name: MSECFA
  - Historical table name: KEX_MS_EXCHANGE_CONNECTION_FILTERING_AGENT or MSECFA
- Data set name: MS Exchange Content Filter Agent
  - Table name: MSECONFA
  - Historical table name: KEX_MS_EXCHANGE_CONTENT_FILTER_AGENT or MSECONFA
- Data set name: MS Exchange Control Panel RBAC
  - Table name: MSERBAC

  - Historical table name: KEX_MS_EXCHANGE_CONTROL_PANEL_RBAC or MSERBAC
- Data set name: MS Exchange Data Loss Prevention Policies
  - Table name: MSEDLPP
  - Historical table name: KEX_MS_EXCHANGE_DATA_LOSS_PREVENTION_POLICIES or MSEDLPP
- Data set name: MS Exchange Data Loss Prevention Policy Tips
  - Table name: MSEDLPPT
  - Historical table name: KEX_MS_EXCHANGE_DATA_LOSS_PREVENTION_POLICY_TIPS or MSEDLPPT
- Data set name: MS Exchange Database Availability Group
  - Table name: MSEDAG
  - Historical table name: KEX_MS_EXCHANGE_DATABASE_AVAILABILITY_GROUP or MSEDAG
- Data set name: MS Exchange DB
  - Table name: MSEDB
  - Historical table name: KEX_MS_EXCHANGE_DB or MSEDB
- Data set name: MS Exchange DB Instance
  - Table name: MSEDBINS
  - Historical table name: KEX_MS_EXCHANGE_DB_INSTANCE or MSEDBINS
- Data set name: MS Exchange Delivery DSN
  - Table name: MSEDDSN
  - Historical table name: KEX_MS_EXCHANGE_DELIVERY_DSN or MSEDDSN
- Data set name: MS Exchange DlpPolicyTips
  - Table name: MSEDLPT
  - Historical table name: KEX_MS_EXCHANGE_DLPPOLICYTIPS or MSEDLPT
- Data set name: MS Exchange DS
  - Table name: MSEDS
  - Historical table name: KEX_MS_EXCHANGE_DS or MSEDS
- Data set name: MS Exchange Email Statistics
  - Table name: MSEES
  - Historical table name: KEX_MS_EXCHANGE_EMAIL_STATISTICS or MSEES
- Data set name: MS Exchange Event Details
  - Table name: MSEEVNTD
  - Historical table name: KEX_MS_EXCHANGE_EVENT_DETAILS or MSEEVNTD
- Data set name: MS Exchange Extensibility Agents
  - Table name: MSEXTAGT
  - Historical table name: KEX_MS_EXCHANGE_EXTENSIBILITY_AGENTS or MSEXTAGT
- Data set name: MS Exchange FDS OAB
  - Table name: MSEFOAB
  - Historical table name: KEX_MS_EXCHANGE_FDS_OAB or MSEFOAB
- Data set name: MS Exchange IS
  - Table name: MSEIS
  - Historical table name: KEX_MS_EXCHANGE_IS or MSEIS
- Data set name: MS Exchange IS Client
  - Table name: MSEISCLI

  - Historical table name: KEX_MS_EXCHANGE_IS_CLIENT or MSEISCLI
- Data set name: MS Exchange IS HA Active Database
  - Table name: MSEISHAD
  - Historical table name: KEX_MS_EXCHANGE_IS_HA_ACTIVE_DATABASE or MSEISHAD
- Data set name: MS Exchange IS Private
  - Table name: MSEISPRI
  - Historical table name: KEX_MS_EXCHANGE_IS_PRIVATE or MSEISPRI
- Data set name: MS Exchange IS Public
  - Table name: MSEISPUB
  - Historical table name: KEX_MS_EXCHANGE_IS_PUBLIC or MSEISPUB
- Data set name: MS Exchange IS Public Replication
  - Table name: MSEISPUR
  - Historical table name: KEX_MS_EXCHANGE_IS_PUBLIC_REPLICATION or MSEISPUR
- Data set name: MS Exchange IS Store
  - Table name: MSEISSTR
  - Historical table name: KEX_MS_EXCHANGE_IS_STORE or MSEISSTR
- Data set name: MS Exchange Lotus Notes Connector Summary
  - Table name: MSELOTUS
  - Historical table name: KEX_MS_EXCHANGE_LOTUS_NOTES_CONNECTOR_SUMMARY or MSELOTUS
- Data set name: MS Exchange Mail Submission
  - Table name: MSEMS
  - Historical table name: KEX_MS_EXCHANGE_MAIL_SUBMISSION or MSEMS
- Data set name: MS Exchange Mail Tips
  - Table name: MSEMT
  - Historical table name: KEX_MS_EXCHANGE_MAIL_TIPS or MSEMT
- Data set name: MS Exchange Mailbox Detail
  - Table name: MSEMBXD
  - Historical table name: KEX_MS_EXCHANGE_MAILBOX_DETAIL or MSEMBXD
- Data set name: MS Exchange Mailbox Replication Service
  - Table name: MSEMREPS
  - Historical table name: KEX_MS_EXCHANGE_MAILBOX_REPLICATION_SERVICE or MSEMREPS
- Data set name: MS Exchange Mailbox Replication Service per Mdb
  - Table name: MSEMRSPM
  - Historical table name: KEX_MS_EXCHANGE_MAILBOX_REPLICATION_SERVICE_PER_MDB or MSEMRSPM
- Data set name: MS Exchange Managed Folder Assistant
  - Table name: MSEMANFA
  - Historical table name: KEX_MS_EXCHANGE_MANAGED_FOLDER_ASSISTANT or MSEMANFA
- Data set name: MS Exchange MAPI Connectivity Details
  - Table name: MSEMCD
  - Historical table name: KEX_MS_EXCHANGE_MAPI_CONNECTIVITY_DETAILS or MSEMCD
- Data set name: MS Exchange MAPIOVERHTTP

  - Table name: MSEMAPI
  - Historical table name: KEX_MS_EXCHANGE_MAPIOVERHTTP or MSEMAPI
- Data set name: MS Exchange MTA
  - Table name: MSEMTA
  - Historical table name: KEX_MS_EXCHANGE_MTA or MSEMTA
- Data set name: MS Exchange MTA Connections
  - Table name: MSEMTAC
  - Historical table name: KEX_MS_EXCHANGE_MTA_CONNECTIONS or MSEMTAC
- Data set name: MS Exchange NLB Status
  - Table name: MSENLBS
  - Historical table name: KEX_MS_EXCHANGE_NLB_STATUS or MSENLBS
- Data set name: MS Exchange Non Delivery Report
  - Table name: MSENDR
  - Historical table name: KEX_MS_EXCHANGE_NON_DELIVERY_REPORT or MSENDR
- Data set name: MS Exchange OAB Details
  - Table name: MSEOABDET
  - Historical table name: KEX_MS_EXCHANGE_OAB_DETAILS or MSEOABDET
- Data set name: MS Exchange OAB Request Handler
  - Table name: MSEOABREH
  - Historical table name: KEX_MS_EXCHANGE_OAB_REQUEST_HANDLER or MSEOABREH
- Data set name: MS Exchange OWA
  - Table name: MSEOWA
  - Historical table name: KEX_MS_EXCHANGE_OWA or MSEOWA
- Data set name: MS Exchange Protocol Analysis Agent
  - Table name: MSEPAA
  - Historical table name: KEX_MS_EXCHANGE_PROTOCOL_ANALYSIS_AGENT or MSEPAA
- Data set name: MS Exchange Public Folder Detail
  - Table name: MSEPFLDD
  - Historical table name: KEX_MS_EXCHANGE_PUBLIC_FOLDER_DETAIL or MSEPFLDD
- Data set name: MS Exchange Reachability
  - Table name: MSEREACH
  - Historical table name: KEX_MS_EXCHANGE_REACHABILITY or MSEREACH
- Data set name: MS Exchange Recipient Cache
  - Table name: MSERCACH
  - Historical table name: KEX_MS_EXCHANGE_RECIPIENT_CACHE or MSERCACH
- Data set name: MS Exchange Recipient Filter Agent
  - Table name: MSERFA
  - Historical table name: KEX_MS_EXCHANGE_RECIPIENT_FILTER_AGENT or MSERFA
- Data set name: MS Exchange Replica Seeder
  - Table name: MSERPSD
  - Historical table name: KEX_MS_EXCHANGE_REPLICA_SEEDER or MSERPSD
- Data set name: MS Exchange Replication

  - Table name: MSEREPLI
  - Historical table name: KEX_MS_EXCHANGE_REPLICATION_VERSION630 or MSEREPLI
- Data set name: MS Exchange Replication Server
  - Table name: MSERS
  - Historical table name: KEX_MS_EXCHANGE_REPLICATION_SERVER or MSERS
- Data set name: MS Exchange Replication(Superseded)
  - Table name: MSEREPL
  - Historical table name: KEX_MS_EXCHANGE_REPLICATION or MSEREPL
- Data set name: MS Exchange Resource Booking
  - Table name: MSERSCBK
  - Historical table name: KEX_MS_EXCHANGE_RESOURCE_BOOKING or MSERSCBK
- Data set name: MS Exchange Resource Health
  - Table name: MSERH
  - Historical table name: KEX_MS_EXCHANGE_RESOURCE_HEALTH or MSERH
- Data set name: MS Exchange Rights Management Service
  - Table name: MSERMS
  - Historical table name: KEX_MS_EXCHANGE_RIGHTS_MANAGEMENT_SERVICE or MSERMS
- Data set name: MS Exchange Role Based Services
  - Table name: MSERBS
  - Historical table name: KEX_MS_EXCHANGE_ROLE_BASED_SERVICES or MSERBS
- Data set name: MS Exchange Role Topology
  - Table name: MSRTOPO
  - Historical table name: KEX_MS_EXCHANGE_ROLE_TOPOLOGY or MSRTOPO
- Data set name: MS Exchange Rpc Client Access
  - Table name: MSERPCCA
  - Historical table name: KEX_MS_EXCHANGE_RPC_CLIENT_ACCESS or MSERPCCA
- Data set name: MS Exchange Search Indices
  - Table name: MSESRCHID
  - Historical table name: KEX_MS_EXCHANGE_SEARCH_INDICES or MSESRCHID
- Data set name: MS Exchange Search Mailbox Operators
  - Table name: MSESMO
  - Historical table name: KEX_MS_EXCHANGE_SEARCH_MAILBOX_OPERATORS or MSESMO
- Data set name: MS Exchange Search Mailbox Session Cache
  - Table name: MSESMSC
  - Historical table name: KEX_MS_EXCHANGE_SEARCH_MAILBOX_SESSION_CACHE or MSESMSC
- Data set name: MS Exchange Sender Filter Agent
  - Table name: MSESFA
  - Historical table name: KEX_MS_EXCHANGE_SENDER_FILTER_AGENT or MSESFA
- Data set name: MS Exchange Sender Id Agent
  - Table name: MSESIDAG
  - Historical table name: KEX_MS_EXCHANGE_SENDER_ID_AGENT or MSESIDAG
- Data set name: MS Exchange Server

  - Table name: MSESERVR
  - Historical table name: KEX_MS_EXCHANGE_SERVER or MSESERVR
- Data set name: MS Exchange Services Detail
  - Table name: MSESRVCD
  - Historical table name: KEX_MS_EXCHANGE_SERVICES_DETAIL or MSESRVCD
- Data set name: MS Exchange Storage Group Detail
  - Table name: MSESGRPD
  - Historical table name: KEX_MS_EXCHANGE_STORAGE_GROUP_DETAIL or MSESGRPD
- Data set name: MS Exchange Store Driver
  - Table name: MSESTRDR
  - Historical table name: KEX_MS_EXCHANGE_STORE_DRIVER or MSESTRDR
- Data set name: MS Exchange Store Driver Database
  - Table name: MSESDD
  - Historical table name: KEX_MS_EXCHANGE_STORE_DRIVER_DATABASE or MSESDD
- Data set name: MS Exchange Store Driver Server
  - Table name: MSESDS
  - Historical table name: KEX_MS_EXCHANGE_STORE_DRIVER_SERVER or MSESDS
- Data set name: MS Exchange Store Interface
  - Table name: MSESTOINT
  - Historical table name: KEX_MS_EXCHANGE_STORE_INTERFACE or MSESTOINT
- Data set name: MS Exchange Submission
  - Table name: MSESUBM
  - Historical table name: KEX_MS_EXCHANGE_SUBMISSION or MSESUBM
- Data set name: MS Exchange Submission DSN
  - Table name: MSESDSN
  - Historical table name: KEX_MS_EXCHANGE_SUBMISSION_DSN or MSESDSN
- Data set name: MS Exchange Text Messaging
  - Table name: MSETXTMSG
  - Historical table name: KEX_MS_EXCHANGE_TEXT_MESSAGING or MSETXTMSG
- Data set name: MS Exchange Throttling
  - Table name: MSET
  - Historical table name: KEX_MS_EXCHANGE_THROTTLING or MSET
- Data set name: MS Exchange Transport Database
  - Table name: MSETRDB
  - Historical table name: KEX_MS_EXCHANGE_TRANSPORT_DATABASE or MSETRDB
- Data set name: MS Exchange Transport Dumpster
  - Table name: MSETRDMP
  - Historical table name: KEX_MS_EXCHANGE_TRANSPORT_DUMPSTER or MSETRDMP
- Data set name: MS Exchange Transport Queues
  - Table name: MSETRQUE
  - Historical table name: KEX_MS_EXCHANGE_TRANSPORT_QUEUES or MSETRQUE
- Data set name: MS Exchange Transport Rules

  - Table name: MSETRRUL
  - Historical table name: KEX_MS_EXCHANGE_TRANSPORT_RULES or MSETRRUL
- Data set name: MS Exchange Transport Shadow Redundancy
  - Table name: MSETRSR
  - Historical table name: KEX_MS_EXCHANGE_TRANSPORT_SHADOW_REDUNDANCY or MSETRSR
- Data set name: MS Exchange Transport SMTP Availability
  - Table name: MSETSMTPA
  - Historical table name: KEX_MS_EXCHANGE_TRANSPORT_SMTP_AVAILABILITY or MSETSMTPA
- Data set name: MS Exchange Transport SmtpReceive
  - Table name: MSESMTPR
  - Historical table name: KEX_MS_EXCHANGE_TRANSPORT_SMTPRECEIVE or MSESMTPR
- Data set name: MS Exchange Transport SmtpSend
  - Table name: MSESMTPS
  - Historical table name: KEX_MS_EXCHANGE_TRANSPORT_SMTPSEND or MSESMTPS
- Data set name: MS Exchange UM Auto Attendant
  - Table name: MSEUMAATTD
  - Historical table name: KEX_MS_EXCHANGE_UM_AUTO_ATTENDANT or MSEUMAATTD
- Data set name: MS Exchange UM Availability
  - Table name: MSEUMAVLBT
  - Historical table name: KEX_MS_EXCHANGE_UM_AVAILABILITY or MSEUMAVLBT
- Data set name: MS Exchange UM Call Answer
  - Table name: MSEUMCANS
  - Historical table name: KEX_MS_EXCHANGE_UM_CALL_ANSWER or MSEUMCANS
- Data set name: MS Exchange UM Enabled User Details
  - Table name: MSEUMEUDTS
  - Historical table name: KEX_MS_EXCHANGE_UM_ENABLED_USER_DETAILS or MSEUMEUDTS
- Data set name: MS Exchange UM General
  - Table name: MSEUMGEN
  - Historical table name: KEX_MS_EXCHANGE_UM_GENERAL or MSEUMGEN
- Data set name: MS Exchange UM Subscriber Access
  - Table name: MSEUMSA
  - Historical table name: KEX_MS_EXCHANGE_UM_SUBSCRIBER_ACCESS or MSEUMSA
- Data set name: MS Exchange Workload Management Policies
  - Table name: MSEWMP
  - Historical table name: KEX_MS_EXCHANGE_WORKLOAD_MANAGEMENT_POLICIES or MSEWMP
- Data set name: MS Exchange Workloads
  - Table name: MSEWLDS
  - Historical table name: KEX_MS_EXCHANGE_WORKLOADS or MSEWLDS
- Data set name: MS Exchange WS
  - Table name: MSEWS
  - Historical table name: KEX_MS_EXCHANGE_WS or MSEWS
- Data set name: RPC HTTP Proxy

  - Table name: MSEPRXY
  - Historical table name: KEX_RPC_HTTP_PROXY or MSEPRXY
- Data set name: SMTP
  - Table name: KEXSMTP
  - Historical table name: KEX_SMTP

## Attribute descriptions

Attributes in each Microsoft Exchange Server agent data set collect data that the agent uses for monitoring.

The descriptions of the data sets contain information such as description, type, and names for each attribute in the data set. Some attributes are designated as key attributes, which are identifier attributes for the data set. An attribute in *italic* indicates that it is available for display in the Cloud APM console dashboard pages.

### Forefront Exchange On Demand Scanner data set

This data set monitors the activity of the Forefront Exchange On Demand Scanner. The _Total instance name displays values for all process instances that are currently active. If a process exits, the _Total instance does not display the data. _RunningTotal and _CumulativeTotal instances display the data since Microsoft Forefront Protection 2010 for Exchange Server was installed. The data set is available only in Exchange Server 2007 and its service packs and Exchange Server 2010. This data set is a multi-instance data set.

This data set contains the following attributes:

**Malware Message Parts Cleaned**
The number of message parts that are removed because they are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_CLEANED or MALPRTCLN (historical name), Malware Message Parts Cleaned (caption), Malware_Message_Parts_Cleaned (attribute name), and MALPRTCLN (column name).

**Malware Message Parts Deleted**
The number of message parts that are deleted because they are detected as malware. The message parts are deleted because the delete action is configured or because a cleaning operation failed. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_DELETED or MALPRTDEL (historical name), Malware Message Parts Deleted (caption), Malware_Message_Parts_Deleted (attribute name), and MALPRTDEL (column name).

**Malware Message Parts Detected**
The number of message parts that are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_DETECTED or MALPRTDET (historical name), Malware Message Parts Detected (caption), Malware_Message_Parts_Detected (attribute name), and MALPRTDET (column name).

**Malware Message Parts Quarantined**
The number of message parts that are quarantined because they are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_QUARANTINED or MALPRTQRN (historical name), Malware Message Parts Quarantined (caption), Malware_Message_Parts_Quarantined (attribute name), and MALPRTQRN (column name).

**Message Parts Scanned**
The number of message parts that are scanned. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGE_PARTS_SCANNED or MSGPRTSCN (historical name), Message Parts Scanned (caption), Message_Parts_Scanned (attribute name), and MSGPRTSCN (column name).

**Message Parts Scanned/sec**
The number of message parts that are scanned per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGE_PARTS_SCANNED/SEC or MSGPRTSPS (historical name), Message Parts Scanned/sec (caption), Message_Parts_Scanned/sec (attribute name), and MSGPRTSPS (column name).

**Messages Scanned/sec**
The number of messages that are scanned per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_SCANNED/SEC or MSGSCNPS (historical name), Messages Scanned/sec (caption), Messages_Scanned/sec (attribute name), and MSGSCNPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**On Demand Scanner Job Name**
The name of the Forefront Exchange On Demand Scanner instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: ON_DEMAND_SCANNER_JOB_NAME_U or ODSNAME (historical name), On Demand Scanner Job Name (caption), On_Demand_Scanner_Job_Name_U (attribute name), and ODSNAME (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Sender Filter Messages Detected**
The number of messages that are detected because the sender of the messages matches a sender-domain filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGES_DETECTED or SENDMDET (historical name), Sender Filter Messages Detected (caption), Sender_Filter_Messages_Detected (attribute name), and SENDMDET (column name).

**Sender Filter Messages Quarantined**
The number of messages that are quarantined because the sender of the messages matches a sender-domain filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGES_QUARANTINED or SENDMQRN (historical name), Sender Filter Messages Quarantined (caption), Sender_Filter_Messages_Quarantined (attribute name), and SENDMQRN (column name).

**Sender Filter Messages Skipped**
The number of messages that are detected because the sender of the messages matches a sender-domain filter, but the messages are routed normally. The skip action is used when the scanner is configured and when the license exceeds the grace period. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGES_SKIPPED or SENDMSKP (historical name), Sender Filter Messages Skipped (caption), Sender_Filter_Messages_Skipped (attribute name), and SENDMSKP (column name).

**Subject Filter Messages Detected**
The number of messages that are detected because the subject line matches a subject line filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGES_DETECTED or SUBJMDET (historical name), Subject Filter Messages Detected (caption), Subject_Filter_Messages_Detected (attribute name), and SUBJMDET (column name).

**Subject Filter Messages Quarantined**
The number of messages that are quarantined because the subject line matches a subject line filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGES_QUARANTINED or SUBJMQRN (historical name), Subject Filter Messages Quarantined (caption), Subject_Filter_Messages_Quarantined (attribute name), and SUBJMQRN (column name).

**Subject Filter Messages Skipped**
The number of messages that are detected because the subject line matches a subject line filter, but the messages are routed normally. The skip action is used when the scanner is configured and when the license exceeds the grace period. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGES_SKIPPED or SUBJMSKP (historical name), Subject Filter Messages Skipped (caption), Subject_Filter_Messages_Skipped (attribute name), and SUBJMSKP (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## Forefront Exchange Realtime Scanner data set

This data set monitors the Forefront Exchange Realtime Scanner activity. The _Total instance name displays values for all process instances that are currently active. If a process exits, the _Total instance does not display the data. _RunningTotal and _CumulativeTotal instances display the data since Microsoft Forefront Protection 2010 for Exchange Server was installed. The data set is available only in Exchange Server 2007 and its service packs and Exchange Server 2010. This data set is a multi-instance data set.

This data set contains the following attributes:

**Malware Message Parts Cleaned**
The number of message parts that are removed because they are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_CLEANED or MALPRTCLN (historical name), Malware Message Parts Cleaned (caption), Malware_Message_Parts_Cleaned (attribute name), and MALPRTCLN (column name).

**Malware Message Parts Deleted**
The number of message parts that are deleted because they are detected as malware. The message parts are deleted because the delete action was configured or because a cleaning operation failed. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_DELETED or MALPRTDEL (historical name), Malware Message Parts Deleted (caption), Malware_Message_Parts_Deleted (attribute name), and MALPRTDEL (column name).

**Malware Message Parts Detected**
The number of message parts that are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_DETECTED or MALPRTDET (historical name), Malware Message Parts Detected (caption), Malware_Message_Parts_Detected (attribute name), and MALPRTDET (column name).

**Malware Message Parts Quarantined**
The number of message parts that are quarantined because they are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_QUARANTINED or MALPRTQRN (historical name), Malware Message Parts Quarantined (caption), Malware_Message_Parts_Quarantined (attribute name), and MALPRTQRN (column name).

**Message Parts Scanned**
The number of message parts that are scanned. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGE_PARTS_SCANNED or MSGPRTSCN (historical name), Message Parts Scanned (caption), Message_Parts_Scanned (attribute name), and MSGPRTSCN (column name).

**Message Parts Scanned/sec**
The number of message parts that are scanned per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGE_PARTS_SCANNED/SEC or MSGPRTSPS (historical name), Message Parts Scanned/sec (caption), Message_Parts_Scanned/sec (attribute name), and MSGPRTSPS (column name).

**Messages Scanned/sec**
The number of messages that are scanned per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_SCANNED/SEC or MSGSCNPS (historical name), Messages Scanned/sec (caption), Messages_Scanned/sec (attribute name), and MSGSCNPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Realtime Scanner Job Name**
The name of the Forefront Exchange Realtime Scanner instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: REALTIME_SCANNER_JOB_NAME_U or RTSNAME (historical name), Realtime Scanner Job Name (caption), Realtime_Scanner_Job_Name_U (attribute name), and RTSNAME (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Sender Filter Message Parts Detected**
The number of message parts that are detected because the sender of the messages matches a sender-domain filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGE_PARTS_DETECTED or SENDMDET (historical name), Sender Filter Message Parts Detected (caption), Sender_Filter_Message_Parts_Detected (attribute name), and SENDMDET (column name).

**Sender Filter Message Parts Quarantined**
The number of message parts that are quarantined because the sender of the messages matches a sender-domain filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGE_PARTS_QUARANTINED or SENDMQRN (historical name), Sender Filter Message Parts Quarantined (caption), Sender_Filter_Message_Parts_Quarantined (attribute name), and SENDMQRN (column name).

**Sender Filter Message Parts Skipped**
The number of message parts that are detected because the sender of the messages matches a sender-domain filter, but the message parts are routed normally. The skip action is used when the scanner is configured and when the license exceeds the grace period. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGE_PARTS_SKIPPED or SENDMSKP (historical name), Sender Filter Message Parts Skipped (caption), Sender_Filter_Message_Parts_Skipped (attribute name), and SENDMSKP (column name).

**Subject Filter Message Parts Detected**
The number of message parts detected because the subject line matches a subject line filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGE_PARTS_DETECTED or SUBJMDET (historical name), Subject Filter Message Parts Detected (caption), Subject_Filter_Message_Parts_Detected (attribute name), and SUBJMDET (column name).

**Subject Filter Message Parts Quarantined**
The number of message parts quarantined because the subject line matches a subject line filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGE_PARTS_QUARANTINED or SUBJMQRN (historical name), Subject Filter Message Parts Quarantined (caption), Subject_Filter_Message_Parts_Quarantined (attribute name), and SUBJMQRN (column name).

**Subject Filter Message Parts Skipped**
The number of message parts that are detected because the subject line matches a subject line filter, but the message parts are routed normally. The skip action is used when the scanner configured and when the license exceeds the grace period. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGE_PARTS_SKIPPED or SUBJMSKP (historical name), Subject Filter Message Parts Skipped (caption), Subject_Filter_Message_Parts_Skipped (attribute name), and SUBJMSKP (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## Forefront Exchange Scheduled Scanner data set

This data set monitors the activity of the Forefront Exchange Scheduled Scanner. The _Total instance name displays values for all process instances that are currently active. If a process exits, the _Total instance does not display the data. _RunningTotal and _CumulativeTotal instances display the data since Microsoft Forefront Protection 2010 for Exchange Server was installed. The data set is available only in

Exchange Server 2007 and its service packs and Exchange Server 2010. This data set is a multi-instance data set.

This data set contains the following attributes:

**Malware Message Parts Cleaned**
The number of message parts that are removed because they are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_CLEANED or MALPRTCLN (historical name), Malware Message Parts Cleaned (caption), Malware_Message_Parts_Cleaned (attribute name), and MALPRTCLN (column name).

**Malware Message Parts Deleted**
The number of message parts that are deleted because they are detected as malware. A deletion occurs because the delete action was configured or because a cleaning operation failed. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_DELETED or MALPRTDEL (historical name), Malware Message Parts Deleted (caption), Malware_Message_Parts_Deleted (attribute name), and MALPRTDEL (column name).

**Malware Message Parts Detected**
The number of message parts that are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_DETECTED or MALPRTDET (historical name), Malware Message Parts Detected (caption), Malware_Message_Parts_Detected (attribute name), and MALPRTDET (column name).

**Malware Message Parts Quarantined**
The number of message parts that are quarantined because they are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_QUARANTINED or MALPRTQRN (historical name), Malware Message Parts Quarantined (caption), Malware_Message_Parts_Quarantined (attribute name), and MALPRTQRN (column name).

**Message Parts Scanned**
The number of message parts that are scanned. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGE_PARTS_SCANNED or MSGPRTSCN (historical name), Message Parts Scanned (caption), Message_Parts_Scanned (attribute name), and MSGPRTSCN (column name).

**Message Parts Scanned/sec**
The number of message parts that are scanned per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGE_PARTS_SCANNED/SEC or MSGPRTSPS (historical name), Message Parts Scanned/sec (caption), Message_Parts_Scanned/sec (attribute name), and MSGPRTSPS (column name).

**Messages Scanned/sec**
The number of messages that are scanned per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_SCANNED/SEC or MSGSCNPS (historical name), Messages Scanned/sec (caption), Messages_Scanned/sec (attribute name), and MSGSCNPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Scheduled Scanner Job Name**
The name of the Forefront Exchange Scheduled Scanner instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: SCHEDULED_SCANNER_JOB_NAME_U or SCHSNAME (historical name), Scheduled Scanner Job Name (caption), Scheduled_Scanner_Job_Name_U (attribute name), and SCHSNAME (column name).

**Sender Filter Message Parts Detected**
The number of message parts that are detected because the sender of the messages matches a sender-domain filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGE_PARTS_DETECTED or SENDMDET (historical name), Sender Filter Message Parts Detected (caption), Sender_Filter_Message_Parts_Detected (attribute name), and SENDMDET (column name).

**Sender Filter Message Parts Quarantined**
The number of message parts that are quarantined because the sender of the messages matches a sender-domain filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGE_PARTS_QUARANTINED or SENDMQRN (historical name), Sender Filter Message Parts Quarantined (caption), Sender_Filter_Message_Parts_Quarantined (attribute name), and SENDMQRN (column name).

**Sender Filter Message Parts Skipped**
The number of message parts that are detected because the sender of the messages matches sender-domain filter, but the message parts are routed normally. The skip action is used when the scanner is configured and when the license exceeds the grace period. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGE_PARTS_SKIPPED or SENDMSKP (historical name), Sender Filter Message Parts Skipped (caption), Sender_Filter_Message_Parts_Skipped (attribute name), and SENDMSKP (column name).

**Subject Filter Message Parts Detected**
The number of message parts that are detected because the subject line matches a subject line filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGE_PARTS_DETECTED or SUBJMDET (historical name), Subject Filter Message Parts Detected (caption), Subject_Filter_Message_Parts_Detected (attribute name), and SUBJMDET (column name).

**Subject Filter Message Parts Quarantined**
The number of message parts that are quarantined because the subject line matches a subject line filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGE_PARTS_QUARANTINED or SUBJMQRN (historical name), Subject Filter Message Parts Quarantined (caption), Subject_Filter_Message_Parts_Quarantined (attribute name), and SUBJMQRN (column name).

**Subject Filter Message Parts Skipped**
The number of message parts that are detected because the subject line matches a subject line filter, but the message parts are routed normally. The skip action is used when the scanner is configured and when the license exceeds the grace period. Forefront Exchange Transport Scanner The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGE_PARTS_SKIPPED or SUBJMSKP (historical name), Subject Filter Message Parts Skipped (caption), Subject_Filter_Message_Parts_Skipped (attribute name), and SUBJMSKP (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## Forefront Exchange Transport Scanner data set

This data set represents Forefront Exchange Transport Scanner. The _Total instance name displays values for all process instances that are currently active. If a process exits, the _Total instance does not display the data. _RunningTotal and _CumulativeTotal instances display the data since Microsoft Forefront Protection 2010 for Exchange Server was installed. The data set is available only in Exchange Server 2007 and its service packs and Exchange Server 2010. This data set is a multi-instance data set.

This data set contains the following attributes:

**Malware Message Parts Cleaned**
The number of message parts that are cleaned because they are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_CLEANED or MALPRTCLN (historical name), Malware Message Parts Cleaned (caption), Malware_Message_Parts_Cleaned (attribute name), and MALPRTCLN (column name).

**Malware Message Parts Deleted**
The number of message parts that are deleted because they are detected as malware. A deletion occurs because the delete action was configured or because a cleaning operation failed. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_DELETED or MALPRTDEL (historical name), Malware Message Parts Deleted (caption), Malware_Message_Parts_Deleted (attribute name), and MALPRTDEL (column name).

**Malware Message Parts Detected**
The number of message parts that are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_DETECTED or MALPRTDET (historical name), Malware Message Parts Detected (caption), Malware_Message_Parts_Detected (attribute name), and MALPRTDET (column name).

**Malware Message Parts Quarantined**
The number of message parts that are quarantined because they are detected as malware. The type is integer (32-bit counter).

The following names are defined for this attribute: MALWARE_MESSAGE_PARTS_QUARANTINED or MALPRTQRN (historical name), Malware Message Parts Quarantined (caption), Malware_Message_Parts_Quarantined (attribute name), and MALPRTQRN (column name).

**Message Parts Scanned**
The number of message parts that are scanned. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGE_PARTS_SCANNED or MSGPRTSCN (historical name), Message Parts Scanned (caption), Message_Parts_Scanned (attribute name), and MSGPRTSCN (column name).

**Message Parts Scanned/sec**
The number of message parts that are scanned per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGE_PARTS_SCANNED/SEC or MSGPRTSPS (historical name), Message Parts Scanned/sec (caption), Message_Parts_Scanned/sec (attribute name), and MSGPRTSPS (column name).

**Messages Scanned/sec**
The number of messages that are scanned per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_SCANNED/SEC or MSGSCNPS (historical name), Messages Scanned/sec (caption), Messages_Scanned/sec (attribute name), and MSGSCNPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Sender Filter Messages Detected**
The number of messages that are detected because the sender of the messages matches a sender-domain filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGES_DETECTED or SENDMDET (historical name), Sender Filter Messages Detected (caption), Sender_Filter_Messages_Detected (attribute name), and SENDMDET (column name).

**Sender Filter Messages Quarantined**
The number of messages that are quarantined because the sender of the messages matches a sender-domain filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGES_QUARANTINED or SENDMQRN (historical name), Sender Filter Messages Quarantined (caption), Sender_Filter_Messages_Quarantined (attribute name), and SENDMQRN (column name).

**Sender Filter Messages Skipped**
The number of messages that are detected because the sender of the messages matches sender-domain filter, but the messages are routed normally. The skip action is used when the scanner is configured and when the license exceeds the grace period. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDER_FILTER_MESSAGES_SKIPPED or SENDMSKP (historical name), Sender Filter Messages Skipped (caption), Sender_Filter_Messages_Skipped (attribute name), and SENDMSKP (column name).

**Subject Filter Messages Detected**
The number of messages that are detected because the subject line matches a subject line filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGES_DETECTED or SUBJMDET (historical name), Subject Filter Messages Detected (caption), Subject_Filter_Messages_Detected (attribute name), and SUBJMDET (column name).

**Subject Filter Messages Quarantined**
The number of messages that are quarantined because the subject line matches a subject line filter. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGES_QUARANTINED or SUBJMQRN (historical name), Subject Filter Messages Quarantined (caption), Subject_Filter_Messages_Quarantined (attribute name), and SUBJMQRN (column name).

**Subject Filter Messages Skipped**
The number of messages that are detected because the subject line matches a subject line filter, but the messages are routed normally. The skip action is used when the scanner is configured and when the license exceeds the grace period. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBJECT_FILTER_MESSAGES_SKIPPED or SUBJMSKP (historical name), Subject Filter Messages Skipped (caption), Subject_Filter_Messages_Skipped (attribute name), and SUBJMSKP (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Transport Scanner Job Name**
The name of the Forefront Exchange Transport Scanner instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: TRANSPORT_SCANNER_JOB_NAME_U or TRNSSNAME (historical name), Transport Scanner Job Name (caption), Transport_Scanner_Job_Name_U (attribute name), and TRNSSNAME (column name).

## Mailbox Server Cluster State data set

This data set provides details about the mailbox server state in the cluster. This data set is available only in Exchange Server 2007. You must configure this data set in a cluster environment.

This data set contains the following attributes:

**Clustered Mailbox Server Name**
Provides the name of the clustered mailbox server. The type is string.

The following names are defined for this attribute: CLUSTERED_MAILBOX_SERVER_NAME or MBXNAME (historical name), Clustered Mailbox Server Name (caption), Clustered_Mailbox_Server_Name (attribute name), and MBXNAME (column name).

**Mailbox State**
Gives the current state of the mailbox server. The type is string with enumerated values. The following values are defined: Online (0), Partially Online (1), Online Pending (2), Offline (3), Offline Pending (4), Failed (5). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_STATE or MBXSTATE (historical name), Mailbox State (caption), Mailbox_State (attribute name), and MBXSTATE (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Operational Machines**
Gives the list of computers that are a part of the mailbox server cluster. The type is string with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OPERATIONAL_MACHINES or NODES (historical name), Operational Machines (caption), Operational_Machines (attribute name), and NODES (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## Microsoft Forefront Server Security Scan data set

This data set provides details about the SMTP Send service. This data set is available only in Exchange Server 2007. This data set is a multi-instance data set.

This data set contains the following attributes:

**Attachments Cleaned Rate**
The rate at which the cleaned attachments are scanned. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ATTACHMENTS_CLEANED_RATE or ACLNR (historical name), Attachments Cleaned Rate (caption), Attachments_Cleaned_Rate (attribute name), and ACLNR (column name).

**Attachments Detected Rate**
The rate at which the detected attachments are scanned. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ATTACHMENTS_DETECTED_RATE or ADETR (historical name), Attachments Detected Rate (caption), Attachments_Detected_Rate (attribute name), and ADETR (column name).

**Attachments Removed Rate**
The rate at which the removed attachments are scanned. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ATTACHMENTS_REMOVED_RATE or AREMR (historical name), Attachments Removed Rate (caption), Attachments_Removed_Rate (attribute name), and AREMR (column name).

**Attachments Scanned Rate**
The rate at which attachments are scanned. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ATTACHMENTS_SCANNED_RATE or ASCNR (historical name), Attachments Scanned Rate (caption), Attachments_Scanned_Rate (attribute name), and ASCNR (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Scan Job Name**
The name of the scan job instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: SCAN_JOB_NAME_U or SJOBNAME (historical name), Scan Job Name (caption), Scan_Job_Name_U (attribute name), and SJOBNAME (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Attachments Cleaned**
The total number of cleaned attachments that were scanned. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_ATTACHMENTS_CLEANED or TOTACLN (historical name), Total Attachments Cleaned (caption), Total_Attachments_Cleaned (attribute name), and TOTACLN (column name).

**Total Attachments Detected**
The total number of detected attachments that were scanned. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_ATTACHMENTS_DETECTED or TOTADET (historical name), Total Attachments Detected (caption), Total_Attachments_Detected (attribute name), and TOTADET (column name).

**Total Attachments Removed**
The total number of removed attachments that were scanned. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_ATTACHMENTS_REMOVED or TOTAREM (historical name), Total Attachments Removed (caption), Total_Attachments_Removed (attribute name), and TOTAREM (column name).

**Total Attachments Scanned**
The total number of attachments that were scanned. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_ATTACHMENTS_SCANNED or TOTASCN (historical name), Total Attachments Scanned (caption), Total_Attachments_Scanned (attribute name), and TOTASCN (column name).

**Total Messages Detected**
The total number of detected messages that were scanned. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_MESSAGES_DETECTED or TOTMDET (historical name), Total Messages Detected (caption), Total_Messages_Detected (attribute name), and TOTMDET (column name).

**Total Messages Purged**
The total number of purged messages that were scanned. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_MESSAGES_PURGED or TOTMPUR (historical name), Total Messages Purged (caption), Total_Messages_Purged (attribute name), and TOTMPUR (column name).

**Total Messages Scanned**
The total number of messages that were scanned. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_MESSAGES_SCANNED or TOTMSCN (historical name), Total Messages Scanned (caption), Total_Messages_Scanned (attribute name), and TOTMSCN (column name).

**Total Messages Tagged**
The total number of tagged messages that were scanned. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_MESSAGES_TAGGED or TOTMTAG (historical name), Total Messages Tagged (caption), Total_Messages_Tagged (attribute name), and TOTMTAG (column name).

## MS Exchange AB data set

This data set monitors the activities of the Name Service Provider Interface (NSPI) service on the Microsoft Exchange Server. This data set is available in Exchange Server 2010, or later. This data set is a single instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***NSPI Connections Current***
The number of NSPI clients that are currently connected to the server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_CONNECTIONS_CURRENT or NSPICC (historical name), *NSPI Connections Current* (caption), NSPI_Connections_Current (attribute name), and NSPICC (column name).

***NSPI Connections Total***
The total number of NSPI clients that have been connected to the server since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_CONNECTIONS_TOTAL or NSCONTOT (historical name), *NSPI Connections Total* (caption), NSPI_Connections_Total (attribute name), and NSCONTOT (column name).

***NSPI Connections/sec***
The number of NSPI client connections that are currently made per second to the server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_CONNECTIONS/SEC or NCPIC (historical name), *NSPI Connections/sec* (caption), NSPI_Connections/sec (attribute name), and NCPIC (column name).

***NSPI RPC Browse Requests Average Latency***
The average time (in milliseconds) that is taken to complete the NSPI browse requests during the sampling period. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_RPC_BROWSE_REQUESTS_AVERAGE_LATENCY or NSRPCBRAV (historical name), *NSPI RPC Browse Requests Average Latency* (caption), NSPI_RPC_Browse_Requests_Average_Latency (attribute name), and NSRPCBRAV (column name).

***NSPI RPC Browse Requests Total***
The total number of NSPI RPC browse requests that have been received by the server since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_RPC_BROWSE_REQUESTS_TOTAL or NSRPCBRT (historical name), *NSPI RPC Browse Requests Total* (caption), NSPI_RPC_Browse_Requests_Total (attribute name), and NSRPCBRT (column name).

***NSPI RPC Browse Requests/sec***
The number of RPC browse requests that are generated per second by the NSPI service. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_RPC_BROWSE_REQUESTS/SEC or NSRPCBRES (historical name), *NSPI RPC Browse Requests/sec* (caption), NSPI_RPC_Browse_Requests/sec (attribute name), and NSRPCBRES (column name).

***NSPI RPC Browse Requests***
The number of NSPI RPC browse requests that are currently processed by the server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_RPC_BROWSE_REQUESTS or NSRPCBRE (historical name), *NSPI RPC Browse Requests* (caption), NSPI_RPC_Browse_Requests (attribute name), and NSRPCBRE (column name).

***NSPI RPC Requests Average Latency***
The average time (in milliseconds) that the NSPI service takes to complete a browse request during the sampling period. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_RPC_REQUESTS_AVERAGE_LATENCY or NRPCRQAL (historical name), *NSPI RPC Requests Average Latency* (caption), NSPI_RPC_Requests_Average_Latency (attribute name), and NRPCRQAL (column name).

***NSPI RPC Requests Total***

The total number of NSPI requests that have been received by the server since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_RPC_REQUESTS_TOTAL or NSRPCRETO (historical name), *NSPI RPC Requests Total* (caption), NSPI_RPC_Requests_Total (attribute name), and NSRPCRETO (column name).

***NSPI RPC Requests/sec***

The number of NSPI requests that occur per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_RPC_REQUESTS/SEC or NRPCRQ (historical name), *NSPI RPC Requests/sec* (caption), NSPI_RPC_Requests/sec (attribute name), and NRPCRQ (column name).

***NSPI RPC Requests***

The number of NSPI RPC requests that are currently processed by the server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NSPI_RPC_REQUESTS or NSRPCRE (historical name), *NSPI RPC Requests* (caption), NSPI_RPC_Requests (attribute name), and NSRPCRE (column name).

***Referral RPC Requests Average Latency***

The average time (in milliseconds) that is required to process referral RPC requests during the sampling period. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REFERRAL_RPC_REQUESTS_AVERAGE_LATENCY or RRPCRAL (historical name), *Referral RPC Requests Average Latency* (caption), Referral_RPC_Requests_Average_Latency (attribute name), and RRPCRAL (column name).

***Referral RPC Requests Total***

The total number of referral requests that have been received by the server since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REFERRAL_RPC_REQUESTS_TOTAL or REFRPCRT (historical name), *Referral RPC Requests Total* (caption), Referral_RPC_Requests_Total (attribute name), and REFRPCRT (column name).

***Referral RPC Requests/sec***

The number of referral RPC requests that occur per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REFERRAL_RPC_REQUESTS/SEC or RRPCRQ (historical name), *Referral RPC Requests/sec* (caption), Referral_RPC_Requests/sec (attribute name), and RRPCRQ (column name).

***Referral RPC Requests***

The number of referral RPC requests that are currently being processed by the server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REFERRAL_RPC_REQUESTS or REFRPCRE (historical name), *Referral RPC Requests* (caption), Referral_RPC_Requests (attribute name), and REFRPCRE (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange Active Manager data set

This data set contains attributes that are related to the Active Manager.

This data set contains the following attributes:

**Active Manager Instance Name**
The name of the Active Manager instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: ACTIVE_MANAGER_INSTANCE_NAME or AMINST (historical name), Active Manager Instance Name (caption), Active_Manager_Instance_Name (attribute name), and AMINST (column name).

**Database Copy Role Active**
A numeric value that indicates whether the database copy is active. The value is Yes for an active copy and No for a passive copy. This attribute is available in Microsoft Exchange Server 2010 SP1 only. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Yes (1), No (0), Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DATABASE_COPY_ROLE_ACTIVE or DBCPRA (historical name), Database Copy Role Active (caption), Database_Copy_Role_Active (attribute name), and DBCPRA (column name).

**Database Mounted**
A numeric value that indicates whether the database is mounted. The value is Yes if the database is mounted and No if the database is not mounted. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Yes (1), No (0), Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DATABASE_MOUNTED or DBMTD (historical name), Database Mounted (caption), Database_Mounted (attribute name), and DBMTD (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Active Manager Client data set

This data set contains attributes that are related to the Active Manager client.

This data set contains the following attributes:

**Active Manager Client Instance Name**
The name of the Active Manager client instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: ACTIVE_MANAGER_CLIENT_INSTANCE_NAME or AMCINST (historical name), Active Manager Client Instance Name (caption), Active_Manager_Client_Instance_Name (attribute name), and AMCINST (column name).

**ClientSide Cache Hits**
The total number of GetServerForDatabase calls that have been processed by the cache without making a remote procedure call to the Microsoft Exchange Information Store since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_SIDE_CACHE_HITS or CLTSCH (historical name), ClientSide Cache Hits (caption), Client_Side_Cache_Hits (attribute name), and CLTSCH (column name).

**ClientSide Cache Misses**
The total number of GetServerForDatabase calls that require a remote procedure call to the Microsoft Exchange Information Store since the service was started. The remote procedure calls are required because the cache does not contain the updated server information. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_SIDE_CACHE_MISSES or CLTSCM (historical name), ClientSide Cache Misses (caption), Client_Side_Cache_Misses (attribute name), and CLTSCM (column name).

**ClientSide Calls**
The total number of GetServerForDatabase calls to the Microsoft Exchange Information Store between the start and end of the process since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_SIDE_CALLS or CLTSC (historical name), ClientSide Calls (caption), Client_Side_Calls (attribute name), and CLTSC (column name).

**ClientSide Calls ReadThrough**
The number of GetServerForDatabase calls using the ReadThrough flag since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_SIDE_CALLS_READ_THROUGH or CLTSCRT (historical name), ClientSide Calls ReadThrough (caption), Client_Side_Calls_Read_Through (attribute name), and CLTSCRT (column name).

**ClientSide Calls/Sec**
The current rate (per second) at which remote clients are querying for the server that hosts a specific mailbox database. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_SIDE_CALLS/SEC or CLTSCS (historical name), ClientSide Calls/Sec (caption), Client_Side_Calls/Sec (attribute name), and CLTSCS (column name).

**ClientSide RPC Calls**
The sum of Client Side Calls Read Through and Client Side Cache Misses attribute values since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_SIDE_RPC_CALLS or CLTSRPCC (historical name), ClientSide RPC Calls (caption), Client_Side_RPC_Calls (attribute name), and CLTSRPCC (column name).

**Location Cache Entries**
The total number of entries in the location cache since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOCATION_CACHE_ENTRIES or LOCCHE (historical name), Location Cache Entries (caption), Location_Cache_Entries (attribute name), and LOCCHE (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**ServerInformation Cache Entries**
The total number of entries in the server information cache since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SERVER_INFORMATION_CACHE_ENTRIES or SVRINFOCHE (historical name), ServerInformation Cache Entries (caption), Server_Information_Cache_Entries (attribute name), and SVRINFOCHE (column name).

**ServerInformation Cache Hits**
The total number of GetServerForDatabase calls that have been processed by the cache without querying the Active Directory since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SERVER_INFORMATION_CACHE_HITS or SVRINFOCHH (historical name), ServerInformation Cache Hits (caption), Server_Information_Cache_Hits (attribute name), and SVRINFOCHH (column name).

**ServerInformation Cache Misses**
The total number of GetServerForDatabase calls that have queried the Active Directory since the service was started. The queries to Active Directory are required because the cache does not contain the updated server information. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SERVER_INFORMATION_CACHE_MISSES or SVRINFOCHM (historical name), ServerInformation Cache Misses (caption), Server_Information_Cache_Misses (attribute name), and SVRINFOCHM (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Unique Databases Queried**
The total number of unique databases that have been returned by the GetServerForDatabase requests since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: UNIQUE_DATABASES_QUERIED or UNQDBQUD (historical name), Unique Databases Queried (caption), Unique_Databases_Queried (attribute name), and UNQDBQUD (column name).

**Unique Servers Queried**
The total number of unique servers that have been returned by the GetServerForDatabase requests since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: UNIQUE_SERVERS_QUERIED or UNQSVRQUD (historical name), Unique Servers Queried (caption), Unique_Servers_Queried (attribute name), and UNQSVRQUD (column name).

## MS Exchange Active Manager Server data set

This data set contains attributes that are related to the Active Manager server.

This data set contains the following attributes:

**Active Manager Database State Writes To Persistent Storage**
The number of write operations to a persistent storage between the start and end of a process. The write operations update the database state information. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVE_MANAGER_DATABASE_STATE_WRITES_TO_PERSISTENT_STORAGE or AMDSWTPS (historical name), Active Manager Database State Writes To Persistent Storage (caption), Active_Manager_Database_State_writes_to_Persistent_storage (attribute name), and AMDSWTPS (column name).

**Active Manager Database State Writes To Persistent Storage/Sec**
The current rate at which the database state information is written to persistent storage per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values.

The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVE_MANAGER_DATABASE_STATE_WRITES_TO_PERSISTENT_STORAGE/SEC or AMDSWTPSS (historical name), Active Manager Database State Writes To Persistent Storage/Sec (caption), Active_Manager_Database_State_writes_to_Persistent_storage/sec (attribute name), and AMDSWTPSS (column name).

**GetServerForDatabase ServerSide Calls**
The number of GetServerForDatabase calls between the start and end of a process since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GETSERVERFORDATABASE_SERVER_SIDE_CALLS or GSFDSSC (historical name), GetServerForDatabase ServerSide Calls (caption), GetServerForDatabase_Server_Side_Calls (attribute name), and GSFDSSC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**ServerSide Calls/Sec**
The rate at which remote clients are querying the current server that hosts a specific mailbox database. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SERVER_SIDE_CALLS/SEC or SSCPS (historical name), ServerSide Calls/Sec (caption), Server_Side_Calls/sec (attribute name), and SSCPS (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Number Of Databases**
The current number of databases on the computer where the Microsoft Exchange Server is configured. This attribute is available in Microsoft Exchange Server 2010 SP1 only. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_NUMBER_OF_DATABASES or TNOF (historical name), Total Number Of Databases (caption), Total_Number_of_Databases (attribute name), and TNOF (column name).

## MS Exchange Active Sync data set

This data set monitors the Exchange Server integrated support for mobile devices. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every minute and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Current Requests***

The number of HTTP requests that are received from ASP NET. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CURRENT_REQUESTS or REQCURR (historical name), *Current Requests* (caption), Current_Requests (attribute name), and REQCURR (column name).

***Node***

The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Ping Commands Pending***

The number of ping commands that are currently pending on the server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PING_COMMANDS_PENDING or PINGCMDSP (historical name), *Ping Commands Pending* (caption), Ping_Commands_Pending (attribute name), and PINGCMDSP (column name).

***Requests Queued***

The number of HTTP requests that are waiting to be assigned to a thread. This attribute is not available in Exchange Server 2010 Service Pack 1 and 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REQUESTS_QUEUED or REQQUEUED (historical name), *Requests Queued* (caption), Requests_Queued (attribute name), and REQQUEUED (column name).

***Requests Total***

The total number of HTTP requests that are received from ASP NET since the service was restarted. This attribute is a key attribute. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REQUESTS_TOTAL or REQTOTAL (historical name), *Requests Total* (caption), Requests_Total (attribute name), and REQTOTAL (column name).

***Sync Commands Pending***

The number of synchronous commands that are currently pending to be executed on the server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SYNC_COMMANDS_PENDING or SYNCMDPD (historical name), *Sync Commands Pending* (caption), Sync_Commands_Pending (attribute name), and SYNCMDPD (column name).

***Timestamp***

The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**Average Request Time**
The average time (in milliseconds) that elapsed waiting for a request to complete. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_REQUEST_TIME or REQAVGTIME (historical name), Average Request Time (caption), Average_Request_Time (attribute name), and REQAVGTIME (column name).

**Busy Threads**
The number of worker threads that are busy processing requests. This attribute is not available in Exchange Server 2010 Service Pack 1 and 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: BUSY_THREADS or BUSYTHRDS (historical name), Busy Threads (caption), Busy_Threads (attribute name), and BUSYTHRDS (column name).

**Client Item Adds/Sec**
The number of client item adds (by the sync command) that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_ITEM_ADDS/SEC or CLNITAPS (historical name), Client Item Adds/Sec (caption), Client_Item_Adds/Sec (attribute name), and CLNITAPS (column name).

**Client Item Changes/Sec**
The number of client item changes (by the sync command) that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_ITEM_CHANGES/SEC or CLNITCPS (historical name), Client Item Changes/Sec (caption), Client_Item_Changes/Sec (attribute name), and CLNITCPS (column name).

**Client Item Deletes/Sec**
The number of client item deletes (by the sync command) that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_ITEM_DELETES/SEC or CLNITDPS (historical name), Client Item Deletes/Sec (caption), Client_Item_Deletes/Sec (attribute name), and CLNITDPS (column name).

**Client Item Fetches/Sec**
The number of client item fetches (by the sync command) that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_ITEM_FETCHES/SEC or CLNITFPS (historical name), Client Item Fetches/Sec (caption), Client_Item_Fetches/Sec (attribute name), and CLNITFPS (column name).

**Client Sync Items/Sec**
The number of client item adds, changes, deletes, and fetches (by the sync command) that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with

two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_SYNC_ITEMS/SEC or CSYNCIPS (historical name), Client Sync Items/Sec (caption), Client_Sync_Items/Sec (attribute name), and CSYNCIPS (column name).

**CreateCollection Commands/Sec**
The number of CreateCollection commands that are currently processed by Exchange ActiveSync per second. This attribute is available in Microsoft Exchange Server 2010 and 2010 SP1. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CREATECOLLECTION_COMMANDS/SEC or CLNCMDPS (historical name), CreateCollection Commands/Sec (caption), CreateCollection_Commands/Sec (attribute name), and CLNCMDPS (column name).

**Current Active Directory Requests**
The current number of Active Directory requests that are pending. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CURRENT_ACTIVE_DIRECTORY_REQUESTS or CRNTADRQ (historical name), Current Active Directory Requests (caption), Current_Active_Directory_Requests (attribute name), and CRNTADRQ (column name).

**Empty Folder Contents Total**
The total number of requests of Empty Folder Contents that are processed since the service started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EMPTY_FOLDER_CONTENTS_TOTAL or EMTFOLCTO (historical name), Empty Folder Contents Total (caption), Empty_Folder_Contents_Total (attribute name), and EMTFOLCTO (column name).

**Exchange Mailbox Server I/O Requests/Sec**
The current number of input/output requests that are currently sent by Exchange ActiveSync to the Exchange mailbox server per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHANGE_MAILBOX_SERVER_I/O_REQUESTS/SEC or EMSIORPS (historical name), Exchange Mailbox Server I/O Requests/Sec (caption), Exchange_Mailbox_Server_I/O_Requests/Sec (attribute name), and EMSIORPS (column name).

**Exchange Mailbox Server Item Adds/Sec**
The number of Exchange mailbox server item adds (by the sync command) that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHANGE_MAILBOX_SERVER_ITEM_ADDS/SEC or EMSIADPS (historical name), Exchange Mailbox Server Item Adds/Sec (caption), Exchange_Mailbox_Server_Item_Adds/Sec (attribute name), and EMSIADPS (column name).

**Exchange Mailbox Server Item Changes/Sec**
The number of Exchange mailbox server item changes (by the sync command) that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHANGE_MAILBOX_SERVER_ITEM_CHANGES/SEC or EMSICHPS (historical name), Exchange Mailbox Server Item Changes/Sec (caption), Exchange_Mailbox_Server_Item_Changes/Sec (attribute name), and EMSICHPS (column name).

**Exchange Mailbox Server Item Deletes/Sec**

The number of Exchange mailbox server item deletes (by the sync command) that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHANGE_MAILBOX_SERVER_ITEM_DELETES/SEC or EMSIDLPS (historical name), Exchange Mailbox Server Item Deletes/Sec (caption), Exchange_Mailbox_Server_Item_Deletes/Sec (attribute name), and EMSIDLPS (column name).

**Exchange Mailbox Server Item Soft Deletes/Sec**

The number of Exchange mailbox server item soft deletes that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHANGE_MAILBOX_SERVER_ITEM_SOFT_DELETES/SEC or EMISDLPS (historical name), Exchange Mailbox Server Item Soft Deletes/Sec (caption), Exchange_Mailbox_Server_Item_Soft_Deletes/Sec (attribute name), and EMISDLPS (column name).

**Exchange Mailbox Server Sync Items/Sec**

The number of Exchange mailbox server adds, changes, deletes, and soft deletes (by the sync command) that are currently sent to the client by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHANGE_MAILBOX_SERVER_SYNC_ITEMS/SEC or ESYNCIPS (historical name), Exchange Mailbox Server Sync Items/Sec (caption), Exchange_Mailbox_Server_Sync_Items/Sec (attribute name), and ESYNCIPS (column name).

**Failed Item Conversion Total**

The total number of items that fail to convert due to modifications made by the server since the service started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILED_ITEM_CONVERSION_TOTAL or FAILICONTO (historical name), Failed Item Conversion Total (caption), Failed_Item_Conversion_Total (attribute name), and FAILICONTO (column name).

**Folder Create Commands/sec**

The number of FolderCreate commands that are processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDER_CREATE_COMMANDS/SEC or FOCRCOPS (historical name), Folder Create Commands/sec (caption), Folder_Create_Commands/sec (attribute name), and FOCRCOPS (column name).

**Folder Create Total**

The total number of FolderCreate requests that are processed since the service started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDER_CREATE_TOTAL or FOCRTO (historical name), Folder Create Total (caption), Folder_Create_Total (attribute name), and FOCRTO (column name).

**Folder Delete Commands/sec**
The number of FolderDelete commands that are processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDER_DELETE_COMMANDS/SEC or FODECOPS (historical name), Folder Delete Commands/sec (caption), Folder_Delete_Commands/sec (attribute name), and FODECOPS (column name).

**Folder Delete Total**
The total number of FolderDelete commands that are processed since the service started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDER_DELETE_TOTAL or FODETO (historical name), Folder Delete Total (caption), Folder_Delete_Total (attribute name), and FODETO (column name).

**Folder Sync Commands/sec**
The number of FolderSync commands that are processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDER_SYNC_COMMANDS/SEC or FOSYCOPS (historical name), Folder Sync Commands/sec (caption), Folder_Sync_Commands/sec (attribute name), and FOSYCOPS (column name).

**Folder Sync Total**
The total number of FolderSync requests that are processed since the service started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDER_SYNC_TOTAL or FOSYTO (historical name), Folder Sync Total (caption), Folder_Sync_Total (attribute name), and FOSYTO (column name).

**Folder Update Commands/sec**
The number of FolderUpdate commands that are processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDER_UPDATE_COMMANDS/SEC or FOUPCOPS (historical name), Folder Update Commands/sec (caption), Folder_Update_Commands/sec (attribute name), and FOUPCOPS (column name).

**Folder Update Total**
The total number of FolderUpdate requests that are processed since the service started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDER_UPDATE_TOTAL or FOUPTO (historical name), Folder Update Total (caption), Folder_Update_Total (attribute name), and FOUPTO (column name).

**GAL Search Total**
The total number of GAL Search requests that are processed since the service started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GAL_SEARCH_TOTAL or GALSETO (historical name), GAL Search Total (caption), GAL_Search_Total (attribute name), and GALSETO (column name).

**GAL Searches/sec**
The number of times the global address list is searched per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GAL_SEARCHES/SEC or GALSEPS (historical name), GAL Searches/sec (caption), GAL_Searches/sec (attribute name), and GALSEPS (column name).

**Get Attachment Commands/sec**
The number of GetAttachment commands that are processed each second. Clients who are running earlier versions of the Exchange ActiveSync protocol use this command to download email attachments. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GET_ATTACHMENT_COMMANDS/SEC or GETATTCMDS (historical name), Get Attachment Commands/sec (caption), Get_Attachment_Commands/sec (attribute name), and GETATTCMDS (column name).

**Get Attachment Total**
The total number of GetAttachments requests that are processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GET_ATTACHMENT_TOTAL or GETATTTOT (historical name), Get Attachment Total (caption), Get_Attachment_Total (attribute name), and GETATTTOT (column name).

**Get Item Estimate Commands/sec**
The number of GetItemEstimate commands that are processed each second. Clients use this command to display synchronization progress. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GET_ITEM_ESTIMATE_COMMANDS/SEC or GETIECMDSE (historical name), Get Item Estimate Commands/sec (caption), Get_Item_Estimate_Commands/sec (attribute name), and GETIECMDSE (column name).

**GetHierarchy Commands/Sec**
The number of GetHierarchy commands that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GETHIERARCHY_COMMANDS/SEC or GHRCMDPS (historical name), GetHierarchy Commands/Sec (caption), GetHierarchy_Commands/Sec (attribute name), and GHRCMDPS (column name).

**Idle Threads**
The number of worker threads that are currently idle. This attribute is available only in Microsoft Exchange Server 2007 SP2. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: IDLE_THREADS or IDLTHRDS (historical name), Idle Threads (caption), Idle_Threads (attribute name), and IDLTHRDS (column name).

**Mailbox Attachment Fetch Commands/sec**
The number of Mailbox Attachment Fetches that are processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_ATTACHMENT_FETCH_COMMANDS/SEC or MAATFECOPS (historical name), Mailbox Attachment Fetch Commands/sec (caption), Mailbox_Attachment_Fetch_Commands/sec (attribute name), and MAATFECOPS (column name).

**Mailbox Attachment Fetch Total**
The total number of Mailbox Attachment Fetch commands that are processed since the service is started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_ATTACHMENT_FETCH_TOTAL or MAATFETO (historical name), Mailbox Attachment Fetch Total (caption), Mailbox_Attachment_Fetch_Total (attribute name), and MAATFETO (column name).

**Mailbox Item Fetch Commands/sec**
The number of times that clients download the entire Exchange items per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_ITEM_FETCH_COMMANDS/SEC or MAILIFCMDS (historical name), Mailbox Item Fetch Commands/sec (caption), Mailbox_Item_Fetch_Commands/sec (attribute name), and MAILIFCMDS (column name).

**Mailbox Item Fetch Total**
The total number of mailbox item fetch requests that are processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_ITEM_FETCH_TOTAL or MAILIFTOT (historical name), Mailbox Item Fetch Total (caption), Mailbox_Item_Fetch_Total (attribute name), and MAILIFTOT (column name).

**Mailbox Search Total**
The total number of mailbox search requests that are processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_SEARCH_TOTAL or MAILSRHTOT (historical name), Mailbox Search Total (caption), Mailbox_Search_Total (attribute name), and MAILSRHTOT (column name).

**Mailbox Searches/sec**
The number of times that mailboxes are searched per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_SEARCHES/SEC or MAILSRHSEC (historical name), Mailbox Searches/sec (caption), Mailbox_Searches/sec (attribute name), and MAILSRHSEC (column name).

**Meeting Response Commands/sec**
The number of Meeting Response commands that are processed per second. The client uses this command to designate a meeting as Accepted, Declined, or Tentative. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MEETING_RESPONSE_COMMANDS/SEC or MTGRSPSEC (historical name), Meeting Response Commands/sec (caption), Meeting_Response_Commands/sec (attribute name), and MTGRSPSEC (column name).

**Meeting Response Total**
The total number of MeetingResponse commands that are received since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MEETING_RESPONSE_TOTAL or MTGRSPTOT (historical name), Meeting Response Total (caption), Meeting_Response_Total (attribute name), and MTGRSPTOT (column name).

**Move Collection Commands/sec**
The number of MoveCollection commands that are processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MOVE_COLLECTION_COMMANDS/SEC or MOCOCOPS (historical name), Move Collection Commands/sec (caption), Move_Collection_Commands/sec (attribute name), and MOCOCOPS (column name).

**Move Collection Total**
The total number of MoveCollections requests that are processed since the service started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MOVE_COLLECTION_TOTAL or MOCOLTO (historical name), Move Collection Total (caption), Move_Collection_Total (attribute name), and MOCOLTO (column name).

**Move Items Commands/sec**
The number of MoveItems commands that are processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MOVE_ITEMS_COMMANDS/SEC or MOITCOPS (historical name), Move Items Commands/sec (caption), Move_Items_Commands/sec (attribute name), and MOITCOPS (column name).

**Move Items Total**
The total number of MoveItems commands that are received since the service started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MOVE_ITEMS_TOTAL or MOITMTO (historical name), Move Items Total (caption), Move_Items_Total (attribute name), and MOITMTO (column name).

**Notify Commands/Sec**
The number of Notify commands that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NOTIFY_COMMANDS/SEC or NTFCMDPS (historical name), Notify Commands/Sec (caption), Notify_Commands/Sec (attribute name), and NTFCMDPS (column name).

**PID**
The process ID that is hosting ActiveSync. This attribute is available in Microsoft Exchange Server 2007 SP2, 2010, and 2010 SP1. The type is integer (32-bit numeric property) with enumerated

values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PID or PROCESSID (historical name), PID (caption), PID (attribute name), and PROCESSID (column name).

**Ping Commands Dropped/sec**
The number of ping commands per second whose connection to the client was dropped before a response could be issued. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PING_COMMANDS_DROPPED/SEC or PINGCMDDS (historical name), Ping Commands Dropped/sec (caption), Ping_Commands_Dropped/sec (attribute name), and PINGCMDDS (column name).

**Ping Dropped Total**
The total number of ping commands whose connection to the client was dropped before a response could be issued. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PING_DROPPED_TOTAL or PINGDRPTOT (historical name), Ping Dropped Total (caption), Ping_Dropped_Total (attribute name), and PINGDRPTOT (column name).

**Ping Total**
The total number of ping commands that are processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PING_TOTAL or PINGTOT (historical name), Ping Total (caption), Ping_Total (attribute name), and PINGTOT (column name).

**Provision Commands/sec**
The number of Provision commands that are processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PROVISION_COMMANDS/SEC or PRVCOPS (historical name), Provision Commands/sec (caption), Provision_Commands/sec (attribute name), and PRVCOPS (column name).

**Requests/sec**
The number of HTTP requests that are received from the client through ASP NET per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REQUESTS/SEC or REQPERSEC (historical name), Requests/sec (caption), Requests/sec (attribute name), and REQPERSEC (column name).

**ResolveRecipients Commands/Sec**
The number of ResolveRecipients commands that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RESOLVERECIPIENTS_COMMANDS/SEC or RRCCMDPS (historical name), ResolveRecipients Commands/Sec (caption), ResolveRecipients_Commands/Sec (attribute name), and RRCCMDPS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Search Commands/sec**
The number of Search commands that are processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEARCH_COMMANDS/SEC or SEACOPS (historical name), Search Commands/sec (caption), Search_Commands/sec (attribute name), and SEACOPS (column name).

**Search Total**
The total number of Search requests that are processed since the service started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEARCH_TOTAL or SEARCHTO (historical name), Search Total (caption), Search_Total (attribute name), and SEARCHTO (column name).

**Send Mail Commands/sec**
The number of SendMail commands that are processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEND_MAIL_COMMANDS/SEC or SNDMAILCS (historical name), Send Mail Commands/sec (caption), Send_Mail_Commands/sec (attribute name), and SNDMAILCS (column name).

**Send Mail Total**
The total number of SendMail commands that are processed. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEND_MAIL_TOTAL or SNDMAILTOT (historical name), Send Mail Total (caption), Send_Mail_Total (attribute name), and SNDMAILTOT (column name).

**Smart Forward Commands/sec**
The number of SmartForward commands that are currently processed by Exchange ActiveSync per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SMARTFORWARD_COMMANDS/SEC or SMFCMDPS (historical name), Smart Forward Commands/sec (caption), SmartForward_Commands/Sec (attribute name), and SMFCMDPS (column name).

**Sync Commands/sec**
The number of Sync commands that are processed per second. Clients use this command to synchronize items within a folder. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SYNC_COMMANDS/SEC or SYNCCMDSEC (historical name), Sync Commands/sec (caption), Sync_Commands/sec (attribute name), and SYNCCMDSEC (column name).

**Sync Total**
The total number of Sync requests that are processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SYNC_TOTAL or SYNCTOT (historical name), Sync Total (caption), Sync_Total (attribute name), and SYNCTOT (column name).

## MS Exchange ADAccess Caches data set

This data set provides details about the Exchange internal component that controls how all Exchange components access Active Directory. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***ADAccess Caches Instance Name***
This is the name of AD Access Cache Instance Name. This attribute is a key attribute. The type is string with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ADACCESS_CACHES_INSTANCE_NAME or ADCACHENAM (historical name), *ADAccess Caches Instance Name* (caption), ADAccess_Caches_Instance_Name (attribute name), and ADCACHENAM (column name).

***Cache Expiries Total (Configuration Data)***
The total number of configuration data objects that expire from the cache since the system was initialized. The type is integer (32-bit counter).

The following names are defined for this attribute: CACHE_EXPIRIES_TOTAL_CONFIGURATION_DATA or CACHETCD (historical name), *Cache Expiries Total (Configuration Data)* (caption), Cache_Expiries_Total_Configuration_Data (attribute name), and CACHETCD (column name).

***Cache Expiries Total (User Data)***
The total number of user data objects that expire from the cache since the system was initialized. The type is integer (32-bit counter).

The following names are defined for this attribute: CACHE_EXPIRIES_TOTAL_USER_DATA or CACHETUD (historical name), *Cache Expiries Total (User Data)* (caption), Cache_Expiries_Total_User_Data (attribute name), and CACHETUD (column name).

***Cache Expiries/Sec (Configuration Data)***
The number of configuration data objects that expire from the cache per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CACHE_EXPIRIES/SEC_CONFIGURATION_DATA or CACHEPSCD (historical name), *Cache Expiries/Sec (Configuration Data)* (caption), Cache_Expiries/Sec_Configuration_Data (attribute name), and CACHEPSCD (column name).

***Cache Expiries/Sec (User Data)***
The number of user data objects that expire from the cache per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CACHE_EXPIRIES/SEC_USER_DATA or CACHEPSUD (historical name), *Cache Expiries/Sec (User Data)* (caption), Cache_Expiries/Sec_User_Data (attribute name), and CACHEPSUD (column name).

***Cache Hits Total***
The total number of objects found in cache events since system was initialized. The type is integer (32-bit counter).

The following names are defined for this attribute: CACHE_HITS_TOTAL or CACHEHTO (historical name), *Cache Hits Total* (caption), Cache_Hits_Total (attribute name), and CACHEHTO (column name).

***Cache Hits/Sec***
The number of object found in cache events per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CACHE_HITS/SEC or CACHHPS (historical name), *Cache Hits/Sec* (caption), Cache_Hits/Sec (attribute name), and CACHHPS (column name).

***Cache Misses Total***
The total number of objects not found in cache events since system was initialized. The type is integer (32-bit counter).

The following names are defined for this attribute: CACHE_MISSES_TOTAL or CACHEMTO (historical name), *Cache Misses Total* (caption), Cache_Misses_Total (attribute name), and CACHEMTO (column name).

***Cache Misses/Sec***
The number of objects not found in cache events per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CACHE_MISSES/SEC or CACHMPS (historical name), *Cache Misses/Sec* (caption), Cache_Misses/Sec (attribute name), and CACHMPS (column name).

***DN Entries (Configuration Data)***
The total number of Configuration Data DN Object type entries in the cache. The type is integer (32-bit gauge).

The following names are defined for this attribute: DN_ENTRIES_CONFIGURATION_DATA or DNENTCD (historical name), *DN Entries (Configuration Data)* (caption), DN_Entries_Configuration_Data (attribute name), and DNENTCD (column name).

***DN Entries (User Data)***
The total number of user data DN object type entries in the cache. The type is integer (32-bit gauge).

The following names are defined for this attribute: DN_ENTRIES_USER_DATA or DNENTUD (historical name), *DN Entries (User Data)* (caption), DN_Entries_User_Data (attribute name), and DNENTUD (column name).

***DN Entries Memory Configuration Data(MB)***
The memory (in MB) occupied by all Configuration Data DN Entries in the cache. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DN_ENTRIES_MEMORY_CONFIGURATION_DATA or DNENTMCD (historical name), *DN Entries Memory Configuration Data(MB)* (caption), DN_Entries_Memory_Configuration_Data (attribute name), and DNENTMCD (column name).

***DN Entries Memory User Data(MB)***
The memory (in MB) occupied by all user Data DN Entries in the cache. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DN_ENTRIES_MEMORY_USER_DATA or DNENTMUD (historical name), *DN Entries Memory User Data(MB)* (caption), DN_Entries_Memory_User_Data (attribute name), and DNENTMUD (column name).

***LDAP Searches Total***
The total number of LDAP search requests issued since the system was initialized. The type is integer (32-bit counter).

The following names are defined for this attribute: LDAP_SEARCHES_TOTAL or LDAPSRCHTO (historical name), *LDAP Searches Total* (caption), LDAP_Searches_Total (attribute name), and LDAPSRCHTO (column name).

***LDAP Searches/sec***
The total LDAP searches per second since the server was started. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_SEARCHES/SEC or LDAPSRCHSC (historical name), *LDAP Searches/sec* (caption), LDAP_Searches/sec (attribute name), and LDAPSRCHSC (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Not Found DN Entries (Configuration Data)***
The total number of Configuration Data Not Found DN type entries in the cache. The type is integer (32-bit gauge).

The following names are defined for this attribute: NOT_FOUND_DN_ENTRIES_CONFIGURATION_DATA or NFDNENTCD (historical name), *Not Found DN Entries (Configuration Data)* (caption), Not_Found_DN_Entries_Configuration_Data (attribute name), and NFDNENTCD (column name).

***Not Found DN Entries (User Data)***
The total number of User Data Not Found DN type entries in the cache. The type is integer (32-bit gauge).

The following names are defined for this attribute: NOT_FOUND_DN_ENTRIES_USER_DATA or NFDNENTUD (historical name), *Not Found DN Entries (User Data)* (caption), Not_Found_DN_Entries_User_Data (attribute name), and NFDNENTUD (column name).

***Not Found DN Entries Memory Configuration Data(MB)***
The memory (in MB) occupied by all Configuration Data Not Found DN Entries in the cache. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: NOT_FOUND_DN_ENTRIES_MEMORY_CONFIGURATION_DATA or NFDNENTMCD (historical name), *Not Found DN Entries Memory Configuration Data(MB)* (caption), Not_Found_DN_Entries_Memory_Configuration_Data (attribute name), and NFDNENTMCD (column name).

***Not Found DN Entries Memory User Data(MB)***
The memory (in MB) occupied by all user Data Not Found DN Entries in the cache. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: NOT_FOUND_DN_ENTRIES_MEMORY_USER_DATA or NFDNENTMUD (historical name), *Not Found DN Entries Memory User Data(MB)* (caption), Not_Found_DN_Entries_Memory_User_Data (attribute name), and NFDNENTMUD (column name).

***Outstanding Async Notifies***
The number of outstanding LDAP notification requests. The type is integer (32-bit gauge).

The following names are defined for this attribute: OUTSTANDING_ASYNC_NOTIFIES or OSASYNCNOT (historical name), *Outstanding Async Notifies* (caption), Outstanding_Async_Notifies (attribute name), and OSASYNCNOT (column name).

***Outstanding Async Reads***
The number of outstanding LDAP read requests. The type is integer (32-bit gauge).

The following names are defined for this attribute: OUTSTANDING_ASYNC_READS or OSASYNCRD (historical name), *Outstanding Async Reads* (caption), Outstanding_Async_Reads (attribute name), and OSASYNCRD (column name).

***Outstanding Async Searches***
The number of outstanding LDAP search requests. The type is integer (32-bit gauge).

The following names are defined for this attribute: OUTSTANDING_ASYNC_SEARCHES or OSASYNCSCH (historical name), *Outstanding Async Searches* (caption), Outstanding_Async_Searches (attribute name), and OSASYNCSCH (column name).

***Search Entries (Configuration Data)***
The total number of configuration data search type entries in the cache. The type is integer (32-bit gauge).

The following names are defined for this attribute: SEARCH_ENTRIES_CONFIGURATION_DATA or SCHENTCD (historical name), *Search Entries (Configuration Data)* (caption), Search_Entries_Configuration_Data (attribute name), and SCHENTCD (column name).

***Search Entries (User Data)***
The total number of user data search type entries in the cache. The type is integer (32-bit gauge).

The following names are defined for this attribute: SEARCH_ENTRIES_USER_DATA or SCHENTUD (historical name), *Search Entries (User Data)* (caption), Search_Entries_User_Data (attribute name), and SCHENTUD (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

***Total Entries (Configuration Data)***
The total number of configuration data entries in the cache. This number includes DN, Search, Not Found DN, and Not Found GUID type entries. The type is integer (32-bit gauge).

The following names are defined for this attribute: TOTAL_ENTRIES_CONFIGURATION_DATA or TOTENTCD (historical name), *Total Entries (Configuration Data)* (caption), Total_Entries_Configuration_Data (attribute name), and TOTENTCD (column name).

***Total Entries (User Data)***
The total number of user data entries in the cache. This number includes DN, Search, Not Found DN, and Not Found GUID type entries. The type is integer (32-bit gauge).

The following names are defined for this attribute: TOTAL_ENTRIES_USER_DATA or TOTENTUD (historical name), *Total Entries (User Data)* (caption), Total_Entries_User_Data (attribute name), and TOTENTUD (column name).

***Total Entries Memory Configuration Data(MB)***
The memory (in MB) occupied by all configuration data entry objects in the cache. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TOTAL_ENTRIES_MEMORY_CONFIGURATION_DATA or TOTENTMCD (historical name), *Total Entries Memory Configuration Data(MB)* (caption), Total_Entries_Memory_Configuration_Data (attribute name), and TOTENTMCD (column name).

***Total Entries Memory User Data(MB)***
The memory (in MB) occupied by all user data entry objects in the cache. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TOTAL_ENTRIES_MEMORY_USER_DATA or TOTENTMUD (historical name), *Total Entries Memory User Data(MB)* (caption), Total_Entries_Memory_User_Data (attribute name), and TOTENTMUD (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange ADAccess Domain Controllers data set

This data set monitors the communication between the Exchange Server and the domain controllers. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Critical Data Flag***
A numeric value that indicates whether a domain controller has an Exchange Server account. A value of 1 indicates that the domain controller contains the Exchange Server account. A value of 0 indicates that the domain controller does not have the Exchange Server account. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CRITICAL_DATA_FLAG or CTRDFLG (historical name), *Critical Data Flag* (caption), Critical_Data_Flag (attribute name), and CTRDFLG (column name).

***Domain Controller Name***
The name of the domain controller that hosts the Exchange Server. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: DOMAIN_CONTROLLER_NAME or DCCTRLN (historical name), *Domain Controller Name* (caption), Domain_Controller_Name (attribute name), and DCCTRLN (column name).

***DsGetDcName Elapsed Time***
The total time (in milliseconds) that has been spent to retrieve the domain controller by using the DsGetDcName API call since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DSGETDCNAME_ELAPSED_TIME or DSGDCNEL (historical name), *DsGetDcName Elapsed Time* (caption), DsGetDcName_Elapsed_Time (attribute name), and DSGDCNEL (column name).

***LDAP Pages/Sec***
The number of additional pages that are retrieved from the domain controller per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_PAGES/SEC or LDAPPGPS (historical name), *LDAP Pages/Sec* (caption), LDAP_Pages/Sec (attribute name), and LDAPPGPS (column name).

***LDAP Read Calls/Sec***

The number of LDAP read calls per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_READ_CALLS/SEC or LDAPRCPS (historical name), *LDAP Read Calls/Sec* (caption), LDAP_Read_Calls/Sec (attribute name), and LDAPRCPS (column name).

***LDAP Read Time***

The time (in milliseconds) that is spent in sending an LDAP read request and receiving a response. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_READ_TIME or LDAPRDTM (historical name), *LDAP Read Time* (caption), LDAP_Read_Time (attribute name), and LDAPRDTM (column name).

***LDAP Search Calls/Sec***

The number of Depth 1 or 2 LDAP search calls that are made per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_SEARCH_CALLS/SEC or LDAPSCPS (historical name), *LDAP Search Calls/Sec* (caption), LDAP_Search_Calls/Sec (attribute name), and LDAPSCPS (column name).

***LDAP Search Time***

The time (in milliseconds) that is spent in sending an LDAP search request and receiving a response. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_SEARCH_TIME or LDAPSRTM (historical name), *LDAP Search Time* (caption), LDAP_Search_Time (attribute name), and LDAPSRTM (column name).

***LDAP Searches Timed Out/Min***

The number of LDAP search requests that were timed out per minute. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_SEARCHES_TIMED_OUT/MIN or LDPSTOPM (historical name), *LDAP Searches Timed Out/Min* (caption), LDAP_Searches_Timed_Out/Min (attribute name), and LDPSTOPM (column name).

***Long Running LDAP Operations/Min***

The number of LDAP operations per minute on the domain controller that run longer than the specified threshold. The default threshold is 15 seconds. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LONG_RUNNING_LDAP_OPERATIONS/MIN or LRLDPOPM (historical name), *Long Running LDAP Operations/Min* (caption), Long_Running_LDAP_Operations/Min (attribute name), and LRLDPOPM (column name).

***Node***

The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Timestamp***

The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange ADAccess Forest Discovery data set

This data set monitors the activities to discover Active Directory forests on the Exchange Server. This data set is available in Exchange Server 2013. This data set is a multi-instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Average Discovery Time***
The average time (in seconds) that is taken to complete the forest discovery process during the sampling period. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_DISCOVERY_TIME or AVGDSTM (historical name), *Average Discovery Time* (caption), Average_Discovery_Time (attribute name), and AVGDSTM (column name).

***Average Time to Discover Servers for Roles***
The average time (in seconds) that is taken to discover the servers according to the roles during the sampling period. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_TIME_TO_DISCOVER_SERVERS_FOR_ROLES or GSRAVCD (historical name), *Average Time to Discover Servers for Roles* (caption), Average_Time_to_Discover_Servers_for_Roles (attribute name), and GSRAVCD (column name).

***Discovery Failures***
The total number of discovery attempts that failed to discover the forests since the process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DISCOVERY_FAILURES or DISCFAIL (historical name), *Discovery Failures* (caption), Discovery_Failures (attribute name), and DISCFAIL (column name).

***Domain Controller Name***
The name of the domain controller. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: DOMAIN_CONTROLLER_NAME or DCNAME (historical name), *Domain Controller Name* (caption), Domain_Controller_Name (attribute name), and DCNAME (column name).

***In-site Domain Controllers***
The total number of suitable domain controllers that were discovered in the local site since the process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: IN-SITE_DOMAIN_CONTROLLERS or INSTDC (historical name), *In-site Domain Controllers* (caption), In-site_Domain_Controllers (attribute name), and INSTDC (column name).

***In-site Global Catalogs***
The total number of suitable global catalogs that were discovered in the local site since the process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: IN-SITE_GLOBAL_CATALOGS or INSTGC (historical name), *In-site Global Catalogs* (caption), In-site_Global_Catalogs (attribute name), and INSTGC (column name).

***Max Discovery Duration***
The maximum time (in seconds) that was taken to complete the forest discovery since the process was started. The type is real number (32-bit counter) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAX_DISCOVERY_DURATION or MXTPDR (historical name), *Max Discovery Duration* (caption), Max_Discovery_Duration (attribute name), and MXTPDR (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Out-of-site Domain Controllers***
The total number of suitable domain controllers that were discovered outside the local site since the process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OUT-OF-SITE_DOMAIN_CONTROLLERS or OTSTDC (historical name), *Out-of-site Domain Controllers* (caption), Out-of-site_Domain_Controllers (attribute name), and OTSTDC (column name).

***Out-of-site Global Catalogs***
The total number of suitable global catalogs that were discovered outside the local site since the process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OUT-OF-SITE_GLOBAL_CATALOGS or OTSTGC (historical name), *Out-of-site Global Catalogs* (caption), Out-of-site_Global_Catalogs (attribute name), and OTSTGC (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

***Topology Discovery Duration***
The time (in seconds) that is taken to complete the last topology discovery process. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following

values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOPOLOGY_DISCOVERY_DURATION or TPDSDR (historical name), *Topology Discovery Duration* (caption), Topology_Discovery_Duration (attribute name), and TPDSDR (column name).

**Maximum Time to Discover Servers for Roles**
The maximum time (in seconds) that was taken to discover the servers according to the roles since the process was started. The type is real number (32-bit counter) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAXIMUM_TIME_TO_DISCOVER_SERVERS_FOR_ROLES or GSRMXCD (historical name), Maximum Time to Discover Servers for Roles (caption), Maximum_Time_to_Discover_Servers_for_Roles (attribute name), and GSRMXCD (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange ADAccess Processes data set

This data set monitors the Exchange Server Active Directory activity. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***AD Process Name***
The name of the Microsoft Exchange ADAccess Processes instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: PROCESS_U or PROCNAME (historical name), *AD Process Name* (caption), Process_U (attribute name), and PROCNAME (column name).

***LDAP Not Found configuration read calls/Sec***
The number of Depth 0 LDAP search calls made by the process that failed with 'Not found' per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_NOT_FOUND_CONFIGURATION_READ_CALLS/SEC or LDAPNFCS (historical name), *LDAP Not Found configuration read calls/Sec* (caption), LDAP_Not_Found_configuration_read_calls/Sec (attribute name), and LDAPNFCS (column name).

***LDAP notifications received/Sec***
The number of LDAP notification results received by the process per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_NOTIFICATIONS_RECEIVED/SEC or LDAPREC (historical name), *LDAP notifications received/Sec* (caption), LDAP_notifications_received/Sec (attribute name), and LDAPREC (column name).

***LDAP notifications Reported/Sec***
The number of LDAP notification results reported by the process to the users per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_NOTIFICATIONS_REPORTED/SEC or LDAPREP (historical name), *LDAP notifications Reported/Sec* (caption), LDAP_notifications_Reported/Sec (attribute name), and LDAPREP (column name).

***LDAP Pages/Sec***
The number of additional pages that are retrieved by the process per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_PAGES/SEC or LDAPPGS (historical name), *LDAP Pages/Sec* (caption), LDAP_Pages/Sec (attribute name), and LDAPPGS (column name).

***LDAP Read calls/Sec***
The number of Depth 0 LDAP search calls made by the process per second. It does not necessarily equal to the number of notifications reported to the users. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_READ_CALLS/SEC or LDAPRDCS (historical name), *LDAP Read calls/Sec* (caption), LDAP_Read_calls/Sec (attribute name), and LDAPRDCS (column name).

***LDAP Read Time***
The time (in milliseconds) taken to send an LDAP read request and receive a response. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_READ_TIME or LDAPRDTI (historical name), *LDAP Read Time* (caption), LDAP_Read_Time (attribute name), and LDAPRDTI (column name).

***LDAP Search calls/Sec***
The number of Depth 1 or 2 LDAP search calls made by the process per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_SEARCH_CALLS/SEC or LDAPSRHCS (historical name), *LDAP Search calls/Sec* (caption), LDAP_Search_calls/Sec (attribute name), and LDAPSRHCS (column name).

***LDAP Search Time***
The time (in milliseconds) taken to send an LDAP search request and receive a response. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_SEARCH_TIME or LDAPSRHTI (historical name), *LDAP Search Time* (caption), LDAP_Search_Time (attribute name), and LDAPSRHTI (column name).

***LDAP Timeout errors/Sec***
The number of LDAP operations made by the process failed because of exceeded timeout per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_TIMEOUT_ERRORS/SEC or LDAPTOS (historical name), *LDAP Timeout errors/Sec* (caption), LDAP_Timeout_errors/Sec (attribute name), and LDAPTOS (column name).

***LDAP Write calls/Sec***
The number of LDAP add, modify, or delete requests made by the process per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_WRITE_CALLS/SEC or LDAPWRTCS (historical name), *LDAP Write calls/Sec* (caption), LDAP_Write_calls/Sec (attribute name), and LDAPWRTCS (column name).

***LDAP Write Time***
The time (in milliseconds) taken to send an LDAP add, modify, or delete request and receive a response. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_WRITE_TIME or LDAPWRTTI (historical name), *LDAP Write Time* (caption), LDAP_Write_Time (attribute name), and LDAPWRTTI (column name).

***Long running LDAP operations/Min***
The number of LDAP operations made by the process that took longer than the specified threshold per minute (default threshold is 15 seconds). The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LONG_RUNNING_LDAP_OPERATIONS/MIN or LDAPLGRM (historical name), *Long running LDAP operations/Min* (caption), Long_running_LDAP_operations/Min (attribute name), and LDAPLGRM (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Number of outstanding requests***
The current number of pending LDAP searches in the process. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_OUTSTANDING_REQUESTS or REQOUTST (historical name), *Number of outstanding requests* (caption), Number_of_outstanding_requests (attribute name), and REQOUTST (column name).

***Open connections to Domain Controllers***
Open connections to Domain Controllers in the process. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OPEN_CONNECTIONS_TO_DOMAIN_CONTROLLERS or OPENCONDC (historical name), *Open connections to Domain Controllers* (caption), Open_connections_to_Domain_Controllers (attribute name), and OPENCONDC (column name).

***Open connections to Global Catalogs***
Open connections to Global Catalogs in the process. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OPEN_CONNECTIONS_TO_GLOBAL_CATALOGS or OPENCONCT (historical name), *Open connections to Global Catalog*s (caption), Open_connections_to_Global_Catalogs (attribute name), and OPENCONCT (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

***Topology version***
The current version of the Active Directory topology data used by the process. The type is integer (32-bit numeric property).

The following names are defined for this attribute: TOPOLOGY_VERSION or TOPOVER (historical name), *Topology version* (caption), Topology_version (attribute name), and TOPOVER (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange Assistants data set

This data set monitors the Exchange Server Assistants services activity, Microsoft Exchange Mail Submission, and Microsoft Exchange Mailbox Assistants. This data set is available only in Exchange Server 2007 and 2010. This data set is a multi-instance data set.

This data set contains the following attributes:

**Assistant Name**
The name of the Microsoft Exchange Assistants instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: ASSISTANT_U or ASTNAME (historical name), Assistant Name (caption), Assistant_U (attribute name), and ASTNAME (column name).

**Average Event Processing Time In seconds**
The average processing time (in seconds) of the events chosen as interesting. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_EVENT_PROCESSING_TIME_IN_SECONDS or AVEVTPRCT (historical name), Average Event Processing Time In seconds (caption), Average_Event_Processing_Time_In_seconds (attribute name), and AVEVTPRCT (column name).

**Average Event Queue Time in seconds**
The average time (in seconds) that the event stays in the dispatcher queue. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_EVENT_QUEUE_TIME_IN_SECONDS or AVEVNTQUTS (historical name), Average Event Queue Time in seconds (caption), Average_Event_Queue_Time_in_seconds (attribute name), and AVEVNTQUTS (column name).

**Average Mailbox Processing Time In seconds**
The average processing time of mailboxes for time-based assistants per second. This attribute is not available in Exchange Server 2010, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_MAILBOX_PROCESSING_TIME_IN_SECONDS or MBXPROCIS (historical name), Average Mailbox Processing Time In seconds (caption), Average_Mailbox_Processing_Time_In_seconds (attribute name), and MBXPROCIS (column name).

**Average Queue Size of Event Dispatchers**
The average queue size of event dispatchers. This attribute is not available in Exchange Server 2010, or later. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_QUEUE_SIZE_OF_EVENT_DISPATCHERS or AVQUSZEVTD (historical name), Average Queue Size of Event Dispatchers (caption), Average_Queue_Size_of_Event_Dispatchers (attribute name), and AVQUSZEVTD (column name).

**Events in queue**
The number of events currently in the in-memory queue that are waiting to be processed by the assistants. The type is integer (32-bit gauge).

The following names are defined for this attribute: EVENTS_IN_QUEUE or EVTINQUE (historical name), Events in queue (caption), Events_in_queue (attribute name), and EVTINQUE (column name).

**Events Polled**
The number of events polled by the assistants. This attribute is not available in Exchange Server 2010, or later. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EVENTS_POLLED or EVTPOLLED (historical name), Events Polled (caption), Events_Polled (attribute name), and EVTPOLLED (column name).

**Events Polled/sec**
The number of events polled per second. This attribute is not available in Exchange Server 2010, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EVENTS_POLLED/SEC or EVTPOLLSEC (historical name), Events Polled/sec (caption), Events_Polled/sec (attribute name), and EVTPOLLSEC (column name).

**Events Processed**
The number of events processed by the assistants. The type is integer (32-bit counter).

The following names are defined for this attribute: EVENTS_PROCESSED or EVTPROC (historical name), Events Processed (caption), Events_Processed (attribute name), and EVTPROC (column name).

**Highest Event Counter Polled**
The highest event counter polled from the database. This attribute is not available in Exchange Server 2010, or later. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: HIGHEST_EVENT_COUNTER_POLLED or HEVTCPOLED (historical name), Highest Event Counter Polled (caption), Highest_Event_Counter_Polled (attribute name), and HEVTCPOLED (column name).

**Mailboxes processed**
The number of mailboxes processed by time-based assistants. This attribute is not available in Exchange Server 2010, or later. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOXES_PROCESSED or MBXPROC (historical name), Mailboxes processed (caption), Mailboxes_processed (attribute name), and MBXPROC (column name).

**Mailboxes processed/sec**
The number of times that mailboxes are processed by time-based assistants per second. This attribute is not available in Exchange Server 2010, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOXES_PROCESSED/SEC or MBXPROCSEC (historical name), Mailboxes processed/sec (caption), Mailboxes_processed/sec (attribute name), and MBXPROCSEC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Number of Event Dispatchers**
The number of event dispatchers currently in memory. The type is integer (32-bit gauge).

The following names are defined for this attribute: NUMBER_OF_EVENT_DISPATCHERS or NUMEVTD (historical name), Number of Event Dispatchers (caption), Number_of_Event_Dispatchers (attribute name), and NUMEVTD (column name).

**Number of events processed per second**
The number of events processed per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: NUMBER_OF_EVENTS_PROCESSED_PER_SECOND or NUMEVTPRCS (historical name), Number of events processed per second (caption), Number_of_events_processed_per_second (attribute name), and NUMEVTPRCS (column name).

**Number of Failed Event Dispatchers**
The number of event dispatchers that are in the failed state. The type is integer (32-bit gauge).

The following names are defined for this attribute: NUMBER_OF_FAILED_EVENT_DISPATCHERS or NUMFEVTD (historical name), Number of Failed Event Dispatchers (caption), Number_of_Failed_Event_Dispatchers (attribute name), and NUMFEVTD (column name).

**Number of Handled Exceptions**
The number of CLR exceptions handled by the code. The type is integer (32-bit counter).

The following names are defined for this attribute: NUMBER_OF_HANDLED_EXCEPTIONS or NUMHNDEX (historical name), Number of Handled Exceptions (caption), Number_of_Handled_Exceptions (attribute name), and NUMHNDEX (column name).

**Number of Threads Used**
The number of threads used from the CLR thread pool. This attribute is not available in Exchange Server 2010, or later. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_THREADS_USED or NUMTHREADS (historical name), Number of Threads Used (caption), Number_of_Threads_Used (attribute name), and NUMTHREADS (column name).

**Percentage of Interesting Events**
The percentage of events generated in the database that are processed by the assistants. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: PERCENTAGE_OF_INTERESTING_EVENTS or PERINTEVTS (historical name), Percentage of Interesting Events (caption), Percentage_of_Interesting_Events (attribute name), and PERINTEVTS (column name).

**Polling Delay**
The latency between the recent MAPI Event that is polled and the event that is created in seconds. This attribute is not available in Exchange Server 2010, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: POLLING_DELAY or POLLDELAY (historical name), Polling Delay (caption), Polling_Delay (attribute name), and POLLDELAY (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Assistants Per Database data set

This data set monitors the activity of Microsoft Exchange Server Assistants.

This data set contains the following attributes:

**Assistant Name (Per Database)**
The name of the Microsoft Exchange Assistants Per Database instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: ASSISTANT_NAME_PER_DATABASE_U or ASTDBNAM (historical name), Assistant Name (Per Database) (caption), Assistant_Name_Per_Database_U (attribute name), and ASTDBNAM (column name).

**Average Event Processing Time In seconds**
The average processing time of the events that are chosen as interesting events. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_EVENT_PROCESSING_TIME_IN_SECONDS or AVEVTPRCT (historical name), Average Event Processing Time In seconds (caption), Average_Event_Processing_Time_In_seconds (attribute name), and AVEVTPRCT (column name).

**Average Mailbox Processing Time In seconds**
The average processing time of the mailboxes for time-based assistants per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_MAILBOX_PROCESSING_TIME_IN_SECONDS or MBXPROCIS (historical name), Average

Mailbox Processing Time In seconds (caption), Average_Mailbox_Processing_Time_In_seconds (attribute name), and MBXPROCIS (column name).

**Events in queue**
The current number of events in the in-memory queue that are waiting to be processed by the assistants. The type is integer (32-bit gauge).

The following names are defined for this attribute: EVENTS_IN_QUEUE or EVTINQUE (historical name), Events in queue (caption), Events_in_queue (attribute name), and EVTINQUE (column name).

**Events Polled**
The number of events that are polled by the assistants since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: EVENTS_POLLED or EVTPOLLED (historical name), Events Polled (caption), Events_Polled (attribute name), and EVTPOLLED (column name).

**Events Polled/sec**
The number of events that are currently polled per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: EVENTS_POLLED/SEC or EVTPOLLSEC (historical name), Events Polled/sec (caption), Events_Polled/sec (attribute name), and EVTPOLLSEC (column name).

**Highest Event Counter Polled**
The highest event counter that is polled from the database. The type is integer (32-bit gauge).

The following names are defined for this attribute: HIGHEST_EVENT_COUNTER_POLLED or HEVTCPOLED (historical name), Highest Event Counter Polled (caption), Highest_Event_Counter_Polled (attribute name), and HEVTCPOLED (column name).

**Mailboxes processed**
The number of mailboxes that are processed by time-based assistants since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MAILBOXES_PROCESSED or MBXPROC (historical name), Mailboxes processed (caption), Mailboxes_processed (attribute name), and MBXPROC (column name).

**Mailboxes processed/sec**
The number of mailboxes that are processed by the time-based assistants per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MAILBOXES_PROCESSED/SEC or MBXPROCSEC (historical name), Mailboxes processed/sec (caption), Mailboxes_processed/sec (attribute name), and MBXPROCSEC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Number of Threads Used**
The number of threads that are currently used from the common language runtime (CLR) thread pool. The type is integer (32-bit gauge).

The following names are defined for this attribute: NUMBER_OF_THREADS_USED or NUMTHREADS (historical name), Number of Threads Used (caption), Number_of_Threads_Used (attribute name), and NUMTHREADS (column name).

**Percentage of Interesting Events**
The percentage of the events that are processed by the assistants. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: PERCENTAGE_OF_INTERESTING_EVENTS or PERINTEVTS (historical name), Percentage of Interesting Events (caption), Percentage_of_Interesting_Events (attribute name), and PERINTEVTS (column name).

**Polling Delay**
The latency between the most recent MAPI event that is polled and the event created, in seconds. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: POLLING_DELAY or POLLDELAY (historical name), Polling Delay (caption), Polling_Delay (attribute name), and POLLDELAY (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Attachment Filtering data set

This data set represents MS Exchange Attachment Filtering statistics activity. This data set is available only in Exchange Server 2007 and 2010. This data set is a single instance data set.

This data set contains the following attributes:

**Change in Messages Attachment Filtered**
The number of messages that were either blocked, attachment-stripped, or silent-deleted (according to configuration) by the attachment filtering agent in that sampling interval. The agent resets the attribute to its initial value on the startup of the Exchange Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CHANGE_IN_MESSAGES_ATTACHMENT_FILTERED or CMSGAF (historical name), Change in Messages Attachment Filtered (caption), Change_in_Messages_Attachment_Filtered (attribute name), and CMSGAF (column name).

**Messages Attachment Filtered**
The number of messages that were either blocked, attachment-stripped, or silent-deleted (according to configuration) by the attachment filtering agent. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_ATTACHMENT_FILTERED or MSGAF (historical name), Messages Attachment Filtered (caption), Messages_Attachment_Filtered (attribute name), and MSGAF (column name).

**Messages Filtered/sec**
The number of messages per second that the attachment filtering agent blocked, attachment-stripped, or silent-deleted. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_FILTERED/SEC or MSGFPS (historical name), Messages Filtered/sec (caption), Messages_Filtered/sec (attribute name), and MSGFPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Authentication data set

This data set monitors the user authentication activities on the Exchange Server. This data set is available in Exchange Server 2013. This data set is a multi-instance data set.

This data set contains the following attributes:

**Accepted Requests**
The total number of authentication requests that were accepted since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACCEPTED_REQUESTS or ACPREQS (historical name), Accepted Requests (caption), Accepted_Requests (attribute name), and ACPREQS (column name).

**Authentication Instance Name**
The name of the authentication service provider. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: AUTHENTICATION_INSTANCE_NAME or AUTHINAM (historical name), Authentication Instance Name (caption), Authentication_Instance_Name (attribute name), and AUTHINAM (column name).

**Latency**
The latency of the current authentication request. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LATENCY or AUTHLAT (historical name), Latency (caption), Latency (attribute name), and AUTHLAT (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Outstanding Requests**
The number of current outstanding authentication requests. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OUTSTANDING_REQUESTS or OUTREQS (historical name), Outstanding Requests (caption), Outstanding_Requests (attribute name), and OUTREQS (column name).

**Rejected Requests**
The total number of authentication requests that were rejected since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REJECTED_REQUESTS or REJREQS (historical name), Rejected Requests (caption), Rejected_Requests (attribute name), and REJREQS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Requests**
The total number of authentication requests that occurred since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_REQUESTS or TOTREQS (historical name), Total Requests (caption), Total_Requests (attribute name), and TOTREQS (column name).

## MS Exchange Autodiscover data set

This data set monitors the activities of the Autodiscover service on the Microsoft Exchange Server. The Autodiscover service provides the following services to Outlook clients: Configures user profiles automatically, and provides access to the Exchange Server features. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Error Responses**
The total number of Autodiscover error responses that have been processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ERROR_RESPONSES or ERRRESP (historical name), Error Responses (caption), Error_Responses (attribute name), and ERRRESP (column name).

**Error Responses/sec**
The number of Autodiscover error responses that occurred per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ERROR_RESPONSES/SEC or ERRESSEC (historical name), Error Responses/sec (caption), Error_Responses/sec (attribute name), and ERRESSEC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Requests/sec**
The number of Autodiscover service requests that are currently processed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REQUESTS/SEC or REQSEC (historical name), Requests/sec (caption), Requests/sec (attribute name), and REQSEC (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Requests**
The total number of Autodiscover service requests that have been processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_REQUESTS or TOTLREQ (historical name), Total Requests (caption), Total_Requests (attribute name), and TOTLREQ (column name).

## MS Exchange Availability Service data set

This data set monitors the Availability service on the Microsoft Exchange Server. The Availability service provides free or busy information to the clients to improve scheduling activities for meetings and calendars. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Availability Requests/sec**
The number of free or busy requests that are processed per second. A free or busy request can query multiple mailboxes. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVAILABILITY_REQUESTS/SEC or AVREQ (historical name), Availability Requests/sec (caption), Availability_Requests/sec (attribute name), and AVREQ (column name).

**Average Free Busy Request Processing Time**

The average time (in seconds) that is taken to process a free or busy request. A free or busy request can query multiple mailboxes. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_TIME_TO_PROCESS_FREE_BUSY_REQUEST or AVFRBRQ (historical name), Average Free Busy Request Processing Time (caption), Average_Time_to_Process_Free_Busy_Request (attribute name), and AVFRBRQ (column name).

**Average Number of Mailboxes Processed/Request**

The average number of mailboxes that are currently processed per request. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_NUMBER_OF_MAILBOXES_PROCESSED/REQUEST or ANMPPR (historical name), Average Number of Mailboxes Processed/Request (caption), Average_Number_of_Mailboxes_Processed/Request (attribute name), and ANMPPR (column name).

**Client Reported Failures AutoDiscover Failures**

The total number of free or busy requests that have been reported by the clients, and that have failed since the service was started because the Autodiscover service failed. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_REPORTED_FAILURES_AUTODISCOVER_FAILURES or CLRFADF (historical name), Client Reported Failures AutoDiscover Failures (caption), Client_Reported_Failures_AutoDiscover_Failures (attribute name), and CLRFADF (column name).

**Client Reported Failures Connection Failures**

The total number of free or busy requests that have been reported by the clients, and that have failed because the clients could not connect to the Client Access Server since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_REPORTED_FAILURES_CONNECTION_FAILURES or CLRFCF (historical name), Client Reported Failures Connection Failures (caption), Client_Reported_Failures_Connection_Failures (attribute name), and CLRFCF (column name).

**Client Reported Failures Partial Other Failures**

The total number of free or busy requests that have been reported by the clients, and that have failed because of the partial or other failures since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_REPORTED_FAILURES_PARTIAL_OTHER_FAILURES or CLRFPF (historical name), Client Reported Failures Partial Other Failures (caption), Client_Reported_Failures_Partial_Other_Failures (attribute name), and CLRFPF (column name).

**Client Reported Failures Timeout Failures**

The total number of free or busy requests that have been reported by the clients, and that have failed because the requests timed out since the service was started. The type is integer (32-bit counter)

with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_REPORTED_FAILURES_TIMEOUT_FAILURES or CLRFTF (historical name), Client Reported Failures Timeout Failures (caption), Client_Reported_Failures_Timeout_Failures (attribute name), and CLRFTF (column name).

**Client Reported Failures Total**
The total number of free or busy requests that have been reported by the clients, and that have failed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_REPORTED_FAILURES_TOTAL or CLRFLT (historical name), Client Reported Failures Total (caption), Client_Reported_Failures_Total (attribute name), and CLRFLT (column name).

**Current Requests**
The current number of requests that are being processed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CURRENT_REQUESTS or CURREQ (historical name), Current Requests (caption), Current_Requests (attribute name), and CURREQ (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Public Folder Queries/sec**
The number of mailboxes for which free or busy information is requested per second from the public folders. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PUBLIC_FOLDER_QUERIES/SEC or PUFQU (historical name), Public Folder Queries/sec (caption), Public_Folder_Queries/sec (attribute name), and PUFQU (column name).

**Public Folder Request Failures/sec**
The number of requests that failed per second to retrieve the free or busy status of public folders. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PUBLIC_FOLDER_REQUEST_FAILURES/SEC or PFREFL (historical name), Public Folder Request Failures/sec (caption), Public_Folder_Request_Failures/sec (attribute name), and PFREFL (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Successful Client Reported Requests Total**
The total number of free or busy requests that have been reported by the clients, and that have been processed since the service was started. The type is integer (32-bit counter) with enumerated values.

The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUCCESSFUL_CLIENT_REPORTED_REQUESTS_TOTAL or SCLRREQ (historical name), Successful Client Reported Requests Total (caption), Successful_Client_Reported_Requests_Total (attribute name), and SCLRREQ (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Calendar Attendant data set

This data set monitors the activities of the Calendar Attendant on the Microsoft Exchange Server. This data set is available in Exchange Server 2007, or later. This data set is a single-instance data set.

This data set contains the following attributes:

**Average Calendar Attendant Processing time**
The average time that is required for the Calendar Attendant to process requests. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_CALENDAR_ATTENDANT_PROCESSING_TIME or AVCALAPT (historical name), Average Calendar Attendant Processing time (caption), Average_Calendar_Attendant_Processing_time (attribute name), and AVCALAPT (column name).

**Meeting Cancellations**
The total number of meeting requests that have been cancelled by the Calendar Attendant since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MEETING_CANCELLATIONS or MTGCANCEL (historical name), Meeting Cancellations (caption), Meeting_Cancellations (attribute name), and MTGCANCEL (column name).

**Meeting Messages Deleted**
The total number of meeting messages that have been deleted by the Calendar Attendant since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MEETING_MESSAGES_DELETED or MTGMSGDL (historical name), Meeting Messages Deleted (caption), Meeting_Messages_Deleted (attribute name), and MTGMSGDL (column name).

**Meeting Messages Processed**
The total number of meeting messages that have been processed by the Calendar Attendant since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MEETING_MESSAGES_PROCESSED or MTGMSGPR (historical name), Meeting Messages Processed (caption), Meeting_Messages_Processed (attribute name), and MTGMSGPR (column name).

**Meeting Requests Invitations**
The total number of meeting invitations that have been processed by the Calendar Attendant since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MEETING_REQUESTS_INVITATIONS or MTGRQINV (historical name), Meeting Requests Invitations (caption), Meeting_Requests_Invitations (attribute name), and MTGRQINV (column name).

**Meeting Responses**
The total number of meeting responses that have been processed by the Calendar Attendant since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MEETING_RESPONSES or MTGRES (historical name), Meeting Responses (caption), Meeting_Responses (attribute name), and MTGRES (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Requests Failed**
The total number of requests that the Calendar Attendant failed to process since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REQUESTS_FAILED or REQFAILD (historical name), Requests Failed (caption), Requests_Failed (attribute name), and REQFAILD (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Connection Filtering Agent data set

This data set represents MS Exchange Connection Filtering Agent statistics activity. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Connections on IP Allow List Providers/sec**
The number of connections on the IP allow list providers per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CONNECTIONS_ON_IP_ALLOW_LIST_PROVIDERS/SEC or CONIPALPRO (historical name),

Connections on IP Allow List Providers/sec (caption), Connections_on_IP_Allow_List_Providers/sec (attribute name), and CONIPALPRO (column name).

**Connections on IP Allow List/sec**
The number of connections on the IP allow list per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CONNECTIONS_ON_IP_ALLOW_LIST/SEC or CIPALPS (historical name), Connections on IP Allow List/sec (caption), Connections_on_IP_Allow_List/sec (attribute name), and CIPALPS (column name).

**Connections on IP Block List**
The total number of connections on the IP block list. The type is integer (32-bit counter).

The following names are defined for this attribute: CONNECTIONS_ON_IP_BLOCK_LIST or CONIPBL (historical name), Connections on IP Block List (caption), Connections_on_IP_Block_List (attribute name), and CONIPBL (column name).

**Connections on IP Block List Providers/sec**
The number of connections on the IP block list providers per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CONNECTIONS_ON_IP_BLOCK_LIST_PROVIDERS/SEC or CONIPBLPPS (historical name), Connections on IP Block List Providers/sec (caption), Connections_on_IP_Block_List_Providers/sec (attribute name), and CONIPBLPPS (column name).

**Connections on IP Block List/sec**
The number of connections on the IP block list per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CONNECTIONS_ON_IP_BLOCK_LIST/SEC or CIPBLPS (historical name), Connections on IP Block List/sec (caption), Connections_on_IP_Block_List/sec (attribute name), and CIPBLPS (column name).

**Messages with Originating IP on IP Allow List/sec**
The number of messages with an originating IP address on the IP allow list each second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_WITH_ORIGINATING_IP_ON_IP_ALLOW_LIST/SEC or MOIPALPS (historical name), Messages with Originating IP on IP Allow List/sec (caption), Messages_with_Originating_IP_on_IP_Allow_List/sec (attribute name), and MOIPALPS (column name).

**Messages with Originating IP on IP Block List**
The total number of messages with originating IP on the IP block list. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_ORIGINATING_IP_ON_IP_BLOCK_LIST or MWOIPOIPBL (historical name), Messages with Originating IP on IP Block List (caption), Messages_with_Originating_IP_on_IP_Block_List (attribute name), and MWOIPOIPBL (column name).

**Messages with Originating IP on IP Block List Providers/sec**
The number of messages with originating IP on the IP block list providers per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_WITH_ORIGINATING_IP_ON_IP_BLOCK_LIST_PROVIDERS/SEC or MOIOIBLPPS (historical name), Messages with Originating IP on IP Block List Providers/sec (caption), Messages_with_Originating_IP_on_IP_Block_List_Providers/sec (attribute name), and MOIOIBLPPS (column name).

**Messages with OriginatingIP on IP Block List/sec**
The number of messages with an originating IP address on the IP block list per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_WITH_ORIGINATING_IP_ON_IP_BLOCK_LIST/SEC or MOIPBLPS (historical name), Messages with OriginatingIP on IP Block List/sec (caption), Messages_with_Originating_IP_on_IP_Block_List/sec (attribute name), and MOIPBLPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Content Filter Agent data set

This data set represents MS Exchange Content Filter Agent statistics. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set. The number of messages that were bypassed by the content filter (according to configuration) in that sampling interval. The agent resets the attribute to its initial value on the startup of the Exchange Server.

This data set contains the following attributes:

**Change in Messages Bypassed Scanning**
Change in Messages that bypassed scanning is the number of messages that were bypassed by the content filter(as per configuration) in that sampling Interval. It will be reset to initial value on server startup. The type is integer (32-bit gauge).

The following names are defined for this attribute: CHANGE_IN_MESSAGES_BYPASSED_SCANNING or CMSGBS (historical name), Change in Messages Bypassed Scanning (caption), Change_in_Messages_Bypassed_Scanning (attribute name), and CMSGBS (column name).

**Change in Messages Bypassed Scanning organization-wide Safe Sender**
The number of messages that were bypassed by the content filter due to an organization-wide safe sender, in that sampling interval. The agent resets the attribute to its initial value on the startup of the Exchange Server. The type is integer (32-bit gauge).

The following names are defined for this attribute: CHANGE_IN_MSGS_BYPASSED_SCANNING_ORG-WIDE_SAFE_SENDER or CMSGBSSS (historical name), Change in Messages Bypassed Scanning organization-wide Safe Sender (caption), Change_in_Msgs_Bypassed_Scanning_org-wide_Safe_Sender (attribute name), and CMSGBSSS (column name).

**Messages Bypassed Scanning**
The total number of messages that bypass scanning. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_BYPASSED_SCANNING or MSGBS (historical name), Messages Bypassed Scanning (caption), Messages_Bypassed_Scanning (attribute name), and MSGBS (column name).

**Messages Bypassed Scanning organization-wide Safe Sender**
The total number of messages that bypass scanning due to an organization-wide safe sender. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_BYPASSED_SCANNING_ORGANIZATION-WIDE_SAFE_SENDER or MSGBSSS (historical name), Messages Bypassed Scanning organization-wide Safe Sender (caption), Messages_Bypassed_Scanning_organization-wide_Safe_Sender (attribute name), and MSGBSSS (column name).

**Messages Deleted**
The total number of messages that are deleted by the Content Filter Agent. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_DELETED or MSGDL (historical name), Messages Deleted (caption), Messages_Deleted (attribute name), and MSGDL (column name).

**Messages Outlook Postmark not validated**
The number of messages that include an Outlook email postmark property and are not validated successfully. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_OUTLOOK_POSTMARK_NOT_VALIDATED or MSGOPNV (historical name), Messages Outlook Postmark not validated (caption), Messages_Outlook_Postmark_not_validated (attribute name), and MSGOPNV (column name).

**Messages Outlook Postmark validated successfully**
The number of messages that include an Outlook email postmark property and are validated successfully. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_OUTLOOK_POSTMARK_VALIDATED_SUCCESSFULLY or MSGOPVS (historical name), Messages Outlook Postmark validated successfully (caption), Messages_Outlook_Postmark_validated_successfully (attribute name), and MSGOPVS (column name).

**Messages Quarantined**
The total number of messages that are quarantined by the Content Filter Agent. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_QUARANTINED or MSGQRN (historical name), Messages Quarantined (caption), Messages_Quarantined (attribute name), and MSGQRN (column name).

**Messages Rejected**
The total number of messages that are rejected by the Content Filter Agent. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_REJECTED or MSGREJ (historical name), Messages Rejected (caption), Messages_Rejected (attribute name), and MSGREJ (column name).

**Messages Scanned**
The total number of messages scanned by the Content Filter Agent. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_SCANNED or MSGSCN (historical name), Messages Scanned (caption), Messages_Scanned (attribute name), and MSGSCN (column name).

**Messages Scanned Per Second**
The number of messages that are scanned per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_SCANNED_PER_SECOND or MSGSPS (historical name), Messages Scanned Per Second (caption), Messages_Scanned_Per_Second (attribute name), and MSGSPS (column name).

**Messages with SCL 0**
The total number of messages that are assigned an SCL rating of 0. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_SCL_0 or MSGSCL0 (historical name), Messages with SCL 0 (caption), Messages_with_SCL_0 (attribute name), and MSGSCL0 (column name).

**Messages with SCL 1**
The total number of messages that are assigned an SCL rating of 1. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_SCL_1 or MSGSCL1 (historical name), Messages with SCL 1 (caption), Messages_with_SCL_1 (attribute name), and MSGSCL1 (column name).

**Messages with SCL 2**
The total number of messages that are assigned an SCL rating of 2. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_SCL_2 or MSGSCL2 (historical name), Messages with SCL 2 (caption), Messages_with_SCL_2 (attribute name), and MSGSCL2 (column name).

**Messages with SCL 3**
The total number of messages that are assigned an SCL rating of 3. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_SCL_3 or MSGSCL3 (historical name), Messages with SCL 3 (caption), Messages_with_SCL_3 (attribute name), and MSGSCL3 (column name).

**Messages with SCL 4**
The total number of messages that are assigned an SCL rating of 4. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_SCL_4 or MSGSCL4 (historical name), Messages with SCL 4 (caption), Messages_with_SCL_4 (attribute name), and MSGSCL4 (column name).

**Messages with SCL 5**
The total number of messages that are assigned an SCL rating of 5. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_SCL_5 or MSGSCL5 (historical name), Messages with SCL 5 (caption), Messages_with_SCL_5 (attribute name), and MSGSCL5 (column name).

**Messages with SCL 6**
The total number of messages that are assigned an SCL rating of 6. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_SCL_6 or MSGSCL6 (historical name), Messages with SCL 6 (caption), Messages_with_SCL_6 (attribute name), and MSGSCL6 (column name).

**Messages with SCL 7**
The total number of messages that are assigned an SCL rating of 7. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_SCL_7 or MSGSCL7 (historical name), Messages with SCL 7 (caption), Messages_with_SCL_7 (attribute name), and MSGSCL7 (column name).

**Messages with SCL 8**
The total number of messages that are assigned an SCL rating of 8. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_SCL_8 or MSGSCL8 (historical name), Messages with SCL 8 (caption), Messages_with_SCL_8 (attribute name), and MSGSCL8 (column name).

**Messages with SCL 9**
The total number of messages that are assigned an SCL rating of 9. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_WITH_SCL_9 or MSGSCL9 (historical name), Messages with SCL 9 (caption), Messages_with_SCL_9 (attribute name), and MSGSCL9 (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Control Panel RBAC data set

This data set represents the Exchange role-based access. The data set is available in the Exchange Server 2010, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Activation of Requests/Sec**
The number of requests that are activated per second in the Exchange Control Panel. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: ACTIVATION_OF_REQUESTS/SEC or REQAPS (historical name), Activation of Requests/Sec (caption), Activation_of_Requests/Sec (attribute name), and REQAPS (column name).

**ASP Net Request Failures/sec**
The current number of ASP. NET requests that failed per second in the Exchange Control Panel. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ASP_NET_REQUEST_FAILURES/SEC or ARFSEC (historical name), ASP Net Request Failures/sec (caption), ASP_Net_Request_Failures/sec (attribute name), and ARFSEC (column name).

**Average Active Time of PowerShell Runspaces**
The average time (in seconds) for which Windows PowerShell runspaces are active while executing cmdlets in the Exchange Control Panel during the sampling period. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_ACTIVE_TIME_OF_POWERSHELL_RUNSPACES or PRAGAT (historical name), Average Active Time of PowerShell Runspaces (caption), Average_Active_Time_of_PowerShell_Runspaces (attribute name), and PRAGAT (column name).

**Average Request Response Time**
The average time (in milliseconds) for the Exchange Control Panel to respond to a request during the sampling period. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: REQUESTS_-_AVERAGE_RESPONSE_TIME or REQAVGT (historical name), Average Request Response Time (caption), Requests_-_Average_Response_Time (attribute name), and REQAVGT (column name).

**Average Response Time of Outbound Proxy Requests**
The average time (in milliseconds) for the secondary Client Access Server to respond to requests during the sampling period. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: OUTBOUND_PROXY_REQUESTS_-_AVERAGE_RESPONSE_TIME or OPRARS (historical name), Average Response Time of Outbound Proxy Requests (caption), Outbound_Proxy_Requests_-_Average_Response_Time (attribute name), and OPRARS (column name).

**Explicit Sign-On Inbound Proxy Requests/sec**
The current number of explicit SignOn requests that are received per second from the primary Client Access Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXPLICIT_SIGN-ON_INBOUND_PROXY_REQUESTS/SEC or ESIPR (historical name), Explicit Sign-On Inbound Proxy Requests/sec (caption), Explicit_Sign-On_Inbound_Proxy_Requests/sec (attribute name), and ESIPR (column name).

**Explicit Sign-On Inbound Proxy Sessions/sec**
The current number of explicit SignOn inbound proxy sessions that are loaded per second in the Exchange Control Panel. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXPLICIT_SIGN-ON_INBOUND_PROXY_SESSIONS/SEC or ESIPS (historical name), Explicit Sign-On Inbound Proxy Sessions/sec (caption), Explicit_Sign-On_Inbound_Proxy_Sessions/sec (attribute name), and ESIPS (column name).

**Explicit Sign-On Outbound Proxy Requests/sec**
The current number of explicit SignOn requests that are sent per second to the secondary Client Access Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXPLICIT_SIGN-ON_OUTBOUND_PROXY_REQUESTS/SEC or ESOPR (historical name), Explicit Sign-On Outbound Proxy Requests/sec (caption), Explicit_Sign-On_Outbound_Proxy_Requests/sec (attribute name), and ESOPR (column name).

**Explicit Sign-On Outbound Proxy Sessions/sec**
The current number of explicit SignOn outbound proxy sessions that are loaded per second in the Exchange Control Panel. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXPLICIT_SIGN-ON_OUTBOUND_PROXY_SESSIONS/SEC or ESOPS (historical name), Explicit Sign-On Outbound Proxy Sessions/sec (caption), Explicit_Sign-On_Outbound_Proxy_Sessions/sec (attribute name), and ESOPS (column name).

**Explicit Sign-On Standard RBAC Requests/sec**
The current number of requests that are received per second by the explicit SignOn standard RBAC session. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXPLICIT_SIGN-ON_STANDARD_RBAC_REQUESTS/SEC or ESSRR (historical name), Explicit Sign-On Standard RBAC Requests/sec (caption), Explicit_Sign-On_Standard_RBAC_Requests/sec (attribute name), and ESSRR (column name).

**Explicit Sign-On Standard RBAC Sessions**
The current number of explicit SignOn standard RBAC sessions that are loaded in the Exchange Control Panel. The type is integer (32-bit gauge).

The following names are defined for this attribute: EXPLICIT_SIGNON_STANDARD_RBAC_SESSIONS or ESOSRSES (historical name), Explicit Sign-On Standard RBAC Sessions (caption), Explicit_SignOn_Standard_RBAC_Sessions (attribute name), and ESOSRSES (column name).

**Explicit Sign-On Standard RBAC Sessions - Total**
The total number of explicit SignOn standard RBAC sessions that are loaded in the Exchange Control Panel since the process was started. The type is integer (32-bit counter).

The following names are defined for this attribute: EXPLICIT_SIGNON_STANDARD_RBAC_SESSIONS_TOTAL or ESOSRSTOT (historical name), Explicit Sign-On Standard RBAC Sessions - Total (caption), Explicit_SignOn_Standard_RBAC_Sessions_Total (attribute name), and ESOSRSTOT (column name).

**Explicit Sign-On Standard RBAC Sessions/sec**
The current number of explicit SignOn standard RBAC sessions that are loaded per second in the Exchange Control Panel. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXPLICIT_SIGN-ON_STANDARD_RBAC_SESSIONS/SEC or ESSRS (historical name), Explicit Sign-On Standard RBAC Sessions/sec (caption), Explicit_Sign-On_Standard_RBAC_Sessions/sec (attribute name), and ESSRS (column name).

**Inbound Proxy Requests/sec**
The current number of requests that are received per second from the primary Client Access Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: INBOUND_PROXY_REQUESTS/SEC or INPRSEC (historical name), Inbound Proxy Requests/sec (caption), Inbound_Proxy_Requests/sec (attribute name), and INPRSEC (column name).

**Inbound Proxy Sessions/sec**
The current number of inbound proxy sessions that are loaded per second in the Exchange Control Panel. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: INBOUND_PROXY_SESSIONS/SEC or INPSSEC (historical name), Inbound Proxy Sessions/sec (caption), Inbound_Proxy_Sessions/sec (attribute name), and INPSSEC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Outbound Proxy Requests/sec**
The current number of requests that are sent per second to the secondary Client Access Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OUTBOUND_PROXY_REQUESTS/SEC or OUPRSEC (historical name), Outbound Proxy Requests/sec (caption), Outbound_Proxy_Requests/sec (attribute name), and OUPRSEC (column name).

**Outbound Proxy Sessions/sec**
The current number of outbound proxy sessions that are loaded per second in the Exchange Control Panel. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OUTBOUND_PROXY_SESSIONS/SEC or OUPSSEC (historical name), Outbound Proxy Sessions/sec (caption), Outbound_Proxy_Sessions/sec (attribute name), and OUPSSEC (column name).

**PowerShell Runspace Activations/Sec**
The number of Windows PowerShell runspaces that are activated per second in the Exchange Control Panel. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: POWERSHELL_RUNSPACE_ACTIVATIONS/SEC or PRAPS (historical name), PowerShell Runspace Activations/Sec (caption), PowerShell_Runspace_Activations/Sec (attribute name), and PRAPS (column name).

**PowerShell Runspaces/Sec**
The number of Windows PowerShell runspaces that are created per second in the Exchange Control Panel. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: POWERSHELL_RUNSPACES/SEC or PRPS (historical name), PowerShell Runspaces/Sec (caption), PowerShell_Runspaces/Sec (attribute name), and PRPS (column name).

**RBAC Sessions**
The current number of RBAC sessions that are loaded in the Exchange Control Panel including standard sessions, inbound proxy sessions, and outbound proxy sessions. The type is integer (32-bit gauge).

The following names are defined for this attribute: RBAC_SESSIONS or RBACSESS (historical name), RBAC Sessions (caption), RBAC_Sessions (attribute name), and RBACSESS (column name).

**RBAC Sessions - Average Creation Time**
The average time (in seconds) that the Exchange Control Panel takes to create an RBAC session during the sampling period. The type is integer (32-bit gauge).

The following names are defined for this attribute: RBAC_SESSIONS_AVERAGE_CREATION_TIME or RBACSAVGT (historical name), RBAC Sessions - Average Creation Time (caption), RBAC_Sessions_Average_Creation_Time (attribute name), and RBACSAVGT (column name).

**RBAC Sessions - Peak**
The highest number of RBAC sessions that are simultaneously loaded in the Exchange Control Panel since the process was started. The type is integer (32-bit counter).

The following names are defined for this attribute: RBAC_SESSIONS_PEAK or RBACSPK (historical name), RBAC Sessions - Peak (caption), RBAC_Sessions_Peak (attribute name), and RBACSPK (column name).

**RBAC Sessions - Total**
The total number of RBAC sessions that are loaded in the Exchange Control Panel since the process was started. The type is integer (32-bit counter).

The following names are defined for this attribute: RBAC_SESSIONS_TOTAL or RBACSTOT (historical name), RBAC Sessions - Total (caption), RBAC_Sessions_Total (attribute name), and RBACSTOT (column name).

**RBAC Sessions/sec**
The number of RBAC sessions that are currently loaded per second in the Exchange Control Panel. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RBAC_SESSIONS/SEC or RBACSPS (historical name), RBAC Sessions/sec (caption), RBAC_Sessions/sec (attribute name), and RBACSPS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Standard RBAC Requests**
The number of requests that are currently received by a standard RBAC session. The type is integer (32-bit gauge).

The following names are defined for this attribute: STANDARD_RBAC_REQUESTS or SRBACRQ (historical name), Standard RBAC Requests (caption), Standard_RBAC_Requests (attribute name), and SRBACRQ (column name).

**Standard RBAC Requests - Peak**
The highest number of requests that are simultaneously received by a standard RBAC session since the process was started. The type is integer (32-bit counter).

The following names are defined for this attribute: STANDARD_RBAC_REQUESTS_PEAK or SRBACRQP (historical name), Standard RBAC Requests - Peak (caption), Standard_RBAC_Requests_Peak (attribute name), and SRBACRQP (column name).

**Standard RBAC Requests - Total**
The total number of requests that are received by a standard RBAC session since the process was started. The type is integer (32-bit counter).

The following names are defined for this attribute: STANDARD_RBAC_REQUESTS_TOTAL or SRBACRTOT (historical name), Standard RBAC Requests - Total (caption), Standard_RBAC_Requests_Total (attribute name), and SRBACRTOT (column name).

**Standard RBAC Requests/sec**
The number of requests that are currently received by a standard RBAC session per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: STANDARD_RBAC_REQUESTS/SEC or SRBACRPS (historical name), Standard RBAC Requests/sec (caption), Standard_RBAC_Requests/sec (attribute name), and SRBACRPS (column name).

**Standard RBAC Sessions**
The number of standard RBAC sessions that are currently loaded in the Exchange Control Panel. The type is integer (32-bit gauge).

The following names are defined for this attribute: STANDARD_RBAC_SESSIONS or SRBACSESS (historical name), Standard RBAC Sessions (caption), Standard_RBAC_Sessions (attribute name), and SRBACSESS (column name).

**Standard RBAC Sessions - Peak**
The highest number of standard RBAC sessions that are simultaneously loaded in the Exchange Control Panel since the process was started. The type is integer (32-bit counter).

The following names are defined for this attribute: STANDARD_RBAC_SESSIONS_PEAK or SRBACSPK (historical name), Standard RBAC Sessions - Peak (caption), Standard_RBAC_Sessions_Peak (attribute name), and SRBACSPK (column name).

**Standard RBAC Sessions - Total**
The total number of standard RBAC sessions that are loaded in the Exchange Control Panel since the process was started. The type is integer (32-bit counter).

The following names are defined for this attribute: STANDARD_RBAC_SESSIONS_TOTAL or SRBACSTOT (historical name), Standard RBAC Sessions - Total (caption), Standard_RBAC_Sessions_Total (attribute name), and SRBACSTOT (column name).

**Standard RBAC Sessions/sec**
The number of standard RBAC sessions that are currently loaded per second in the Exchange Control Panel. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: STANDARD_RBAC_SESSIONS/SEC or SRBACSPS (historical name), Standard RBAC Sessions/sec (caption), Standard_RBAC_Sessions/sec (attribute name), and SRBACSPS (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Data Loss Prevention Policies data set

This data set provides information about data loss prevention policies. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 8 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Policy Mode***
Mode of DLP policy. The type is string.

The following names are defined for this attribute: POLICY_MODE or PMODE (historical name), *Policy Mode* (caption), Policy_Mode (attribute name), and PMODE (column name).

***Policy Name***
Name of DLP policy. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: POLICY_NAME or PNAME (historical name), *Policy Name* (caption), Policy_Name (attribute name), and PNAME (column name).

***Policy State***
State of DLP policy. The type is string.

The following names are defined for this attribute: POLICY_STATE or PSTATE (historical name), *Policy State* (caption), Policy_State (attribute name), and PSTATE (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange Data Loss Prevention Policy Tips data set

This data set provides information about data prevention policy tips. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 8 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Policy Tip Identity***
Identity of DLP policy tip. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: POLICY_TIP_IDENTITY or PTIDENTITY (historical name), *Policy Tip Identity* (caption), Policy_Tip_Identity (attribute name), and PTIDENTITY (column name).

***Policy Tip Value***
Value of DLP policy tip. The type is string.

The following names are defined for this attribute: POLICY_TIP_VALUE or PTVALUE (historical name), *Policy Tip Value* (caption), Policy_Tip_Value (attribute name), and PTVALUE (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange Database Availability Group data set

This data set provides information about the Database Availability Group. The data set is available in Exchange server 2010, or later. This data set is a multi-instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Activation Preference***
The numeric value used to break ties during database activation when multiple database copies meet the same criteria for activating. The type is integer (32-bit counter).

The following names are defined for this attribute: ACTIVATION_PREFERENCE or ACTPREF (historical name), *Activation Preference* (caption), Activation_Preference (attribute name), and ACTPREF (column name).

***Database Copy Status***
The copy status of mailbox databases that is available on the monitored node of a database availability group setup. The type is string with enumerated values. The following values are defined: Active (Active), Passive (Passive). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DATABASE_COPY_STATUS or DBCPSTATUS (historical name), *Database Copy Status* (caption), Database_Copy_Status (attribute name), and DBCPSTATUS (column name).

***Mailbox Database Copies***
The list of mailbox database copies that are available on the monitored node of a database availability group setup. The type is string.

The following names are defined for this attribute: MAILBOX_DATABASE_COPIES or MBDBCOPIES (historical name), *Mailbox Database Copies* (caption), Mailbox_Database_Copies (attribute name), and MBDBCOPIES (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Replay Lag Time(Min)***
The amount of time in minutes, to delay log replay for the database copy. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLAY_LAG_TIME or REPLAYLT (historical name), *Replay Lag Time(Min)* (caption), Replay_Lag_Time (attribute name), and REPLAYLT (column name).

***ROWNO***
The row number of the sample. This attribute is a key attribute. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), *ROWNO* (caption), ROWNO (attribute name), and ROWNO (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

***Truncation Lag Time(Min)***
The amount of time (in minutes) to delay the truncation of log files that have been replayed into the database copy since the replication service was started. The time period starts after the log files are replayed into the database copy. The type is integer (32-bit counter).

The following names are defined for this attribute: TRUNCATION_LAG_TIME or TRNLAYLT (historical name), *Truncation Lag Time(Min)* (caption), Truncation_Lag_Time (attribute name), and TRNLAYLT (column name).

**DAG Name**
The name of the database availability group. The type is string.

The following names are defined for this attribute: DAG_NAME or DAGNAME (historical name), DAG Name (caption), DAG_Name (attribute name), and DAGNAME (column name).

**File Share Witness Directory**
The name of the directory that is used to store the file share witness data. This directory is located on a server that is not a member of the database availability group. The type is string.

The following names are defined for this attribute: FILE_SHARE_WITNESS_DIRECTORY or FILESHWTD (historical name), File Share Witness Directory (caption), File_Share_Witness_Directory (attribute name), and FILESHWTD (column name).

**Member Count**
The number of nodes that are the member of a database availability group setup. The type is integer (32-bit counter).

The following names are defined for this attribute: MEMBER_COUNT or MEMCOUNT (historical name), Member Count (caption), Member_Count (attribute name), and MEMCOUNT (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Witness Server Name**
The name of the witness server in a database availability group setup. The type is string.

The following names are defined for this attribute: WITNESS_SERVER_NAME or WITSERNAME (historical name), Witness Server Name (caption), Witness_server_name (attribute name), and WITSERNAME (column name).

## MS Exchange DB data set

This data set provides information about the activities of Exchange databases.

This data set contains the following attributes:

**Cache % Hit**
The percentage of database file page requests that were fulfilled by the database cache without causing a file operation since the server was started. If the percentage is too low, the database cache size might be too small. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CACHE_%_HIT or CACHEHIT (historical name), Cache % Hit (caption), Cache_%_Hit (attribute name), and CACHEHIT (column name).

**Cache Page Fault Stalls/sec**
The number of page faults per second that cannot be serviced because no pages are available for allocation from the database cache since the server was started. If this counter is greater than zero most of the time, the clean threshold might be too low. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CACHE_PAGE_FAULT_STALLS/SEC or CACHSTALL (historical name), Cache Page Fault Stalls/sec (caption), Cache_Page_Fault_Stalls/sec (attribute name), and CACHSTALL (column name).

**Cache Page Faults/sec**
The number of database page requests per second that require the database cache manager to allocate a new page from the database cache since the server was started. If this rate is too high, the database cache size might be too small. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CACHE_PAGE_FAULTS/SEC or CACHFAULT (historical name), Cache Page Faults/sec (caption), Cache_Page_Faults/sec (attribute name), and CACHFAULT (column name).

**Cache Size**
The amount of system memory in kilobytes that the database cache manager used to hold frequently accessed information from the database files and prevent file operations. The type is integer (32-bit numeric property).

The following names are defined for this attribute: CACHE_SIZE or CACHSIZE (historical name), Cache Size (caption), Cache_Size (attribute name), and CACHSIZE (column name).

**Cache Size(MB)**
The size of system memory (in MB) that the database cache manager uses to hold frequently used information from the database files to prevent file operations. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CACHE_SIZE_MB or CAHSIZEMB (historical name), Cache Size(MB) (caption), Cache_Size_MB (attribute name), and CAHSIZEMB (column name).

**Database Name**
The name of the database instance. The type is string.

The following names are defined for this attribute: DATABASE_NAME_U_V622 or DBSNAME (historical name), Database Name (caption), Database_Name_U_v622 (attribute name), and DBSNAME (column name).

**Database Name (Superseded)**
The name of the database instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: DATABASE_NAME_U or DBNAME (historical name), Database Name (Superseded) (caption), Database_Name_U (attribute name), and DBNAME (column name).

**I/O Database Reads Attached Average Latency**
The average time (in milliseconds) that is required for reading data from the attached database. Attached databases are the databases that are currently active. This attribute is available in Microsoft Exchange Server 2010, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_DATABASE_READS_ATTACHED_AVERAGE_LATENCY or IODBRALAT (historical name), I/O Database Reads Attached Average Latency (caption), I/O_Database_Reads_Attached_Average_Latency (attribute name), and IODBRALAT (column name).

**I/O Database Reads Average Latency**
The average length of time (in milliseconds) that each database read operation takes to finish. This attribute is available in Microsoft Exchange Server 2007 and 2010. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_DATABASE_READS_AVERAGE_LATENCY or IODBRDLT (historical name), I/O Database Reads Average Latency (caption), I/O_Database_Reads_Average_Latency (attribute name), and IODBRDLT (column name).

**I/O Database Reads Recovery Average Latency**
The average time (in milliseconds) that is required for reading data from the database that is used as a backup database. This database is part of the database availability group. This attribute is available in Microsoft Exchange Server 2010, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_DATABASE_READS_RECOVERY_AVERAGE_LATENCY or IODBRALRE (historical name), I/O Database Reads Recovery Average Latency (caption), I/O_Database_Reads_Recovery_Average_Latency (attribute name), and IODBRALRE (column name).

**I/O Database Reads/sec**
The rate of database read operations. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: I/O_DATABASE_READS/SEC or IODBRD (historical name), I/O Database Reads/sec (caption), I/O_Database_Reads/sec (attribute name), and IODBRD (column name).

**I/O Database Writes Attached Average Latency**
The average time (in milliseconds) that is required for writing data to the attached database. Attached databases are the databases that are currently active. This attribute is available in Microsoft Exchange Server 2010, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_DATABASE_WRITES_ATTACHED_AVERAGE_LATENCY or IODBWALAT (historical name), I/O Database Writes Attached Average Latency (caption), I/O_Database_Writes_Attached_Average_Latency (attribute name), and IODBWALAT (column name).

**I/O Database Writes Average Latency**
The average length of time (in milliseconds) that database write operation takes to finish. This attribute is available in Microsoft Exchange Server 2007 and 2010. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_DATABASE_WRITES_AVERAGE_LATENCY or IODBWRTLT (historical name), I/O Database Writes Average Latency (caption), I/O_Database_Writes_Average_Latency (attribute name), and IODBWRTLT (column name).

**I/O Database Writes Recovery Average Latency**
The average time (in milliseconds) that is required for writing data to the database that is used as a backup database. This database is part of the database availability group. This attribute is available in Microsoft Exchange Server 2010, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_DATABASE_WRITES_RECOVERY_AVERAGE_LATENCY or IODBWALRE (historical name), I/O Database Writes Recovery Average Latency (caption), I/O_Database_Writes_Recovery_Average_Latency (attribute name), and IODBWALRE (column name).

**I/O Database Writes/sec**
The rate of database write operations. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: I/O_DATABASE_WRITES/SEC or IODBWRT (historical name), I/O Database Writes/sec (caption), I/O_Database_Writes/sec (attribute name), and IODBWRT (column name).

**I/O Log Reads/sec**
The rate of log file read operations. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: I/O_LOG_READS/SEC or IOLOGRD (historical name), I/O Log Reads/sec (caption), I/O_Log_Reads/sec (attribute name), and IOLOGRD (column name).

**I/O Log Writes Average Latency**
The average length of time (in milliseconds) that each log file write operation takes to finish. This attribute is available in Microsoft Exchange Server 2007 and 2010. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_LOG_WRITES_AVERAGE_LATENCY or IOLOGWRTL (historical name), I/O Log Writes Average Latency (caption), I/O_Log_Writes_Average_Latency (attribute name), and IOLOGWRTL (column name).

**I/O Log Writes/sec**
The rate of log file write operations that are completed. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: I/O_LOG_WRITES/SEC or IOLOGWRT (historical name), I/O Log Writes/sec (caption), I/O_Log_Writes/sec (attribute name), and IOLOGWRT (column name).

**IO Log Read Average Latency**
The average time (in milliseconds) that is required to read a log file. This attribute is available in Microsoft Exchange Server 2010, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: IO_LOG_READ_AVERAGE_LATENCY or IOLGRAL (historical name), IO Log Read Average Latency (caption), IO_Log_Read_Average_Latency (attribute name), and IOLGRAL (column name).

**Log Bytes Write/sec**
The rate at which the bytes are written to the log. This attribute is available in Microsoft Exchange Server 2007 and 2010. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOG_BYTES_WRITE/SEC or LOGBYTWRT (historical name), Log Bytes Write/sec (caption), Log_Bytes_Write/sec (attribute name), and LOGBYTWRT (column name).

**Log Record Stalls/sec**
The number of records that cannot be added to the log buffers per second because the buffers are full since the server was started. If this counter is greater than zero for most of the time, the log buffer size might be a bottleneck. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LOG_RECORD_STALLS/SEC or LOGSTALL (historical name), Log Record Stalls/sec (caption), Log_Record_Stalls/sec (attribute name), and LOGSTALL (column name).

**Log Threads Waiting**
The number of threads waiting for their data to be written to the log to complete an update of the database since the server was started. If this number is too high, the log might be a bottleneck. The type is integer (32-bit gauge).

The following names are defined for this attribute: LOG_THREADS_WAITING or LOGWAIT (historical name), Log Threads Waiting (caption), Log_Threads_Waiting (attribute name), and LOGWAIT (column name).

**Log Writes/sec**
The number of times that log buffers are written to the log files per second since the server was started. If this number approaches the maximum rate for the media that is holding the log files, the log is a bottleneck. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LOG_WRITES/SEC or LOGWRITE (historical name), Log Writes/sec (caption), Log_Writes/sec (attribute name), and LOGWRITE (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Pages Converted/sec**
The rate at which a database page is converted from an older database format. This attribute is not available in Microsoft Exchange Server 2010 SP1, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PAGES_CONVERTED/SEC or PGCONV (historical name), Pages Converted/sec (caption), Pages_Converted/sec (attribute name), and PGCONV (column name).

**Records Converted/sec**
The rate at which a database record is converted from an older database format. This attribute is not available in Microsoft Exchange Server 2010 SP1, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RECORDS_CONVERTED/SEC or RECCONV (historical name), Records Converted/sec (caption), Records_Converted/sec (attribute name), and RECCONV (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Table Open Cache % Hit**
The percent of operations that return a handle to a previously opened table since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TABLE_OPEN_CACHE_%_HIT or TABLEHIT (historical name), Table Open Cache % Hit (caption), Table_Open_Cache_%_Hit (attribute name), and TABLEHIT (column name).

**Table Open Cache Hits/sec**
The number of OpenTable operations per second that were issued on tables that were previously opened since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TABLE_OPEN_CACHE_HITS/SEC or TABLEOCH (historical name), Table Open Cache Hits/sec (caption), Table_Open_Cache_Hits/sec (attribute name), and TABLEOCH (column name).

**Table Open Cache Misses/sec**
The number of OpenTable operations per second that were issued on tables that were not previously opened since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TABLE_OPEN_CACHE_MISSES/SEC or TABLEOCM (historical name), Table Open Cache Misses/sec (caption), Table_Open_Cache_Misses/sec (attribute name), and TABLEOCM (column name).

**Table Opens/sec**
The total number of issued OpenTable operations per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TABLE_OPENS/SEC or TABLOPEN (historical name), Table Opens/sec (caption), Table_Opens/sec (attribute name), and TABLOPEN (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Version Buckets Allocated**
The total number of buckets that are allocated. This attribute is available only in Microsoft Exchange Server 2007 and 2010. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: VERSION_BUCKETS_ALLOCATED or VERSBUCK (historical name), Version Buckets Allocated (caption), Version_Buckets_Allocated (attribute name), and VERSBUCK (column name).

## MS Exchange DB Instance data set
This data set provides details about the Exchange database instances.

This data set contains the following attributes:

**Database Instance Name**
The name of the exchange database. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: DATABASE_INSTANCE_NAME or DBNAME (historical name), Database Instance Name (caption), Database_Instance_Name (attribute name), and DBNAME (column name).

**I/O Database Reads Average Latency**
The average length of time (in milliseconds) taken per database read operation. This attribute is available in Microsoft Exchange Server 2007 and 2010. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_DATABASE_READS_AVERAGE_LATENCY or IODBRAVGL (historical name), I/O Database Reads Average Latency (caption), I/O_Database_Reads_Average_Latency (attribute name), and IODBRAVGL (column name).

**I/O Database Reads/sec**
The number of times the database read operations are completed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_DATABASE_READS/SEC or IODBRPS (historical name), I/O Database Reads/sec (caption), I/O_Database_Reads/sec (attribute name), and IODBRPS (column name).

**I/O Database Writes Average Latency**
The average length of time (in milliseconds) taken per database write operation. This attribute is available in Microsoft Exchange Server 2007 and 2010. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_DATABASE_WRITES_AVERAGE_LATENCY or IODBWAVGL (historical name), I/O Database Writes Average Latency (caption), I/O_Database_Writes_Average_Latency (attribute name), and IODBWAVGL (column name).

**I/O Database Writes/sec**
The number of times the database write operations are completed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_DATABASE_WRITES/SEC or IODBWPS (historical name), I/O Database Writes/sec (caption), I/O_Database_Writes/sec (attribute name), and IODBWPS (column name).

**I/O Log Reads/sec**
The rate of log file read operations. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_LOG_READS/SEC or IOLOGRD (historical name), I/O Log Reads/sec (caption), I/O_Log_Reads/sec (attribute name), and IOLOGRD (column name).

**I/O Log Writes Average Latency**
The average length of time (in milliseconds) spent per log file write operation. This attribute is available in Microsoft Exchange Server 2007 and 2010. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_LOG_WRITES_AVERAGE_LATENCY or IOLOGWALT (historical name), I/O Log Writes Average Latency (caption), I/O_Log_Writes_Average_Latency (attribute name), and IOLOGWALT (column name).

**I/O Log Writes/sec**
The rate of log file write operations. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: I/O_LOG_WRITES/SEC or IOLOGWRT (historical name), I/O Log Writes/sec (caption), I/O_Log_Writes/sec (attribute name), and IOLOGWRT (column name).

**Log Bytes Write/sec**
The rate at which bytes are written to the log. This attribute is available in Microsoft Exchange Server 2007 and 2010. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOG_BYTES_WRITE/SEC or LOGBYTWT (historical name), Log Bytes Write/sec (caption), Log_Bytes_Write/sec (attribute name), and LOGBYTWT (column name).

**Log Files Generated**
The total number of log files that are generated by an instance since the log files were last initialized. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOG_FILES_GENERATED or LOGFILGEN (historical name), Log Files Generated (caption), Log_Files_Generated (attribute name), and LOGFILGEN (column name).

**Log Generation Checkpoint Depth**
The number of transaction log files that must be added or committed to the Exchange Server Edition (ESE) database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOG_GENERATION_CHECKPOINT_DEPTH or LOGCKPDEPT (historical name), Log Generation Checkpoint Depth (caption), Log_Generation_Checkpoint_Depth (attribute name), and LOGCKPDEPT (column name).

**Log Record Stalls/sec**
The number of log records that are not added to the log buffers per second because they are full. If this counter is non-zero most of the time, the log buffer size can become a bottleneck. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LOG_RECORD_STALLS/SEC or LOGSTALL (historical name), Log Record Stalls/sec (caption), Log_Record_Stalls/sec (attribute name), and LOGSTALL (column name).

**Log Threads Waiting**
The number of threads that are waiting for the data to be written to the log to finish an update of the database. If the number is too high, the log becomes a bottleneck. The type is integer (32-bit gauge).

The following names are defined for this attribute: LOG_THREADS_WAITING or LOGWAIT (historical name), Log Threads Waiting (caption), Log_Threads_Waiting (attribute name), and LOGWAIT (column name).

**Log Writes/sec**
The number of times the log buffers are written to the log files per second. If this number approaches the maximum write rate for the media holding the log files, the log becomes a bottleneck. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LOG_WRITES/SEC or LOGWRITE (historical name), Log Writes/sec (caption), Log_Writes/sec (attribute name), and LOGWRITE (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Pages Converted/sec**
The rate at which a database page is converted from an older database format. This attribute is not available in Microsoft Exchange Server 2010 SP1, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PAGES_CONVERTED/SEC or PGCONV (historical name), Pages Converted/sec (caption), Pages_Converted/sec (attribute name), and PGCONV (column name).

**Records Converted/sec**
The rate at which a database record is converted from an older database format. This attribute is not available in Microsoft Exchange Server 2010 SP1, or later. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RECORDS_CONVERTED/SEC or RECCONV (historical name), Records Converted/sec (caption), Records_Converted/sec (attribute name), and RECCONV (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Table Open Cache % Hit**
The percentage of database tables that are opened by using cached schema information. If this percentage is low, the table cache size can be small too. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TABLE_OPEN_CACHE_%_HIT or TABLEHIT (historical name), Table Open Cache % Hit (caption), Table_Open_Cache_%_Hit (attribute name), and TABLEHIT (column name).

**Table Open Cache Hits/sec**
The number of database tables that are opened by using cached schema information per second. If this rate is low, the table cache size can be small too. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TABLE_OPEN_CACHE_HITS/SEC or TABLEOCH (historical name), Table Open Cache Hits/sec (caption), Table_Open_Cache_Hits/sec (attribute name), and TABLEOCH (column name).

**Table Open Cache Misses/sec**
The number of database tables that are opened without using cached schema information per second. If this rate is too high, the table cache size can be small too. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TABLE_OPEN_CACHE_MISSES/SEC or TABLEOCM (historical name), Table Open Cache Misses/sec (caption), Table_Open_Cache_Misses/sec (attribute name), and TABLEOCM (column name).

**Table Opens/sec**
The number of database tables that are opened per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TABLE_OPENS/SEC or TABLOPEN (historical name), Table Opens/sec (caption), Table_Opens/sec (attribute name), and TABLOPEN (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Version buckets allocated**
The total number of version buckets that are allocated. This attribute is available only in Microsoft Exchange Server 2007 and 2010. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: VERSION_BUCKETS_ALLOCATED or VERSBUCK (historical name), Version buckets allocated (caption), Version_buckets_allocated (attribute name), and VERSBUCK (column name).

## MS Exchange Delivery DSN data set

This data set monitors the delivery status notifications (DSN) for messages that are sent to the Mailbox Transport Delivery service on the Exchange Server. DSN messages provide delivery failure reports and other status messages to message senders. This data set is available in Exchange Server 2013. This data set is a multi-instance data set.

This data set contains the following attributes:

**Delay DSNs**
The total number of delay DSN messages that were generated since the service was started. A delay DSN message is generated after each message delivery failure. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DELAY_DSNS or DLAYDSN (historical name), Delay DSNs (caption), Delay_DSNs (attribute name), and DLAYDSN (column name).

**Delivered DSNs**
The total number of DSN messages that were generated for the completed message deliveries since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DELIVERED_DSNS or DLVDDSN (historical name), Delivered DSNs (caption), Delivered_DSNs (attribute name), and DLVDDSN (column name).

**DSN Type**
The type of DSN. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: DSN_TYPE or DDSNTYPE (historical name), DSN Type (caption), DSN_Type (attribute name), and DDSNTYPE (column name).

**Expanded DSNs**
The total number of expanded DSN messages that were generated since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXPANDED_DSNS or EXPNDDSN (historical name), Expanded DSNs (caption), Expanded_DSNs (attribute name), and EXPNDDSN (column name).

**Failure DSNs in Last Hour that can be Alerted**
The number of failure DSN messages that can be alerted within the last hour because of message delivery failures. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILURE_DSNS_IN_LAST_HOUR_THAT_CAN_BE_ALERTED or LHALFDSN (historical name), Failure DSNs in Last Hour that can be Alerted (caption), Failure_DSNs_in_Last_Hour_that_can_be_Alerted (attribute name), and LHALFDSN (column name).

**Failure DSNs Total**
The total number of failure DSN messages that were generated because of message delivery failures since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILURE_DSNS_TOTAL or FDSNTOT (historical name), Failure DSNs Total (caption), Failure_DSNs_Total (attribute name), and FDSNTOT (column name).

**Last Hour Delayed DSNs**
The number of delay DSN messages that are generated within the last hour. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LAST_HOUR_DELAYED_DSNS or LHDDSN (historical name), Last Hour Delayed DSNs (caption), Last_Hour_Delayed_DSNs (attribute name), and LHDDSN (column name).

**Last Hour Failure DSNs**
The number of failure DSN messages that are generated within the last hour because of message delivery failures. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LAST_HOUR_FAILURE_DSNS or LHFDSN (historical name), Last Hour Failure DSNs (caption), Last_Hour_Failure_DSNs (attribute name), and LHFDSN (column name).

**NDRs Generated for Catch-All Recipients**
The total number of delivery failure reports that were generated because the messages delivery to the catch-all mailbox recipients failed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NDRS_GENERATED_FOR_CATCH-ALL_RECIPIENTS or NDRGNCA (historical name), NDRs Generated for Catch-All Recipients (caption), NDRs_Generated_for_Catch-All_Recipients (attribute name), and NDRGNCA (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Relay DSNs**
The total number of relay DSN messages that were generated since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RELAY_DSNS or RLAYDSN (historical name), Relay DSNs (caption), Relay_DSNs (attribute name), and RLAYDSN (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange DlpPolicyTips data set

This data set provides information about DLP Policy Tips. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A

data sample is sent to the server every 8 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Average latency of the DlpPolicyTips requests within the last 5 minutes***

Average latency of the DlpPolicyTips requests within the last 5 minutes. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_LATENCY_WITHIN_LAST_5_MINUTES or DLPAVGLAT (historical name), *Average latency of the DlpPolicyTips requests within the last 5 minutes* (caption), Average_latency_within_last_5_minutes (attribute name), and DLPAVGLAT (column name).

***Current Pending DlpPolicyTips requests***

Current Pending DlpPolicyTips requests. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CURRENT_PENDING_DLPPOLICYTIPS_REQUESTS or CURPDREQ (historical name), *Current Pending DlpPolicyTips requests* (caption), Current_Pending_DlpPolicyTips_requests (attribute name), and CURPDREQ (column name).

***Failed DlpPolicyTips requests Etr exceptions***

Failed DlpPolicyTips requests Exchange Transport Rule Engine (ETR) exceptions. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILED_DLPPOLICYTIPS_REQUESTS_ETR_EXCEPTIONS or FETREXP (historical name), *Failed DlpPolicyTips requests Etr exceptions* (caption), Failed_DlpPolicyTips_requests_Etr_exceptions (attribute name), and FETREXP (column name).

***Node***

The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Number of DlpPolicyTips requests with latency more than 1 minute***

Number of DlpPolicyTips requests with latency more than 1 minute. The type is integer (32-bit gauge).

The following names are defined for this attribute: NUMBER_OF_REQUESTS_WITH_LATENCY_MORE_THAN_1_MINUTE or NOREQ (historical name), *Number of DlpPolicyTips requests with latency more than 1 minute* (caption), Number_of_requests_with_latency_more_than_1_minute (attribute name), and NOREQ (column name).

***Percent of all server Failed requests within the last 5 minutes***

Percent of all server Failed requests within the last 5 minutes. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PERCENT_OF_ALL_SERVER_FAILED_REQUESTS_WITHIN_LAST_5_MINUTES or PSERFREQ (historical name), *Percent of all server Failed requests within the last 5 minutes* (caption), Percent_of_all_server_Failed_requests_within_last_5_minutes (attribute name), and PSERFREQ (column name).

***Successful DlpPolicyTips requests***
Successful DlpPolicyTips requests. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUCCESSFUL_DLPPOLICYTIPS_REQUESTS or SUCDREQ (historical name), *Successful DlpPolicyTips requests* (caption), Successful_DlpPolicyTips_requests (attribute name), and SUCDREQ (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

***Total DlpPolicyTips requests processed***
Total DlpPolicyTips requests processed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_DLPPOLICYTIPS_REQUESTS_PROCESSED or TDREQP (historical name), *Total DlpPolicyTips requests processed* (caption), Total_DlpPolicyTips_requests_processed (attribute name), and TDREQP (column name).

***Total server Failed DlpPolicyTips requests received***
Total server Failed DlpPolicyTips requests received. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SERVER_FAILED_DLPPOLICYTIPS_REQUESTS_RECEIVED or TSERFDREQR (historical name), *Total server Failed DlpPolicyTips requests received* (caption), Total_server_Failed_DlpPolicyTips_requests_received (attribute name), and TSERFDREQR (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange DS data set

This data set represents the MS Exchange Server Directory Service activity.

This data set contains the following attributes:

**AB ANR/sec**
The rate at which address book clients perform ambiguous name resolution operations. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AB_ANR/SEC or APANRPS (historical name), AB ANR/sec (caption), AB_ANR/sec (attribute name), and APANRPS (column name).

**AB Browses/sec**
The number of times the Address Book clients perform browse operations per second after the server started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AB_BROWSES/SEC or ABBROWSE (historical name), AB Browses/sec (caption), AB_Browses/sec (attribute name), and ABBROWSE (column name).

**AB Client Sessions**
The number of connected Address Book client sessions. The type is integer (32-bit gauge).

The following names are defined for this attribute: AB_CLIENT_SESSIONS or ABCLIENT (historical name), AB Client Sessions (caption), AB_Client_Sessions (attribute name), and ABCLIENT (column name).

**AB Matches/sec**
The rate at which address book clients perform find operations. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AB_MATCHES/SEC or ABMATPS (historical name), AB Matches/sec (caption), AB_Matches/sec (attribute name), and ABMATPS (column name).

**AB Property Reads/sec**
The rate at which address book clients perform property read operations. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AB_PROPERTY_READS/SEC or ABPRPRDPS (historical name), AB Property Reads/sec (caption), AB_Property_Reads/sec (attribute name), and ABPRPRDPS (column name).

**AB Proxy Lookups/sec**
The rate at which proxy clients perform search operations. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AB_PROXY_LOOKUPS/SEC or ABPRXLOPS (historical name), AB Proxy Lookups/sec (caption), AB_Proxy_Lookups/sec (attribute name), and ABPRXLOPS (column name).

**AB Searches/sec**
The rate at which address book clients perform key search operations. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AB_SEARCHES/SEC or ABSRCHPS (historical name), AB Searches/sec (caption), AB_Searches/sec (attribute name), and ABSRCHPS (column name).

**DRA Sync Requests Made**
The number of synchronization requests that are made to the neighbors. The type is integer (32-bit gauge).

The following names are defined for this attribute: DRA_SYNC_REQUESTS_MADE or DRASYRQMA (historical name), DRA Sync Requests Made (caption), DRA_Sync_Requests_Made (attribute name), and DRASYRQMA (column name).

**DRA Sync Requests Successful**
The number of synchronization requests that are made to the neighbors that returned successfully. The type is integer (32-bit gauge).

The following names are defined for this attribute: DRA_SYNC_REQUESTS_SUCCESSFUL or DRASYRQSU (historical name), DRA Sync Requests Successful (caption), DRA_Sync_Requests_Successful (attribute name), and DRASYRQSU (column name).

**LDAP Active Threads**
The number of threads that are in use by the LDAP subsystem of the local directory service. The type is integer (32-bit gauge).

The following names are defined for this attribute: LDAP_ACTIVE_THREADS or LDAPACTHR (historical name), LDAP Active Threads (caption), LDAP_Active_Threads (attribute name), and LDAPACTHR (column name).

**LDAP Bind Time**
The time taken (in milliseconds) for the last successful LDAP bind. The type is integer (32-bit gauge).

The following names are defined for this attribute: LDAP_BIND_TIME or LDAPBNDTI (historical name), LDAP Bind Time (caption), LDAP_Bind_Time (attribute name), and LDAPBNDTI (column name).

**LDAP Client Sessions**
The number of connected LDAP client sessions. The type is integer (32-bit gauge).

The following names are defined for this attribute: LDAP_CLIENT_SESSIONS or LDAPCLISES (historical name), LDAP Client Sessions (caption), LDAP_Client_Sessions (attribute name), and LDAPCLISES (column name).

**LDAP Closed Connections/sec**
The number of LDAP connections that are closed in the last second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LDAP_CLOSED_CONNECTIONS/SEC or LDAPCLCOPS (historical name), LDAP Closed Connections/sec (caption), LDAP_Closed_Connections/sec (attribute name), and LDAPCLCOPS (column name).

**LDAP New Connections/sec**
The number of new LDAP connections that arrive per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LDAP_NEW_CONNECTIONS/SEC or LDAPNWCOPS (historical name), LDAP New Connections/sec (caption), LDAP_New_Connections/sec (attribute name), and LDAPNWCOPS (column name).

**LDAP Searches/sec**
The number of times the LDAP clients perform search operations per second after the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LDAP_SEARCHES/SEC or LSPERSEC (historical name), LDAP Searches/sec (caption), LDAP_Searches/sec (attribute name), and LSPERSEC (column name).

**LDAP Successful Binds/sec**
The number of LDAP Binds per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LDAP_SUCCESSFUL_BINDS/SEC or LDAPSUBIPS (historical name), LDAP Successful Binds/sec (caption), LDAP_Successful_Binds/sec (attribute name), and LDAPSUBIPS (column name).

**LDAP Writes/sec**
The rate at which LDAP clients perform write operations. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LDAP_WRITES/SEC or LDAPWRPS (historical name), LDAP Writes/sec (caption), LDAP_Writes/sec (attribute name), and LDAPWRPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Threads in Use**
The current number of threads that the directory service is using. This number is different from the number of threads in the directory service process. This attribute represents the number of RPC-generated threads that are currently in API calls, and can be used to indicate whether additional processors could be beneficial. The type is integer (32-bit gauge).

The following names are defined for this attribute: THREADS_IN_USE or THREADS (historical name), Threads in Use (caption), Threads_in_Use (attribute name), and THREADS (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Email Statistics data set

This data set provides information about the number and size of email messages that are sent and received by the Exchange Server. Data is collected for this data set according to the data collection interval that you specify when you configure the agent. For more information about specifying the data collection interval, see the "Agent installation and configuration" chapter in the Exchange Server Agent Installation and Configuration Guide. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Emails Received**
The number of email messages that are received during the last collection. The type is integer (32-bit gauge).

The following names are defined for this attribute: EMAILS_RECEIVED or EMAILREC (historical name), Emails Received (caption), Emails_Received (attribute name), and EMAILREC (column name).

**Emails Sent**
The number of email messages that are sent during the last collection. The type is integer (32-bit gauge).

The following names are defined for this attribute: EMAILS_SENT or EMAILSENT (historical name), Emails Sent (caption), Emails_Sent (attribute name), and EMAILSENT (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Bytes Received (MB)**
The total size (in MB) of email messages that are received by the Exchange Server during the last collection. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TOTAL_BYTES_RECEIVED or BYTEREC (historical name), Total Bytes Received (MB) (caption), Total_Bytes_Received (attribute name), and BYTEREC (column name).

**Total Bytes Sent (MB)**
The total size (in MB) of email messages that are sent from the Exchange Server during the last collection. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TOTAL_BYTES_SENT or BYTESENT (historical name), Total Bytes Sent (MB) (caption), Total_Bytes_Sent (attribute name), and BYTESENT (column name).

## MS Exchange Event Details data set

This data set monitors the events that are triggered on Exchange Servers. This data set is a multi-instance data set.

This data set contains the following attributes:

**Event Age (Min.)**
The age (in minutes) of the event since the event was triggered. The type is integer (32-bit numeric property).

The following names are defined for this attribute: EVENT_AGE or MSGAGE (historical name), Event Age (Min.) (caption), Event_Age (attribute name), and MSGAGE (column name).

**Event Category**
The category of the event. The type is string.

The following names are defined for this attribute: EVENT_CATEGORY or EVENTCAT (historical name), Event Category (caption), Event_Category (attribute name), and EVENTCAT (column name).

**Event Description**
The description in the event log. The type is string with enumerated values. The following values are defined: N/A (N/A). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EVENT_DESCRIPTION or EVENTTXT (historical name), Event Description (caption), Event_Description (attribute name), and EVENTTXT (column name).

**Event ID**
The ID of the triggered event. This attribute is a key attribute. The type is integer (32-bit numeric property).

The following names are defined for this attribute: EVENT_ID or ERRORID (historical name), Event ID (caption), Event_ID (attribute name), and ERRORID (column name).

**Event Log User**
The name of the user who was logged on when the event occurred. The type is string.

The following names are defined for this attribute: EVENT_LOG_USER or EVENTUSR (historical name), Event Log User (caption), Event_Log_User (attribute name), and EVENTUSR (column name).

**Event Source**
The name of the event source. The type is string.

The following names are defined for this attribute: EVENT_SOURCE or EVENTSRC (historical name), Event Source (caption), Event_Source (attribute name), and EVENTSRC (column name).

**Event Timestamp**
The time when the event was triggered. The format is MM/DD/YY HH:mm:SS, where the following measures apply: MM Month DD Day YY Year HH Hour mm Minute SS Second This attribute is a key attribute. The type is timestamp.

The following names are defined for this attribute: EVENT_TIMESTAMP or EVNTTIME (historical name), Event Timestamp (caption), Event_Timestamp (attribute name), and EVNTTIME (column name).

**Event Type**
The type of event, such as error, warning, or Failure Audit. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Error (1), Warning (2), Failure Audit (3), Information (4), Success Audit (5). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TYPE or EVENTTYP (historical name), Event Type (caption), Type (attribute name), and EVENTTYP (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Extensibility Agents data set

This data set monitors the activities of transport agents and the time taken by each agent to process email messages. This data set is available only in Exchange Server 2007 and 2010. This data set is a multi-instance data set.

This data set contains the following attributes:

**Average Agent Processing Time**
The average processing time (in seconds) of the agent per event. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_AGENT_PROCESSING_TIME or AAPTS (historical name), Average Agent Processing Time (caption), Average_Agent_Processing_Time (attribute name), and AAPTS (column name).

**Extensibility Agent Name**
The name of the extensibility agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: EXTENSIBILITY_AGENT_NAME or EXAGTNM (historical name), Extensibility Agent Name (caption), Extensibility_Agent_Name (attribute name), and EXAGTNM (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Agent Invocations**
The total number of agent invocations that have occurred since the agent was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_AGENT_INVOCATIONS or TAGTINV (historical name), Total Agent Invocations (caption), Total_Agent_Invocations (attribute name), and TAGTINV (column name).

## MS Exchange FDS OAB data set

This data set monitors the activities of the File Distribution Service (FDS) on the Microsoft Exchange Server that are related to the Office Address Book (OAB). This data set is available only in Exchange Server 2007 and 2010. This data set is a multi-instance data set.

This data set contains the following attributes:

**Bytes Downloaded**
The number of bytes that are downloaded by the current download task. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: BYTES_DOWNLOADED or BYTDW (historical name), Bytes Downloaded (caption), Bytes_Downloaded (attribute name), and BYTDW (column name).

**Download Task Queued**
A numeric value that indicates whether the download task is queued for execution. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1), Yes (1), No (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DOWNLOAD_TASK_QUEUED or DTASKQU (historical name), Download Task Queued (caption), Download_Task_Queued (attribute name), and DTASKQU (column name).

**Download Tasks Completed**
The number of OAB download tasks that are currently completed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DOWNLOAD_TASKS_COMPLETED or DTASKCOM (historical name), Download Tasks Completed (caption), Download_Tasks_Completed (attribute name), and DTASKCOM (column name).

**FDS OAB Instance Name**
The name of the FDS OAB instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: FDS_OAB_INSTANCE_NAME or FDSOABIT (historical name), FDS OAB Instance Name (caption), FDS_OAB_Instance_Name (attribute name), and FDSOABIT (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Bytes To Download**
The number of bytes that are currently pending to be downloaded by the current download task. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_BYTES_TO_DOWNLOAD or TBYTDW (historical name), Total Bytes To Download (caption), Total_Bytes_To_Download (attribute name), and TBYTDW (column name).

## MS Exchange IS data set

This data set represents the MS Exchange Server Information Store activity. This data set is available only in Exchange Server 2007 and 2010. This data set is a single instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every minute and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Active Connection Count***
The number of connections that have shown some activity in the last 10 minutes. The type is integer (32-bit gauge).

The following names are defined for this attribute: ACTIVE_CONNECTION_COUNT or ACTCNCNT (historical name), *Active Connection Count* (caption), Active_Connection_Count (attribute name), and ACTCNCNT (column name).

***Active User Count***
The number of user connections that have shown some activity in the last 10 minutes. The type is integer (32-bit gauge).

The following names are defined for this attribute: ACTIVE_USER_COUNT or ACTUSCNT (historical name), *Active User Count* (caption), Active_User_Count (attribute name), and ACTUSCNT (column name).

***Connection Count***
The number of client processes that are connected to the information store. The type is integer (32-bit gauge).

The following names are defined for this attribute: CONNECTION_COUNT or CONNCONT (historical name), *Connection Count* (caption), Connection_Count (attribute name), and CONNCONT (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***RPC Averaged Latency***
The average RPC latency in milliseconds for the past 1024 packets. The value should be less than 100 milliseconds. The type is integer (32-bit gauge).

The following names are defined for this attribute: RPC_AVERAGED_LATENCY or RPCAVGLA (historical name), *RPC Averaged Latency* (caption), RPC_Averaged_Latency (attribute name), and RPCAVGLA (column name).

***RPC Operations Failed Due to Server Too Busy***
The number of RPC operations that failed because the server was too busy since the mailbox store was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CLIENT_RPCS_FAILED_SERVER_TOO_BUSY or SERBSY (historical name), *RPC Operations Failed Due to Server Too Busy* (caption), Client_RPCs_Failed_Server_Too_Busy (attribute name), and SERBSY (column name).

***RPC Operations/sec***
The number of times the RPC operations occur per second since the server was started. The value should be less than 100. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RPC_OPERATIONS/SEC or RPCOPSEC (historical name), *RPC Operations/sec* (caption), RPC_Operations/sec (attribute name), and RPCOPSEC (column name).

***RPC Requests***
The number of client requests that the Information Store currently processed. The value should be less than 70. The type is integer (32-bit gauge).

The following names are defined for this attribute: RPC_REQUESTS or RPCREQTS (historical name), *RPC Requests* (caption), RPC_Requests (attribute name), and RPCREQTS (column name).

***Slow Search Threads***
The number of search threads that currently run queries, which are not optimized. The type is integer (32-bit gauge).

The following names are defined for this attribute: SLOW_SEARCH_THREADS or SLST (historical name), *Slow Search Threads* (caption), Slow_Search_Threads (attribute name), and SLST (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

***User Count***
The number of users that are connected to the information store. The type is integer (32-bit gauge).

The following names are defined for this attribute: USER_COUNT or USERCONT (historical name), *User Count* (caption), User_Count (attribute name), and USERCONT (column name).

***VM Largest Block Size***
The size of the largest free virtual memory block in megabytes. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: VM_LARGEST_BLOCK_SIZE or VMLRGBLS (historical name), *VM Largest Block Size* (caption), VM_Largest_Block_Size (attribute name), and VMLRGBLS (column name).

***VM Total 16MB Free Blocks***
The total number of free virtual memory blocks that are larger than or equal to 16 MB. The type is integer (32-bit counter).

The following names are defined for this attribute: VM_TOTAL_16MB_FREE_BLOCKS or VMTOTMFB (historical name), *VM Total 16MB Free Blocks* (caption), VM_Total_16MB_Free_Blocks (attribute name), and VMTOTMFB (column name).

***VM Total Free Blocks***
The total number of free virtual memory blocks. The type is integer (32-bit counter).

The following names are defined for this attribute: VM_TOTAL_FREE_BLOCKS or VMTOTFBL (historical name), *VM Total Free Blocks* (caption), VM_Total_Free_Blocks (attribute name), and VMTOTFBL (column name).

***VM Total Large Free Block Bytes***
The total number of megabytes in free virtual memory blocks that are larger than or equal to 16 MB. The type is integer (32-bit counter).

The following names are defined for this attribute: VM_TOTAL_LARGE_FREE_BLOCK_BYTES or VMTOTLFB (historical name), *VM Total Large Free Block Bytes* (caption), VM_Total_Large_Free_Block_Bytes (attribute name), and VMTOTLFB (column name).

**Active Anonymous User Count**
Number of active users. The type is integer (32-bit gauge).

The following names are defined for this attribute: ACTIVE_ANONYMOUS_USER_COUNT or ACTANCNT (historical name), Active Anonymous User Count (caption), Active_Anonymous_User_Count (attribute name), and ACTANCNT (column name).

**Anonymous User Count**
The number of anonymous users that are connected to the information store. The type is integer (32-bit gauge).

The following names are defined for this attribute: ANONYMOUS_USER_COUNT or ANONCONT (historical name), Anonymous User Count (caption), Anonymous_User_Count (attribute name), and ANONCONT (column name).

**Appointment Instances Created**
The number of appointment instances that are created. The type is integer (32-bit counter).

The following names are defined for this attribute: APPOINTMENT_INSTANCES_CREATED or APPINSCRT (historical name), Appointment Instances Created (caption), Appointment_Instances_Created (attribute name), and APPINSCRT (column name).

**Appointment Instances Deleted**
The number of appointment instances that are deleted. The type is integer (32-bit counter).

The following names are defined for this attribute: APPOINTMENT_INSTANCES_DELETED or APPINSDEL (historical name), Appointment Instances Deleted (caption), Appointment_Instances_Deleted (attribute name), and APPINSDEL (column name).

**Client RPCs attempted**
The total number of RPCs attempted by the users since the store was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CLIENT_RPCS_ATTEMPTED or CLIRPCATT (historical name), Client RPCs attempted (caption), Client_RPCs_attempted (attribute name), and CLIRPCATT (column name).

**Client RPCs attempted/sec**
The client-reported rate of RPCs attempted by the users since the store was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CLIENT_RPCS_ATTEMPTED/SEC or CLIRPCAPS (historical name), Client RPCs attempted/sec (caption), Client_RPCs_attempted/sec (attribute name), and CLIRPCAPS (column name).

**Client RPCs Failed**
The number of failed RPCs that are reported by the client since the store was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CLIENT_RPCS_FAILED or CLIRPCFL (historical name), Client RPCs Failed (caption), Client_RPCs_Failed (attribute name), and CLIRPCFL (column name).

**Client RPCs Failed/sec**
The rate of failed RPCs that is reported by the client since the store was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CLIENT_RPCS_FAILED/SEC or CLIRPCFPS (historical name), Client RPCs Failed/sec (caption), Client_RPCs_Failed/sec (attribute name), and CLIRPCFPS (column name).

**Client RPCs succeeded**
The number of successful RPCs that are reported by the client since the store was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CLIENT_RPCS_SUCCEEDED or CLIRPCSUC (historical name), Client RPCs succeeded (caption), Client_RPCs_succeeded (attribute name), and CLIRPCSUC (column name).

**Client RPCs succeeded/sec**
The rate of successful RPCs that is reported by the client since the store was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CLIENT_RPCS_SUCCEEDED/SEC or CLIRPCSPS (historical name), Client RPCs succeeded/sec (caption), Client_RPCs_succeeded/sec (attribute name), and CLIRPCSPS (column name).

**Database Session Hit Rate**
Percent hit rate on re-using database sessions since the server was started. is 0 for Exchange Server 2007. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DATABASE_SESSION_HIT_RATE or DBHITRAT (historical name), Database Session Hit Rate (caption), Database_Session_Hit_Rate (attribute name), and DBHITRAT (column name).

**Exchmem Current Bytes Allocated(MB)**
The current number bytes (in MB) that is allocated through Exchmem (excluding virtual allocations). The type is integer (32-bit gauge).

The following names are defined for this attribute: EXCHMEM_CURRENT_BYTES_ALLOCATED or CURBYTALL (historical name), Exchmem Current Bytes Allocated(MB) (caption), Exchmem_Current_Bytes_Allocated (attribute name), and CURBYTALL (column name).

**Exchmem Current Number of Virtual Allocations**
The current number of Exchmem allocations that are directly allocated through virtual memory. The type is integer (32-bit gauge).

The following names are defined for this attribute: EXCHMEM_CURRENT_NUMBER_OF_VIRTUAL_ALLOCATIONS or CURVIRALL (historical name), Exchmem Current Number of Virtual Allocations (caption), Exchmem_Current_Number_of_Virtual_Allocations (attribute name), and CURVIRALL (column name).

**Exchmem Current Virtual Bytes Allocated(MB)**
The current number bytes (in MB) that is virtually allocated through Exchmem. The type is integer (32-bit gauge).

The following names are defined for this attribute: EXCHMEM_CURRENT_VIRTUAL_BYTES_ALLOCATED or CURVBALL (historical name), Exchmem Current Virtual Bytes Allocated(MB) (caption), Exchmem_Current_Virtual_Bytes_Allocated (attribute name), and CURVBALL (column name).

**Exchmem Maximum Bytes Allocated(MB)**
The maximum concurrent bytes (in MB) allocated through Exchmem (excluding virtual allocations). The type is integer (32-bit gauge).

The following names are defined for this attribute: EXCHMEM_MAXIMUM_BYTES_ALLOCATED or MAXBYTALL (historical name), Exchmem Maximum Bytes Allocated(MB) (caption), Exchmem_Maximum_Bytes_Allocated (attribute name), and MAXBYTALL (column name).

**Exchmem Maximum Virtual Bytes Allocated(MB)**
The maximum concurrent bytes (in MB) virtually allocated through Exchmem. The type is integer (32-bit gauge).

The following names are defined for this attribute: EXCHMEM_MAXIMUM_VIRTUAL_BYTES_ALLOCATED or MAXVBALL (historical name), Exchmem Maximum Virtual Bytes Allocated(MB) (caption), Exchmem_Maximum_Virtual_Bytes_Allocated (attribute name), and MAXVBALL (column name).

**Exchmem Number of Additional Heaps**
The number of Exchmem heaps that are created by the MS Exchange IS after startup. The type is integer (32-bit counter).

The following names are defined for this attribute: EXCHMEM_NUMBER_OF_ADDITIONAL_HEAPS or NOADDNLH (historical name), Exchmem Number of Additional Heaps (caption), Exchmem_Number_of_Additional_Heaps (attribute name), and NOADDNLH (column name).

**Exchmem Number of heaps with memory errors**
The total number of Exchmem heaps that were not allocated due to insufficient available memory. The type is integer (32-bit gauge).

The following names are defined for this attribute: EXCHMEM_NUMBER_OF_HEAPS_WITH_MEMORY_ERRORS or NOHWMEME (historical name), Exchmem Number of heaps with memory errors (caption), Exchmem_Number_of_heaps_with_memory_errors (attribute name), and NOHWMEME (column name).

**Exchmem Number of memory errors**
The total number of Exchmem allocations that cannot be satisfied by the available memory. The type is integer (32-bit gauge).

The following names are defined for this attribute: EXCHMEM_NUMBER_OF_MEMORY_ERRORS or NOMEMERR (historical name), Exchmem Number of memory errors (caption), Exchmem_Number_of_memory_errors (attribute name), and NOMEMERR (column name).

**Exchmem Total Number of Virtual Allocations**
The total number of Exchmem allocations that are directly allocated from virtual memory. The type is integer (32-bit gauge).

The following names are defined for this attribute: EXCHMEM_TOTAL_NUMBER_OF_VIRTUAL_ALLOCATIONS or TOTVIRALL (historical name), Exchmem Total Number of Virtual Allocations (caption), Exchmem_Total_Number_of_Virtual_Allocations (attribute name), and TOTVIRALL (column name).

**Maximum Anonymous Users**
The maximum number of anonymous users since server startup. The type is integer (32-bit numeric property).

The following names are defined for this attribute: MAXIMUM_ANONYMOUS_USERS or MAXANONU (historical name), Maximum Anonymous Users (caption), Maximum_Anonymous_Users (attribute name), and MAXANONU (column name).

**Maximum Connections**
The maximum number of concurrent connections since server startup. The type is integer (32-bit numeric property).

The following names are defined for this attribute: MAXIMUM_CONNECTIONS or MAXCONNS (historical name), Maximum Connections (caption), Maximum_Connections (attribute name), and MAXCONNS (column name).

**Maximum Users**
The maximum number of concurrent users since server startup. The type is integer (32-bit numeric property).

The following names are defined for this attribute: MAXIMUM_USERS or MAXUSERS (historical name), Maximum Users (caption), Maximum_Users (attribute name), and MAXUSERS (column name).

**Peak Push Notifications Cache Size**
The maximum size of the Push Notifications Cache. The type is integer (32-bit numeric property).

The following names are defined for this attribute: PEAK_PUSH_NOTIFICATIONS_CACHE_SIZE or PKPSHCAC (historical name), Peak Push Notifications Cache Size (caption), Peak_Push_Notifications_Cache_Size (attribute name), and PKPSHCAC (column name).

**Push Notifications Cache Size**
The current size of the Push Notifications Cache since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: PUSH_NOTIFICATIONS_CACHE_SIZE or PUSHCACS (historical name), Push Notifications Cache Size (caption), Push_Notifications_Cache_Size (attribute name), and PUSHCACS (column name).

**Push Notifications Generated/sec**
The number of times the notifications are sent to clients, who have registered for notifications of changes to tables in the information store, per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: PUSH_NOTIFICATIONS_GENERATED/SEC or PUSHGENS (historical name), Push Notifications Generated/sec (caption), Push_Notifications_Generated/sec (attribute name), and PUSHGENS (column name).

**Push Notifications Skipped/sec**
The number of push notifications per second that were skipped by caching at the server. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: PUSH_NOTIFICATIONS_SKIPPED/SEC or PUSHSKIP (historical name), Push Notifications Skipped/sec (caption), Push_Notifications_Skipped/sec (attribute name), and PUSHSKIP (column name).

**Read Bytes RPC Clients/sec**
The number of times that bytes are read from RPC clients per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: READ_BYTES_RPC_CLIENTS/SEC or READRPCS (historical name), Read Bytes RPC Clients/sec (caption), Read_Bytes_RPC_Clients/sec (attribute name), and READRPCS (column name).

**Recurring Appointment Deletion Rate**
The number of recurring appointments that are deleted per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RECURRING_APPOINTMENT_DELETION_RATE or RECAPDELR (historical name), Recurring Appointment Deletion Rate (caption), Recurring_Appointment_Deletion_Rate (attribute name), and RECAPDELR (column name).

**Recurring Appointment Modification Rate**
The number of recurring appointments that are modified per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RECURRING_APPOINTMENT_MODIFICATION_RATE or RECAPMODR (historical name), Recurring Appointment Modification Rate (caption), Recurring_Appointment_Modification_Rate (attribute name), and RECAPMODR (column name).

**Recurring Apppointment Creation Rate**
The number of recurring appointments that are created per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RECURRING_APPPOINTMENT_CREATION_RATE or RECAPCRR (historical name), Recurring Apppointment Creation Rate (caption), Recurring_Apppointment_Creation_Rate (attribute name), and RECAPCRR (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**RPC Client Backoff/sec**
The rate at which the server notifies a client to withdraw. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_CLIENT_BACKOFF/SEC or RPCCLIBCK (historical name), RPC Client Backoff/sec (caption), RPC_Client_Backoff/sec (attribute name), and RPCCLIBCK (column name).

**RPC Num. of Slow Packets**
The number of RPC packets in the past 1024 packets that have latencies longer than 2 seconds. The type is integer (32-bit counter).

The following names are defined for this attribute: RPC_NUM_OF_SLOW_PACKETS or RPCNUMSLP (historical name), RPC Num. of Slow Packets (caption), RPC_Num_of_Slow_Packets (attribute name), and RPCNUMSLP (column name).

**RPC Operations Failed per Second Due to Server Too Busy**
The number of RPC operations that have failed per second because the server was too busy. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CLIENT_RPCS_FAILED_SERVER_TOO_BUSY/SEC or SERBPS (historical name), RPC Operations Failed per Second Due to Server Too Busy (caption), Client_RPCs_Failed_Server_Too_Busy/sec (attribute name), and SERBPS (column name).

**RPC Packets/sec**
The number of times the RPC packets are processed per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RPC_PACKETS/SEC or RPCPKSEC (historical name), RPC Packets/sec (caption), RPC_Packets/sec (attribute name), and RPCPKSEC (column name).

**RPC Requests Peak**
The maximum number of client requests that were processed simultaneously by the information store since it was started. The type is integer (32-bit counter).

The following names are defined for this attribute: RPC_REQUESTS_PEAK or RPCRPEAK (historical name), RPC Requests Peak (caption), RPC_Requests_Peak (attribute name), and RPCRPEAK (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Single Appointment Creation Rate**
The number of single instance appointments that are created per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SINGLE_APPOINTMENT_CREATION_RATE or SGLAPCRR (historical name), Single Appointment Creation Rate (caption), Single_Appointment_Creation_Rate (attribute name), and SGLAPCRR (column name).

**Single Appointment Deletion Rate**
The number of single instance appointments that are deleted per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SINGLE_APPOINTMENT_DELETION_RATE or SGLAPDELR (historical name), Single Appointment Deletion Rate (caption), Single_Appointment_Deletion_Rate (attribute name), and SGLAPDELR (column name).

**Single Appointment Modification Rate**
The number of single instance appointments that are modified per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SINGLE_APPOINTMENT_MODIFICATION_RATE or SGLAPMODR (historical name), Single Appointment Modification Rate (caption), Single_Appointment_Modification_Rate (attribute name), and SGLAPMODR (column name).

**Single Appointments Created**
The number of single instance appointments that are created. The type is integer (32-bit counter).

The following names are defined for this attribute: SINGLE_APPOINTMENTS_CREATED or SGLAPCR (historical name), Single Appointments Created (caption), Single_Appointments_Created (attribute name), and SGLAPCR (column name).

**Single Appointments Deleted**
The number of single instance appointments that are deleted. The type is integer (32-bit counter).

The following names are defined for this attribute: SINGLE_APPOINTMENTS_DELETED or SGLAPDEL (historical name), Single Appointments Deleted (caption), Single_Appointments_Deleted (attribute name), and SGLAPDEL (column name).

**Single Appointments Modified**
The number of single instance appointments that are modified. The type is integer (32-bit counter).

The following names are defined for this attribute: SINGLE_APPOINTMENTS_MODIFIED or SGLAPMOD (historical name), Single Appointments Modified (caption), Single_Appointments_Modified (attribute name), and SGLAPMOD (column name).

**Slow QP Threads**
The number of Query Processor threads that are running unoptimized queries. The type is real number (32-bit counter) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SLOW_QP_THREADS or SLQOTHRD (historical name), Slow QP Threads (caption), Slow_QP_Threads (attribute name), and SLQOTHRD (column name).

**Virus Scan Files Cleaned**
The total number of separate files that are cleaned by a virus scanner. The type is integer (32-bit counter).

The following names are defined for this attribute: VIRUS_SCAN_FILES_CLEANED or VSCNFCLN (historical name), Virus Scan Files Cleaned (caption), Virus_Scan_Files_Cleaned (attribute name), and VSCNFCLN (column name).

**Virus Scan Files Cleaned/sec**
The rate at which separate files are cleaned by a virus scanner. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: VIRUS_SCAN_FILES_CLEANED/SEC or VSCNFCPS (historical name), Virus Scan Files Cleaned/sec (caption), Virus_Scan_Files_Cleaned/sec (attribute name), and VSCNFCPS (column name).

**Virus Scan Files Quarantined**
The total number of files that are shifted into quarantine by a virus scanner. The type is integer (32-bit counter).

The following names are defined for this attribute: VIRUS_SCAN_FILES_QUARANTINED or VSCNFQRN (historical name), Virus Scan Files Quarantined (caption), Virus_Scan_Files_Quarantined (attribute name), and VSCNFQRN (column name).

**Virus Scan Files Quarantined/sec**
The rate at which separate files are shifted into quarantine by a virus scanner. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: VIRUS_SCAN_FILES_QUARANTINED/SEC or VSCNFQPS (historical name), Virus Scan Files Quarantined/sec (caption), Virus_Scan_Files_Quarantined/sec (attribute name), and VSCNFQPS (column name).

**Virus Scan Files Scanned**
The total number of separate files that are scanned by a virus scanner. The type is integer (32-bit counter).

The following names are defined for this attribute: VIRUS_SCAN_FILES_SCANNED or VSCNFSCN (historical name), Virus Scan Files Scanned (caption), Virus_Scan_Files_Scanned (attribute name), and VSCNFSCN (column name).

**Virus Scan Files Scanned/sec**
The rate at which separate files are scanned by a virus scanner. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: VIRUS_SCAN_FILES_SCANNED/SEC or VSCNFSPS (historical name), Virus Scan Files Scanned/sec (caption), Virus_Scan_Files_Scanned/sec (attribute name), and VSCNFSPS (column name).

**Virus Scan Folders Scanned in Background**
The total number of folders that are processed by background scanning. The type is integer (32-bit counter).

The following names are defined for this attribute: VIRUS_SCAN_FOLDERS_SCANNED_IN_BACKGROUND or FLDSCNBCK (historical name), Virus Scan

Folders Scanned in Background (caption), Virus_Scan_Folders_Scanned_in_Background (attribute name), and FLDSCNBCK (column name).

**Virus Scan Messages Cleaned**
The total number of top-level messages that are cleaned by a virus scanner. The type is integer (32-bit counter).

The following names are defined for this attribute: VIRUS_SCAN_MESSAGES_CLEANED or VSCNMCLN (historical name), Virus Scan Messages Cleaned (caption), Virus_Scan_Messages_Cleaned (attribute name), and VSCNMCLN (column name).

**Virus Scan Messages Cleaned/sec**
The rate at which top-level messages are cleaned by a virus scanner. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: VIRUS_SCAN_MESSAGES_CLEANED/SEC or VSCNMCPS (historical name), Virus Scan Messages Cleaned/sec (caption), Virus_Scan_Messages_Cleaned/sec (attribute name), and VSCNMCPS (column name).

**Virus Scan Messages Deleted**
The total number of top-level messages that are deleted upon the request of a virus scanner. The type is integer (32-bit counter).

The following names are defined for this attribute: VIRUS_SCAN_MESSAGES_DELETED or VSCNMDEL (historical name), Virus Scan Messages Deleted (caption), Virus_Scan_Messages_Deleted (attribute name), and VSCNMDEL (column name).

**Virus Scan Messages Deleted/sec**
The rate at which top-level messages are deleted upon the request of a virus scanner. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: VIRUS_SCAN_MESSAGES_DELETED/SEC or VSCNMDPS (historical name), Virus Scan Messages Deleted/sec (caption), Virus_Scan_Messages_Deleted/sec (attribute name), and VSCNMDPS (column name).

**Virus Scan Messages Processed**
The total number of top-level messages that are processed by a virus scanner. The type is integer (32-bit counter).

The following names are defined for this attribute: VIRUS_SCAN_MESSAGES_PROCESSED or VSCNMPROS (historical name), Virus Scan Messages Processed (caption), Virus_Scan_Messages_Processed (attribute name), and VSCNMPROS (column name).

**Virus Scan Messages Processed/sec**
The rate at which top-level messages are processed by a virus scanner. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: VIRUS_SCAN_MESSAGES_PROCESSED/SEC or VSCNMPPS (historical name), Virus Scan Messages Processed/sec (caption), Virus_Scan_Messages_Processed/sec (attribute name), and VSCNMPPS (column name).

**Virus Scan Messages Quarantined**
The total number of top-level messages that are shifted into quarantine by a virus scanner. The type is integer (32-bit counter).

The following names are defined for this attribute: VIRUS_SCAN_MESSAGES_QUARANTINED or VSCNMQRN (historical name), Virus Scan Messages Quarantined (caption), Virus_Scan_Messages_Quarantined (attribute name), and VSCNMQRN (column name).

**Virus Scan Messages Quarantined/sec**
The rate at which top-level messages are shifted into quarantine by a virus scanner. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: VIRUS_SCAN_MESSAGES_QUARANTINED/SEC or VSCNMQPS (historical name), Virus Scan Messages Quarantined/sec (caption), Virus_Scan_Messages_Quarantined/sec (attribute name), and VSCNMQPS (column name).

**Virus Scan Messages Scanned in Background**
The total number of messages that are processed by background scanning. The type is integer (32-bit counter).

The following names are defined for this attribute: VIRUS_SCAN_MESSAGES_SCANNED_IN_BACKGROUND or MSGSCNBKG (historical name), Virus Scan Messages Scanned in Background (caption), Virus_Scan_Messages_Scanned_in_Background (attribute name), and MSGSCNBKG (column name).

**Virus Scan Queue Length**
The number of outstanding requests that are currently queued for virus scanning. The type is integer (32-bit gauge).

The following names are defined for this attribute: VIRUS_SCAN_QUEUE_LENGTH or VSCNQLEN (historical name), Virus Scan Queue Length (caption), Virus_Scan_Queue_Length (attribute name), and VSCNQLEN (column name).

**Write Bytes RPC Clients/sec**
The number of times that bytes are written to RPC clients per second since the server started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: WRITE_BYTES_RPC_CLIENTS/SEC or WTRPCSEC (historical name), Write Bytes RPC Clients/sec (caption), Write_Bytes_RPC_Clients/sec (attribute name), and WTRPCSEC (column name).

## MS Exchange IS Client data set

This data set represents MS Exchange IS Client statistics. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every minute and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Client Name***
The name of the client instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: CLIENT_NAME_U or CLINAME (historical name), *Client Name* (caption), Client_Name_U (attribute name), and CLINAME (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***RPC Average Latency***
The average server RPC latency in milliseconds for the past 1024 packets. The type is integer (32-bit gauge).

The following names are defined for this attribute: RPC_AVERAGE_LATENCY or RPCAVGLAT (historical name), *RPC Average Latency* (caption), RPC_Average_Latency (attribute name), and RPCAVGLAT (column name).

***RPC Bytes Received/sec***
The number of times that bytes are received from RPC clients per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RPC_BYTES_RECEIVED/SEC or RPCBRPS (historical name), *RPC Bytes Received/sec* (caption), RPC_Bytes_Received/sec (attribute name), and RPCBRPS (column name).

***RPC Bytes Sent/sec***
The number of times that bytes are sent to RPC clients per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RPC_BYTES_SENT/SEC or RPCBSPS (historical name), *RPC Bytes Sent/sec* (caption), RPC_Bytes_Sent/sec (attribute name), and RPCBSPS (column name).

***RPC Operations/Sec***
The number of RPC operations that are currently requested per second from the server. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RPC_OPERATIONS/SEC or RPCOPS (historical name), *RPC Operations/Sec* (caption), RPC_Operations/Sec (attribute name), and RPCOPS (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**JET Log Records/sec**
The rate at which the database log records are generated while processing requests for the client. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: JET_LOG_RECORDS/SEC or JETLOGRC (historical name), JET Log Records/sec (caption), JET_Log_Records/sec (attribute name), and JETLOGRC (column name).

**JET Pages Read/sec**
The rate at which the database pages are read from disk while processing requests for the client. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: JET_PAGES_READ/SEC or JETPGRD (historical name), JET Pages Read/sec (caption), JET_Pages_Read/sec (attribute name), and JETPGRD (column name).

**LDAP Reads/Sec**
The number of LDAP read operations that are performed per second while processing client requests. This attribute is not available in Exchange Server 2013. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LDAP_READS/SEC or LRPS (historical name), LDAP Reads/Sec (caption), LDAP_Reads/Sec (attribute name), and LRPS (column name).

**LDAP Searches/Sec**
The number of LDAP search operations that are performed per second while processing client requests. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LDAP_SEARCHES/SEC or LSPS (historical name), LDAP Searches/Sec (caption), LDAP_Searches/Sec (attribute name), and LSPS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**RPC Packets/sec**
The number of times that the RPC packets are processed per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RPC_PACKETS/SEC or RPCPPS (historical name), RPC Packets/sec (caption), RPC_Packets/sec (attribute name), and RPCPPS (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange IS HA Active Database data set

This data set monitors the availability of active mailbox databases on the Exchange Server. This data set is available in Exchange Server 2013. This data set is a multi-instance data set.

This data set contains the following attributes:

**Average Emit And Send Latency**
The average latency (in seconds) for processing messages that are sent to the network. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_EMIT_AND_SEND_LATENCY or AVGESLAT (historical name), Average Emit And Send Latency (caption), Average_Emit_And_Send_Latency (attribute name), and AVGESLAT (column name).

**Average Emit Latency**
The average latency (in seconds) for processing messages. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_EMIT_LATENCY or AVGEMLAT (historical name), Average Emit Latency (caption), Average_Emit_Latency (attribute name), and AVGEMLAT (column name).

**Block Mode Replication Overflows**
The total number of transitions that occurred out of the continuous replication - block mode because of the transmit queue overflow. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: BLOCK_MODE_REPLICATION_OVERFLOWS or BMRPOVRF (historical name), Block Mode Replication Overflows (caption), Block_Mode_Replication_Overflows (attribute name), and BMRPOVRF (column name).

**Compression Enabled**
A numeric value that indicates whether log data is compressed before it is sent to the passive database copies. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1), Yes (1), No (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: COMPRESSION_ENABLED or COMPRENB (historical name), Compression Enabled (caption), Compression_Enabled (attribute name), and COMPRENB (column name).

**Current Log Generation Number**
The generation sequence number of the last log file that is sent by the active database copy. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CURRENT_LOG_GENERATION_NUMBER or CLOGGENN (historical name), Current Log Generation Number (caption), Current_Log_Generation_Number (attribute name), and CLOGGENN (column name).

**Emit Calls Per Second**
The number notifications that are generated per second to replicate log files. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EMIT_CALLS_PER_SECOND or EMTCLPS (historical name), Emit Calls Per Second (caption), Emit_Calls_Per_Second (attribute name), and EMTCLPS (column name).

**Log Generation Rate**
The amount of log data that is generated per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOG_GENERATION_RATE or LOGGENRT (historical name), Log Generation Rate (caption), Log_Generation_Rate (attribute name), and LOGGENRT (column name).

**Mailbox Database Name**
The name of the mailbox database. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: MAILBOX_DATABASE_NAME or MBXDBNM (historical name), Mailbox Database Name (caption), Mailbox_Database_Name (attribute name), and MBXDBNM (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Bytes Input To Compression**
The total amount of data (in bytes) that was compressed before replication since the service was started. The type is real number (32-bit counter) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_BYTES_INPUT_TO_COMPRESSION or TBTINPCP (historical name), Total Bytes Input To Compression (caption), Total_Bytes_Input_To_Compression (attribute name), and TBTINPCP (column name).

**Total Bytes Output From Compression**
The total amount of compressed data (in bytes) that was queued for replication since the service was started. The type is real number (32-bit counter) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_BYTES_OUTPUT_FROM_COMPRESSION or TBTOUTCP (historical name), Total Bytes Output From Compression (caption), Total_Bytes_Output_From_Compression (attribute name), and TBTOUTCP (column name).

**Total Emit Calls**
The total number of times the log data was provided to replicate active mailbox database copies for high availability since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_EMIT_CALLS or TOTEMTCL (historical name), Total Emit Calls (caption), Total_Emit_Calls (attribute name), and TOTEMTCL (column name).

**Total Log Bytes Generated**
The total amount of log data (in bytes) that was queued for replication since the service was started. The type is real number (32-bit counter) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_LOG_BYTES_GENERATED or TLGBTGEN (historical name), Total Log Bytes Generated (caption), Total_Log_Bytes_Generated (attribute name), and TLGBTGEN (column name).

## MS Exchange IS Private data set

This data set represents the MS Exchange IS Private activity. This data set is available in Exchange Server 2007 and 2010. This data set is a multi-instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every minute and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Average Delivery Time***
The average time in milliseconds between the submission of a message to the mailbox store and submission to other storage providers for the last 10 messages. The value should be less than 3000 milliseconds. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_DELIVERY_TIME or AVGDELTM (historical name), *Average Delivery Time* (caption), Average_Delivery_Time (attribute name), and AVGDELTM (column name).

***IS Mailbox Database Percent Space Used***
The percent of the total space the Mailbox Database is using. Mailbox Information Store Database takes up a percentage of the total Information Store space used. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: N/A (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_IS_DATABASE_PERCENT_SPACE_USED or MAILISDBPR (historical name), *IS Mailbox Database Percent Space Used* (caption), Mailbox_IS_Database_Percent_Space_Used (attribute name), and MAILISDBPR (column name).

***Mailbox Name***
The name of the mailbox. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: MAILBOX_NAME_U or MBNAME (historical name), *Mailbox Name* (caption), Mailbox_Name_U (attribute name), and MBNAME (column name).

***Mailbox Store State***
The state of the mailbox store, such as mounted or demounted. The mailbox store can be demounted for maintenance. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Mounted (0), Dismounted (1), N/A (2). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_STORE_STATE or MAILSTSTAT (historical name), *Mailbox Store State* (caption), Mailbox_Store_State (attribute name), and MAILSTSTAT (column name).

***Messages Delivered/min***
The number of messages delivered to all recipients per minute since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_DELIVERED/MIN or MSGSDELM (historical name), *Messages Delivered/min* (caption), Messages_Delivered/min (attribute name), and MSGSDELM (column name).

***Messages Queued For Submission***
The current number of submitted messages that are not processed by transport. The type is integer (32-bit gauge).

The following names are defined for this attribute: MESSAGES_QUEUED_FOR_SUBMISSION or MSGQUFSUB (historical name), *Messages Queued For Submission* (caption), Messages_Queued_For_Submission (attribute name), and MSGQUFSUB (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***RPC Average Latency***
The average time (in milliseconds) of the database RPC latency for the last 1024 packets. The value should be less than 100 milliseconds. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_AVERAGE_LATENCY or RPCAL (historical name), *RPC Average Latency* (caption), RPC_Average_Latency (attribute name), and RPCAL (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**Active Client Logons**
The number of clients that performed any action within the last 10 minute interval. The type is integer (32-bit gauge).

The following names are defined for this attribute: ACTIVE_CLIENT_LOGONS or ACTCLLOG (historical name), Active Client Logons (caption), Active_Client_Logons (attribute name), and ACTCLLOG (column name).

**Average Local Delivery Time**
The average time in milliseconds between the submission of a message to the information store and the delivery to all local recipients on the same server for the last 10 messages. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_LOCAL_DELIVERY_TIME or AVGLOCDT (historical name), Average Local Delivery Time (caption), Average_Local_Delivery_Time (attribute name), and AVGLOCDT (column name).

**Categorization Count**
The number of categorizations that exist in the private information store. Categorizations are created when a user creates a filtered view or performs a search. When the information store must maintain an excessive number of categorizations, performance can be affected. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CATEGORIZATION_COUNT or CATCOUNT (historical name), Categorization Count (caption), Categorization_Count (attribute name), and CATCOUNT (column name).

**Client Logons**
The number of clients (including system processes) that are currently logged on. The type is integer (32-bit gauge).

The following names are defined for this attribute: CLIENT_LOGONS or CLILOGON (historical name), Client Logons (caption), Client_Logons (attribute name), and CLILOGON (column name).

**Event History Deletes**
The number of events that are deleted from the event history of the mailbox store since the start of the mailbox store. The type is integer (32-bit counter).

The following names are defined for this attribute: EVENT_HISTORY_DELETES or EVHIDELETS (historical name), Event History Deletes (caption), Event_History_Deletes (attribute name), and EVHIDELETS (column name).

**Event History Deletes/sec**
The rate at which the events are deleted from the event history of the mailbox store. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: EVENT_HISTORY_DELETES/SEC or EVHIDELEPS (historical name), Event History Deletes/sec (caption), Event_History_Deletes/sec (attribute name), and EVHIDELEPS (column name).

**Event History Reads**
The number of events that are read from the event history of the mailbox store since the start of the mailbox store. The type is integer (32-bit counter).

The following names are defined for this attribute: EVENT_HISTORY_READS or EVHIREADS (historical name), Event History Reads (caption), Event_History_Reads (attribute name), and EVHIREADS (column name).

**Event History Reads/sec**
The rate at which the events are read from the event history of the mailbox store. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: EVENT_HISTORY_READS/SEC or EVHIREADPS (historical name), Event History Reads/sec (caption), Event_History_Reads/sec (attribute name), and EVHIREADPS (column name).

**Event History Writes**
The number of events that are written to the event history of the mailbox store since the start of the mailbox store. The type is integer (32-bit counter).

The following names are defined for this attribute: EVENT_HISTORY_WRITES or EVHIWRITES (historical name), Event History Writes (caption), Event_History_Writes (attribute name), and EVHIWRITES (column name).

**Event History Writes/sec**
The rate at which the events are written to the event history of the mailbox store. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: EVENT_HISTORY_WRITES/SEC or EVHIWRPS (historical name), Event History Writes/sec (caption), Event_History_Writes/sec (attribute name), and EVHIWRPS (column name).

**Folder Opens/sec**
The number of times that requests to open folders are submitted to the information store per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: FOLDER_OPENS/SEC or FOLDOPSC (historical name), Folder Opens/sec (caption), Folder_Opens/sec (attribute name), and FOLDOPSC (column name).

**IS Mailbox Percent Growth**
Mailbox Information Store growth percentage since the last interval sample was performed. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: N/A (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_IS_PERCENT_GROWTH or MAILISPRGR (historical name), IS Mailbox Percent Growth (caption), Mailbox_IS_Percent_Growth (attribute name), and MAILISPRGR (column name).

**IS Mailbox Size**
The size of the mailbox information store in megabytes. Information Store maintains the messaging databases that contain all server-based mailboxes. Messaging databases are managed in storage groups and include transaction log files, a MAPI-based database file, and a streaming database. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MAILBOX_IS_SIZE or MAILISSIZE (historical name), IS Mailbox Size (caption), Mailbox_IS_Size (attribute name), and MAILISSIZE (column name).

**Local Deliveries**
Total number of messages delivered locally since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: LOCAL_DELIVERIES or LOCLDELS (historical name), Local Deliveries (caption), Local_Deliveries (attribute name), and LOCLDELS (column name).

**Local delivery rate**
The Rate at which messages are delivered locally since the server started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LOCAL_DELIVERY_RATE or LOCDELRT (historical name), Local delivery rate (caption), Local_delivery_rate (attribute name), and LOCDELRT (column name).

**Logon Operations/sec**
The rate of Logon requests in the mailbox store. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LOGON_OPERATIONS/SEC or LOGOPPS (historical name), Logon Operations/sec (caption), Logon_Operations/sec (attribute name), and LOGOPPS (column name).

**Mailbox Distinguished Name**
The distinguished name of the mailbox database. The type is string with enumerated values. The following values are defined: N/A (N/A). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_STORE_DISTINGUISHED_NAME or DISTNAME (historical name), Mailbox Distinguished Name (caption), Mailbox_Store_Distinguished_Name (attribute name), and DISTNAME (column name).

**Message Opens/sec**
The number of times that requests to open messages are submitted to the information store per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGE_OPENS/SEC or MSGOPSEC (historical name), Message Opens/sec (caption), Message_Opens/sec (attribute name), and MSGOPSEC (column name).

**Message Recipients Delivered**
The total number of recipients that have received a message since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGE_RECIPIENTS_DELIVERED or MSGRECDL (historical name), Message Recipients Delivered (caption), Message_Recipients_Delivered (attribute name), and MSGRECDL (column name).

**Message Recipients Delivered/min**
The number of messages that recipients receive per minute since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGE_RECIPIENTS_DELIVERED/MIN or MSGRECDM (historical name), Message Recipients Delivered/min (caption), Message_Recipients_Delivered/min (attribute name), and MSGRECDM (column name).

**Messages Delivered**
The total number of messages delivered to all recipients since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_DELIVERED or MSGSDELD (historical name), Messages Delivered (caption), Messages_Delivered (attribute name), and MSGSDELD (column name).

**Messages Sent**
The total number of messages that were sent to the transport since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_SENT or MSGSSENT (historical name), Messages Sent (caption), Messages_Sent (attribute name), and MSGSSENT (column name).

**Messages Sent/min**
The number of messages sent to the transport per minute since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_SENT/MIN or MSGSENTM (historical name), Messages Sent/min (caption), Messages_Sent/min (attribute name), and MSGSENTM (column name).

**Messages Submitted**
The total number of messages that clients submitted since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_SUBMITTED or MSGSUBMT (historical name), Messages Submitted (caption), Messages_Submitted (attribute name), and MSGSUBMT (column name).

**Messages Submitted/min**
The number of messages submitted by the clients per minute since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_SUBMITTED/MIN or MSGSUBMM (historical name), Messages Submitted/min (caption), Messages_Submitted/min (attribute name), and MSGSUBMM (column name).

**Peak Client Logons**
The maximum number of concurrent client logons since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: PEAK_CLIENT_LOGONS or PKCLILOG (historical name), Peak Client Logons (caption), Peak_Client_Logons (attribute name), and PKCLILOG (column name).

**Receive Queue Size**
The number of messages in the private information store receive queue. This attribute is available only in Microsoft Exchange Server 2007 and not in Microsoft Exchange Server 2010. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RECEIVE_QUEUE_SIZE or RECQSIZE (historical name), Receive Queue Size (caption), Receive_Queue_Size (attribute name), and RECQSIZE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Search Task Rate**
The number of search tasks that are created per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SEARCH_TASK_RATE or SRCHTSKR (historical name), Search Task Rate (caption), Search_Task_Rate (attribute name), and SRCHTSKR (column name).

**Send Queue Size**
The number of messages in the send queue of the private information store. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEND_QUEUE_SIZE or SENDQSIZ (historical name), Send Queue Size (caption), Send_Queue_Size (attribute name), and SENDQSIZ (column name).

**Single Instance Ratio**
The average number of references to each message in the mailbox store since the server was started. This attribute is available only on Microsoft Exchange Server 2007, not on Microsoft Exchange Server 2010. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SINGLE_INSTANCE_RATIO or SINGINRA (historical name), Single Instance Ratio (caption), Single_Instance_Ratio (attribute name), and SINGINRA (column name).

**Slow FindRow Rate**
The rate at which the slower findrow must be used in the mailbox store. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SLOW_FINDROW_RATE or SLFRRATE (historical name), Slow FindRow Rate (caption), Slow_FindRow_Rate (attribute name), and SLFRRATE (column name).

**Total Count of Recoverable Items**
The total number of items retained for Item Recovery since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: TOTAL_COUNT_OF_RECOVERABLE_ITEMS or TOTRECIT (historical name), Total Count of Recoverable Items (caption), Total_Count_of_Recoverable_Items (attribute name), and TOTRECIT (column name).

**Total Size of Recoverable Items**
The total size in kilobytes of items retained for Item Recovery since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: TOTAL_SIZE_OF_RECOVERABLE_ITEMS or TOTSIZRI (historical name), Total Size of Recoverable Items (caption), Total_Size_of_Recoverable_Items (attribute name), and TOTSIZRI (column name).

## MS Exchange IS Public data set

This data set represents the MS Exchange IS Public activity. If public folder database is demounted, then for all the attributes will be displayed as 0. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every minute and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Average Delivery Time***
The average time in seconds between the submission of a message to the public folder store and submission to other storage providers for the last 10 messages. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_DELIVERY_TIME or AVGTIMDE (historical name), *Average Delivery Time* (caption), Average_Delivery_Time (attribute name), and AVGTIMDE (column name).

***IS Public Database Percent Space Used***
The percentage of the total Information Store space that is used by the public folder database. This attribute reports what percent of the total space the Public Folder Database is using. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PUBLIC_IS_DATABASE_PERCENT_SPACE_USED or PUBISDBPRC (historical name), *IS Public Database Percent Space Used* (caption), Public_IS_Database_Percent_Space_Used (attribute name), and PUBISDBPRC (column name).

***IS Public Percent Growth***
Public Folder growth percentage since the last interval sample was performed. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PUBLIC_IS_PERCENT_GROWTH or PUBISPRCGR (historical name), *IS Public Percent Growth* (caption), Public_IS_Percent_Growth (attribute name), and PUBISPRCGR (column name).

***IS Public Size***
Size of Public Information Store which maintains the messaging databases that contain all server-based public folders. Public Folder databases are managed in storage groups and include transaction log files. This reports the size of the Public Folder Information size in megabytes. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PUBLIC_IS_SIZE or PUBISSIZE (historical name), *IS Public Size* (caption), Public_IS_Size (attribute name), and PUBISSIZE (column name).

***Messages Queued For Submission***
The current number of submitted messages that are not processed by transport. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_QUEUED_FOR_SUBMISSION or MSGQUFSUB (historical name), *Messages Queued For Submission* (caption), Messages_Queued_For_Submission (attribute name), and MSGQUFSUB (column name).

***Name***
The name of Microsoft Exchange public folder store. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NAME_U or NAME (historical name), *Name* (caption), Name_U (attribute name), and NAME (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Public Store State***
The state of the public folder, such as mounted or demounted. The public folder can be demounted for maintenance. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Mounted (0), Dismounted (1), N/A (2). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PUBLIC_STORE_STATE or PUBSTSTATE (historical name), *Public Store State* (caption), Public_Store_State (attribute name), and PUBSTSTATE (column name).

***Replication Receive Queue Size***
The number of copied messages that are to be processed. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLICATION_RECEIVE_QUEUE_SIZE or REPRECQSZ (historical name), *Replication Receive Queue Size* (caption), Replication_Receive_Queue_Size (attribute name), and REPRECQSZ (column name).

***Send Queue Size***
The number of messages in the send queue of the public information store. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEND_QUEUE_SIZE or SNDQSIZE (historical name), *Send Queue Size* (caption), Send_Queue_Size (attribute name), and SNDQSIZE (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**Active Client Logons**
The number of clients that are currently logged on. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVE_CLIENT_LOGONS or ACTCLILO (historical name), Active Client Logons (caption), Active_Client_Logons (attribute name), and ACTCLILO (column name).

**Average Local Delivery Time**
The average time in seconds between the submission of a message to the public folder store and the delivery to all local recipients (recipients on the same server) for the last 10 messages. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_LOCAL_DELIVERY_TIME or AVGTIMLD (historical name), Average Local Delivery Time (caption), Average_Local_Delivery_Time (attribute name), and AVGTIMLD (column name).

**Categorization Count**
The number of categorizations that exist in the information store. Categorizations are created when a user creates a filtered view or performs a search. When the information store must maintain an excessive number of categorizations, performance can be affected. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CATEGORIZATION_COUNT or CATCOUNT (historical name), Categorization Count (caption), Categorization_Count (attribute name), and CATCOUNT (column name).

**Client Logons**
The total number of client logons since server startup. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_LOGONS or CLILOGON (historical name), Client Logons (caption), Client_Logons (attribute name), and CLILOGON (column name).

**Event History Deletes**
The number of events deleted from the event history of the public store since the start of the public store. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EVENT_HISTORY_DELETES or EVHIDELETS (historical name), Event History Deletes (caption), Event_History_Deletes (attribute name), and EVHIDELETS (column name).

**Event History Deletes/sec**
The rate at which events are deleted from the event history of the public store. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EVENT_HISTORY_DELETES/SEC or EVHIDELEPS (historical name), Event History Deletes/sec (caption), Event_History_Deletes/sec (attribute name), and EVHIDELEPS (column name).

**Event History Reads**
The number of events that are read from the event history of the public store since the start of the public store. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EVENT_HISTORY_READS or EVHIREADS (historical name), Event History Reads (caption), Event_History_Reads (attribute name), and EVHIREADS (column name).

**Event History Reads/sec**
The rate at which events are read from the event history of the public store. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EVENT_HISTORY_READS/SEC or EVHIREADPS (historical name), Event History Reads/sec (caption), Event_History_Reads/sec (attribute name), and EVHIREADPS (column name).

**Event History Writes**
The number of events that are written to the event history of the public store since the start of the public store. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EVENT_HISTORY_WRITES or EVHIWRITES (historical name), Event History Writes (caption), Event_History_Writes (attribute name), and EVHIWRITES (column name).

**Event History Writes/sec**
The rate at which events are written to the event history of the public store. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EVENT_HISTORY_WRITES/SEC or EVHIWRPS (historical name), Event History Writes/sec (caption), Event_History_Writes/sec (attribute name), and EVHIWRPS (column name).

**Folder opens/sec**
The number of times that requests to open folders are submitted to the information store per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDER_OPENS/SEC or FLDOPSEC (historical name), Folder opens/sec (caption), Folder_opens/sec (attribute name), and FLDOPSEC (column name).

**Logon Operations/sec**
The rate of Logon requests in the public store. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOGON_OPERATIONS/SEC or LOGOPPS (historical name), Logon Operations/sec (caption), Logon_Operations/sec (attribute name), and LOGOPPS (column name).

**Message Opens/sec**
The number of times that requests to open messages are submitted to the information store per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGE_OPENS/SEC or MSGOPSEC (historical name), Message Opens/sec (caption), Message_Opens/sec (attribute name), and MSGOPSEC (column name).

**Message Recipients Delivered**
The total number of recipients that have received a message since server startup. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGE_RECIPIENTS_DELIVERED or MSGRCDLV (historical name), Message Recipients Delivered (caption), Message_Recipients_Delivered (attribute name), and MSGRCDLV (column name).

**Message Recipients Delivered/min**
The number of messages that recipients receive per minute since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGE_RECIPIENTS_DELIVERED/MIN or MSGRCPMN (historical name), Message Recipients Delivered/min (caption), Message_Recipients_Delivered/min (attribute name), and MSGRCPMN (column name).

**Messages Delivered**
The total number of messages delivered to all recipients since server startup. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_DELIVERED or MSGSDELV (historical name), Messages Delivered (caption), Messages_Delivered (attribute name), and MSGSDELV (column name).

**Messages Delivered/min**
The number of messages delivered to all recipients per minute since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_DELIVERED/MIN or MSGDELMN (historical name), Messages Delivered/min (caption), Messages_Delivered/min (attribute name), and MSGDELMN (column name).

**Messages Sent**
The total number of messages sent to other storage providers since server startup. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_SENT or MSGSSENT (historical name), Messages Sent (caption), Messages_Sent (attribute name), and MSGSSENT (column name).

**Messages Sent/min**
The number of messages sent to other storage providers per minute since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_SENT/MIN or MSGSNTMN (historical name), Messages Sent/min (caption), Messages_Sent/min (attribute name), and MSGSNTMN (column name).

**Messages Submitted**
The total number of messages submitted by clients since server startup. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_SUBMITTED or MSGSSUBM (historical name), Messages Submitted (caption), Messages_Submitted (attribute name), and MSGSSUBM (column name).

**Messages Submitted/min**
The number of messages that are submitted by clients per minute since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_SUBMITTED/MIN or MSGSUBMN (historical name), Messages Submitted/min (caption), Messages_Submitted/min (attribute name), and MSGSUBMN (column name).

**Number of messages expired from public folders**
Number of messages expired from public folders since the server was started. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_MESSAGES_EXPIRED_FROM_PUBLIC_FOLDERS or MSGXPFLD (historical name), Number of messages expired from public folders (caption), Number_of_messages_expired_from_public_folders (attribute name), and MSGXPFLD (column name).

**Peak Client Logons**
The maximum number of concurrent client logons since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: PEAK_CLIENT_LOGONS or PEAKCLOG (historical name), Peak Client Logons (caption), Peak_Client_Logons (attribute name), and PEAKCLOG (column name).

**Public Folder Distinguished Name**
The distinguished name of the Public Folder database. The type is string with enumerated values. The following values are defined: N/A (N/A). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PUBLIC_FOLDER_DISTINGUISHED_NAME or DISTNAME (historical name), Public Folder Distinguished Name (caption), Public_Folder_Distinguished_Name (attribute name), and DISTNAME (column name).

**Receive Queue Size**
The number of messages in the receive queue of the public information store. This attribute is available only on Microsoft Exchange Server 2007, not on Microsoft Exchange Server 2010. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RECEIVE_QUEUE_SIZE or RECQSIZE (historical name), Receive Queue Size (caption), Receive_Queue_Size (attribute name), and RECQSIZE (column name).

**Replication Folder Changes Received**
The number of changes in the replication folder that are copied from other servers since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLICATION_FOLDER_CHANGES_RECEIVED or REPFCHGREC (historical name), Replication Folder Changes Received (caption), Replication_Folder_Changes_Received (attribute name), and REPFCHGREC (column name).

**Replication Folder Changes Sent**
The number of messages that are copied due to public folder hierarchy changes that are sent to other servers since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLICATION_FOLDER_CHANGES_SENT or REPFCHGSNT (historical name), Replication Folder Changes Sent (caption), Replication_Folder_Changes_Sent (attribute name), and REPFCHGSNT (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Single Instance Ratio**
The average number of references to each message in the public store. Valid values range from 1 to 2. This attribute is available only on Microsoft Exchange Server 2007, not on Microsoft Exchange Server 2010. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SINGLE_INSTANCE_RATIO or SGLINRAT (historical name), Single Instance Ratio (caption), Single_Instance_Ratio (attribute name), and SGLINRAT (column name).

**Total Count of Recoverable Items**
The total number of items retained for Item Recovery since the server was started. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_COUNT_OF_RECOVERABLE_ITEMS or TOTCRITM (historical name), Total Count of Recoverable Items (caption), Total_Count_of_Recoverable_Items (attribute name), and TOTCRITM (column name).

**Total Size of Recoverable Items**
The total size in kilobytes of items retained for Item Recovery since the server was started. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SIZE_OF_RECOVERABLE_ITEMS or TOTSRITM (historical name), Total Size of Recoverable Items (caption), Total_Size_of_Recoverable_Items (attribute name), and TOTSRITM (column name).

## MS Exchange IS Public Replication data set

This data set represents the MS Exchange IS Public Replication activity. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Name***
The name of the Microsoft Exchange IS Public Replication instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NAME_U or NAME (historical name), *Name* (caption), Name_U (attribute name), and NAME (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Replication Backfill Data Messages Received***
The number of replication messages received from other servers in response to backfill requests since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_BACKFILL_DATA_MESSAGES_RECEIVED or RBKDMREC (historical name), *Replication Backfill Data Messages Received* (caption), Replication_Backfill_Data_Messages_Received (attribute name), and RBKDMREC (column name).

***Replication Backfill Data Messages Sent***
The number of replication messages sent in response to backfill requests from other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_BACKFILL_DATA_MESSAGES_SENT or RBKDMSNT (historical name), *Replication Backfill Data Messages Sent* (caption), Replication_Backfill_Data_Messages_Sent (attribute name), and RBKDMSNT (column name).

***Replication Backfill Requests Received***
The number of backfill request replication messages that were received from other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_BACKFILL_REQUESTS_RECEIVED or RBKRQREC (historical name), *Replication Backfill Requests Received* (caption), Replication_Backfill_Requests_Received (attribute name), and RBKRQREC (column name).

***Replication Backfill Requests Sent***
The number of backfill request replication messages that were sent to other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_BACKFILL_REQUESTS_SENT or RBKRQSNT (historical name), *Replication Backfill Requests Sent* (caption), Replication_Backfill_Requests_Sent (attribute name), and RBKRQSNT (column name).

***Replication Status Messages Received***
The number of replication status request or response messages that were received from other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_STATUS_MESSAGES_RECEIVED or RSTMGREC (historical name), *Replication Status Messages Received* (caption), Replication_Status_Messages_Received (attribute name), and RSTMGREC (column name).

***Replication Status Messages Sent***
The number of replication status request or response messages that were sent to other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_STATUS_MESSAGES_SENT or RSTMGSNT (historical name), *Replication Status Messages Sent* (caption), Replication_Status_Messages_Sent (attribute name), and RSTMGSNT (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**Replication Folder Changes Received**
The number of folder changes that were replicated from other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_FOLDER_CHANGES_RECEIVED or RFOCHREC (historical name), Replication Folder Changes Received (caption), Replication_Folder_Changes_Received (attribute name), and RFOCHREC (column name).

**Replication Folder Changes Sent**
The number of replication messages due to public folder hierarchy changes that were sent to other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_FOLDER_CHANGES_SENT or RFOCHSNT (historical name), Replication Folder Changes Sent (caption), Replication_Folder_Changes_Sent (attribute name), and RFOCHSNT (column name).

**Replication Folder Data Messages Received**
The number of replication messages due to changes to items in public folders that were received from other service since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_FOLDER_DATA_MESSAGES_RECEIVED or RFODMREC (historical name), Replication Folder Data Messages Received (caption), Replication_Folder_Data_Messages_Received (attribute name), and RFODMREC (column name).

**Replication Folder Data Messages Sent**
The number of replication messages due to changes to items in public folders that were sent to other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_FOLDER_DATA_MESSAGES_SENT or RFODMSNT (historical name), Replication Folder Data Messages Sent (caption), Replication_Folder_Data_Messages_Sent (attribute name), and RFODMSNT (column name).

**Replication Folder Tree Messages Received**
The number of replication messages due to public folder hierarchy changes that were received from other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_FOLDER_TREE_MESSAGES_RECEIVED or RFOTMREC (historical name), Replication Folder Tree Messages Received (caption), Replication_Folder_Tree_Messages_Received (attribute name), and RFOTMREC (column name).

**Replication Folder Tree Messages Sent**
The number of replication messages due to public folder hierarchy changes that were sent to other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_FOLDER_TREE_MESSAGES_SENT or RFOTMSNT (historical name), Replication Folder Tree Messages Sent (caption), Replication_Folder_Tree_Messages_Sent (attribute name), and RFOTMSNT (column name).

**Replication Message Changes Received**
The number of changes to items in public folders that were received from other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_MESSAGE_CHANGES_RECEIVED or RMGCHREC (historical name), Replication Message Changes Received (caption), Replication_Message_Changes_Received (attribute name), and RMGCHREC (column name).

**Replication Message Changes Sent**
The number of changes to items in public folders that were replicated to other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_MESSAGE_CHANGES_SENT or RMGCHSNT (historical name), Replication Message Changes Sent (caption), Replication_Message_Changes_Sent (attribute name), and RMGCHSNT (column name).

**Replication Messages Received**
The total number of replication messages received from other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_MESSAGES_RECEIVED or RMSGRCVD (historical name), Replication Messages Received (caption), Replication_Messages_Received (attribute name), and RMSGRCVD (column name).

**Replication Messages Sent**
The total number of replication messages that were sent to other servers since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLICATION_MESSAGES_SENT or RMSGSENT (historical name), Replication Messages Sent (caption), Replication_Messages_Sent (attribute name), and RMSGSENT (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange IS Store data set

This data set monitors the Information Store activities on the Exchange Server. This data set is available in Exchange Server 2013, or later. This data set is a multi-instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every minute and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Mailbox Database Name***
The name of the mailbox database. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: MAILBOX_DATABASE_NAME or MBXDBNAME (historical name), *Mailbox Database Name* (caption), Mailbox_Database_Name (attribute name), and MBXDBNAME (column name).

***Mailbox Database Percent Space Used***
The percentage of Information Store space that is currently used by the mailbox database. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: N/A (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_DATABASE_PERCENT_SPACE_USED or MAILISDBPR (historical name), *Mailbox Database Percent Space Used* (caption), Mailbox_Database_Percent_Space_Used (attribute name), and MAILISDBPR (column name).

***Mailbox Database State***
The state of the mailbox store, such as mounted or dismounted. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Mounted (0), Dismounted (1), N/A (2). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_DATABASE_STATE or MAILSTSTAT (historical name), *Mailbox Database State* (caption), Mailbox_Database_State (attribute name), and MAILSTSTAT (column name).

***Messages Delivered/Sec***
The number of messages that are currently delivered per second to the database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_DELIVERED/SEC or MSGDLV (historical name), *Messages Delivered/Sec* (caption), Messages_Delivered/Sec (attribute name), and MSGDLV (column name).

***Messages Submitted/Sec***
The number of messages that are currently submitted per second from the database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_SUBMITTED/SEC or MSGSUB (historical name), *Messages Submitted/Sec* (caption), Messages_Submitted/Sec (attribute name), and MSGSUB (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***RPC Average Latency***
The average time (in milliseconds) of the MAPI RPC latency. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_AVERAGE_LATENCY or RPCAL (historical name), *RPC Average Latency* (caption), RPC_Average_Latency (attribute name), and RPCAL (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**Active Mailboxes**
The number of mailboxes that are currently active. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVE_MAILBOXES or ACTMBX (historical name), Active Mailboxes (caption), Active_Mailboxes (attribute name), and ACTMBX (column name).

**AddressInfo Cache Lookups/Sec**
The number of times the AddressInfo cache is currently accessed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ADDRESSINFO_CACHE_LOOKUPS/SEC or CLADRINFO (historical name), AddressInfo Cache Lookups/Sec (caption), AddressInfo_Cache_Lookups/Sec (attribute name), and CLADRINFO (column name).

**AddressInfo Cache Misses/Sec**
The number of cache access attempts per second when the required data was not found in the AddressInfo cache. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ADDRESSINFO_CACHE_MISSES/SEC or CMADRINFO (historical name), AddressInfo Cache Misses/Sec (caption), AddressInfo_Cache_Misses/Sec (attribute name), and CMADRINFO (column name).

**Async Notification Calls In RPC Pools**
The number of asynchronous notification calls that are currently waiting to be processed in all the RPC context handle pools. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ASYNC_NOTIFICATION_CALLS_IN_RPC_POOLS or RPCPPANC (historical name), Async Notification Calls In RPC Pools (caption), Async_Notification_Calls_In_RPC_Pools (attribute name), and RPCPPANC (column name).

**DatabaseInfo Cache Lookups/Sec**

The number of times the DatabaseInfocache is currently accessed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DATABASEINFO_CACHE_LOOKUPS/SEC or CLDBINFO (historical name), DatabaseInfo Cache Lookups/Sec (caption), DatabaseInfo_Cache_Lookups/Sec (attribute name), and CLDBINFO (column name).

**DatabaseInfo Cache Misses/Sec**

The number of cache access attempts per second when the required data was not found in the DatabaseInfo cache. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DATABASEINFO_CACHE_MISSES/SEC or CMDBINFO (historical name), DatabaseInfo Cache Misses/Sec (caption), DatabaseInfo_Cache_Misses/Sec (attribute name), and CMDBINFO (column name).

**DistributionListMembership Cache Lookups/Sec**

The number of times the DistributionListMembership cache is currently accessed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DISTRIBUTIONLISTMEMBERSHIP_CACHE_LOOKUPS/SEC or CLDISTLST (historical name), DistributionListMembership Cache Lookups/Sec (caption), DistributionListMembership_Cache_Lookups/Sec (attribute name), and CLDISTLST (column name).

**DistributionListMembership Cache Misses/Sec**

The number of cache access attempts per second when the required data was not found in the DistributionListMembership cache. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DISTRIBUTIONLISTMEMBERSHIP_CACHE_MISSES/SEC or CMDISTLST (historical name), DistributionListMembership Cache Misses/Sec (caption), DistributionListMembership_Cache_Misses/Sec (attribute name), and CMDISTLST (column name).

**Folders Created/Sec**

The number of folders that are currently created per second in the Information Store. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDERS_CREATED/SEC or FCSEC (historical name), Folders Created/Sec (caption), Folders_Created/Sec (attribute name), and FCSEC (column name).

**Folders Deleted/Sec**

The number of folders that are currently deleted per second in the Information Store. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDERS_DELETED/SEC or FDSEC (historical name), Folders Deleted/Sec (caption), Folders_Deleted/Sec (attribute name), and FDSEC (column name).

**Folders Opened/Sec**
The number of folders that are currently opened per second in the Information Store. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FOLDERS_OPENED/SEC or FOSEC (historical name), Folders Opened/Sec (caption), Folders_Opened/Sec (attribute name), and FOSEC (column name).

**LogicalIndex Cache Hits/Sec**
The number of cache access attempts per second when the required data was found in the LogicalIndex cache. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOGICALINDEX_CACHE_HITS/SEC or CHITLC (historical name), LogicalIndex Cache Hits/Sec (caption), LogicalIndex_Cache_Hits/Sec (attribute name), and CHITLC (column name).

**LogicalIndex Cache Lookups/Sec**
The number of times the LogicalIndex cache is currently accessed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOGICALINDEX_CACHE_LOOKUPS/SEC or CLLOGIDX (historical name), LogicalIndex Cache Lookups/Sec (caption), LogicalIndex_Cache_Lookups/Sec (attribute name), and CLLOGIDX (column name).

**LogicalIndex Cache Misses/Sec**
The number of cache access attempts per second when the required data was not found in the LogicalIndex cache. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOGICALINDEX_CACHE_MISSES/SEC or CMLOGIDX (historical name), LogicalIndex Cache Misses/Sec (caption), LogicalIndex_Cache_Misses/Sec (attribute name), and CMLOGIDX (column name).

**Mailbox Database Distinguished Name**
The distinguished name of the mailbox database. The type is string with enumerated values. The following values are defined: N/A (N/A). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_DATABASE_DISTINGUISHED_NAME or DISTNAME (historical name), Mailbox Database Distinguished Name (caption), Mailbox_Database_Distinguished_Name (attribute name), and DISTNAME (column name).

**Mailbox Database Percent Growth**
The percentage of Information Store growth since the last query was processed. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: N/A (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_DATABASE_PERCENT_GROWTH or MAILISPRGR (historical name), Mailbox Database Percent Growth (caption), Mailbox_Database_Percent_Growth (attribute name), and MAILISPRGR (column name).

**Mailbox Database Size**
The current size (in MB) of the mailbox databases in the Information Store. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MAILBOX_DATABASE_SIZE or MAILISSIZE (historical name), Mailbox Database Size (caption), Mailbox_Database_Size (attribute name), and MAILISSIZE (column name).

**Mailbox Level Maintenance Items**
The number of mailbox maintenance items. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_LEVEL_MAINTENANCE_ITEMS or MBXLVLMI (historical name), Mailbox Level Maintenance Items (caption), Mailbox_Level_Maintenance_Items (attribute name), and MBXLVLMI (column name).

**Mailbox Level Maintenances/Sec**
The number of maintenance tasks that are currently completed per second for the mailbox. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_LEVEL_MAINTENANCES/SEC or MBXLVLMS (historical name), Mailbox Level Maintenances/Sec (caption), Mailbox_Level_Maintenances/Sec (attribute name), and MBXLVLMS (column name).

**MailboxInfo Cache Hits/Sec**
The number of cache access attempts per second when the required data was found in the MailboxInfo cache. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOXINFO_CACHE_HITS/SEC or CHITMC (historical name), MailboxInfo Cache Hits/Sec (caption), MailboxInfo_Cache_Hits/Sec (attribute name), and CHITMC (column name).

**MailboxInfo Cache Lookups/Sec**
The number of times the MailboxInfo cache is currently accessed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOXINFO_CACHE_LOOKUPS/SEC or CLMBXINFO (historical name), MailboxInfo Cache Lookups/Sec (caption), MailboxInfo_Cache_Lookups/Sec (attribute name), and CLMBXINFO (column name).

**MailboxInfo Cache Misses/Sec**
The number of cache access attempts per second when the required data was not found in the MailboxInfo cache. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOXINFO_CACHE_MISSES/SEC or CMMBXINFO (historical name), MailboxInfo Cache Misses/Sec (caption), MailboxInfo_Cache_Misses/Sec (attribute name), and CMMBXINFO (column name).

**MAPI Messages Created/Sec**
The number of MAPI messages that are currently created per second in the database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAPI_MESSAGES_CREATED/SEC or MAPIMC (historical name), MAPI Messages Created/Sec (caption), MAPI_Messages_Created/Sec (attribute name), and MAPIMC (column name).

**MAPI Messages Modified/Sec**
The number of MAPI messages that are currently modified per second in the database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAPI_MESSAGES_MODIFIED/SEC or MAPIMM (historical name), MAPI Messages Modified/Sec (caption), MAPI_Messages_Modified/Sec (attribute name), and MAPIMM (column name).

**MAPI Messages Opened/Sec**
The number of MAPI messages that are currently opened per second in the database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAPI_MESSAGES_OPENED/SEC or MAPIMO (historical name), MAPI Messages Opened/Sec (caption), MAPI_Messages_Opened/Sec (attribute name), and MAPIMO (column name).

**Messages Created/Sec**
The number of messages that are currently created per second in the top-level folders of the Information Store. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_CREATED/SEC or MSGCR (historical name), Messages Created/Sec (caption), Messages_Created/Sec (attribute name), and MSGCR (column name).

**Messages Deleted/Sec**
The number of messages that are currently deleted per second in the top-level folders of the Information Store. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_DELETED/SEC or MSGDL (historical name), Messages Deleted/Sec (caption), Messages_Deleted/Sec (attribute name), and MSGDL (column name).

**Messages Opened/Sec**
The number of messages that are currently opened per second in the top-level folders of the Information Store. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_OPENED/SEC or MSGOPD (historical name), Messages Opened/Sec (caption), Messages_Opened/Sec (attribute name), and MSGOPD (column name).

**Messages Updated/Sec**
The number of messages that are currently updated per second in the top-level folders of the Information Store. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_UPDATED/SEC or MSGUPD (historical name), Messages Updated/Sec (caption), Messages_Updated/Sec (attribute name), and MSGUPD (column name).

**Number of Active RPC Context Handle Pools**
The number of RPC context handle pools that are currently active. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_POOL_POOLS or RPCPOOL (historical name), Number of Active RPC Context Handle Pools (caption), RPC_Pool_Pools (attribute name), and RPCPOOL (column name).

**Organization Container Cache Hits/Sec**
The number of cache access attempts per second when the required data was found in the OrganizationContainer cache. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ORGANIZATION_CONTAINER_CACHE_HITS/SEC or CHIOCC (historical name), Organization Container Cache Hits/Sec (caption), Organization_Container_Cache_Hits/Sec (attribute name), and CHIOCC (column name).

**Organization Container Cache Lookups/Sec**
The number of times the OrganizationContainer cache is currently accessed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ORGANIZATION_CONTAINER_CACHE_LOOKUPS/SEC or CLORGCONT (historical name), Organization Container Cache Lookups/Sec (caption), Organization_Container_Cache_Lookups/Sec (attribute name), and CLORGCONT (column name).

**Organization Container Cache Misses/Sec**
The number of cache access attempts per second when the required data was not found in the OrganizationContainer cache. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ORGANIZATION_CONTAINER_CACHE_MISSES/SEC or CMORGCONT (historical name), Organization Container Cache Misses/Sec (caption), Organization_Container_Cache_Misses/Sec (attribute name), and CMORGCONT (column name).

**Percent RPC Requests**
The percentage of MAPI RPC requests that are currently being processed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PERCENT_RPC_REQUESTS or RPCREQ (historical name), Percent RPC Requests (caption), Percent_RPC_Requests (attribute name), and RPCREQ (column name).

**Quarantined Mailbox Count**
The number of mailboxes that are currently quarantined per database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: QUARANTINED_MAILBOX_COUNT or QMCNT (historical name), Quarantined Mailbox Count (caption), Quarantined_Mailbox_Count (attribute name), and QMCNT (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**RPC Operations/Sec**
The number of RPC operations that are currently processed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_OPERATIONS/SEC or RPCOPR (historical name), RPC Operations/Sec (caption), RPC_Operations/Sec (attribute name), and RPCOPR (column name).

**RPC Packets/Sec**
The number of RPC packets that are currently processed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_PACKETS/SEC or RPCPAC (historical name), RPC Packets/Sec (caption), RPC_Packets/Sec (attribute name), and RPCPAC (column name).

**RPC Pool Context Handles**
The number of RPC context handles that are currently available in all the RPC context handle pools. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_POOL_CONTEXT_HANDLES or RPCPCH (historical name), RPC Pool Context Handles (caption), RPC_Pool_Context_Handles (attribute name), and RPCPCH (column name).

**RPC Requests**
The number of MAPI RPC requests that are currently running. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_REQUESTS or RPCREQS (historical name), RPC Requests (caption), RPC_Requests (attribute name), and RPCREQS (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Search Queries/Sec**
The number of search queries that are currently processed per second on the database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEARCH_QUERIES/SEC or SRACH (historical name), Search Queries/Sec (caption), Search_Queries/Sec (attribute name), and SRACH (column name).

**Search Results/Sec**
The number of search results that are currently generated per second during the database search operations. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEARCH_RESULTS/SEC or SRHRES (historical name), Search Results/Sec (caption), Search_Results/Sec (attribute name), and SRHRES (column name).

**Subobjects Cleaned/Sec**
The number of message attachments or embedded messages that are currently cleaned per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUBOBJECTS_CLEANED/SEC or SUBCLEAN (historical name), Subobjects Cleaned/Sec (caption), Subobjects_Cleaned/Sec (attribute name), and SUBCLEAN (column name).

**Subobjects Created/Sec**
The number of message attachments or embedded messages that are currently created per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUBOBJECTS_CREATED/SEC or SUBCREAT (historical name), Subobjects Created/Sec (caption), Subobjects_Created/Sec (attribute name), and SUBCREAT (column name).

**Subobjects Deleted/Sec**
The number of message attachments or embedded messages that are currently deleted per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUBOBJECTS_DELETED/SEC or SUBDELET (historical name), Subobjects Deleted/Sec (caption), Subobjects_Deleted/Sec (attribute name), and SUBDELET (column name).

**Subobjects Opened/Sec**
The number of message attachments or embedded messages that are currently opened per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUBOBJECTS_OPENED/SEC or SUBOPEN (historical name), Subobjects Opened/Sec (caption), Subobjects_Opened/Sec (attribute name), and SUBOPEN (column name).

**Subobjects Searches/Sec**
The number of search operations that are currently completed per second on the database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUBOBJECTS_SEARCHES/SEC or SUBSEAR (historical name), Subobjects Searches/Sec (caption), Subobjects_Searches/Sec (attribute name), and SUBSEAR (column name).

**Total Search Queries Completed In 10 To 60 Seconds**
The number of search queries that are currently processed per database, and for which the processing time was in the range 10 - 60 seconds. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SEARCH_QUERIES_COMPLETED_IN_10_TO_60_SECONDS or SEATENS (historical name), Total Search Queries Completed In 10 To 60 Seconds (caption), Total_Search_Queries_Completed_In_10_To_60_Seconds (attribute name), and SEATENS (column name).

**Total Search Queries Completed In 2 To 10 Seconds**
The number of search queries that are currently processed per database, and for which the processing time was in the range 2 - 10 seconds. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SEARCH_QUERIES_COMPLETED_IN_2_TO_10_SECONDS or SEATWOSS (historical name), Total Search Queries Completed In 2 To 10 Seconds (caption), Total_Search_Queries_Completed_In_2_To_10_Seconds (attribute name), and SEATWOSS (column name).

**Total Search Queries Completed In Less Than 1 Second**
The number of search queries that are currently processed per database, and for which the processing time was less than 1 second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SEARCH_QUERIES_COMPLETED_IN_LESS_THAN_1_SECOND or SEAFIVES (historical name), Total Search Queries Completed In Less Than 1 Second (caption), Total_Search_Queries_Completed_In_Less_Than_1_Second (attribute name), and SEAFIVES (column name).

**Total Search Queries Completed In Less Than 2 Seconds**
The number of search queries that are currently processed per database, and for which the processing time was less than 2 seconds. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SEARCH_QUERIES_COMPLETED_IN_LESS_THAN_2_SECONDS or SEATWOS (historical name), Total Search Queries Completed In Less Than 2 Seconds (caption), Total_Search_Queries_Completed_In_Less_Than_2_Seconds (attribute name), and SEATWOS (column name).

**Total Search Queries Completed In More Than 60 Seconds**
The number of search queries that are currently processed per database, and for which the processing time was greater than 60 seconds. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SEARCH_QUERIES_COMPLETED_IN_MORE_THAN_60_SECONDS or SEASIXTY (historical name), Total Search Queries Completed In More Than 60 Seconds (caption), Total_Search_Queries_Completed_In_More_Than_60_Seconds (attribute name), and SEASIXTY (column name).

**Total Searches**
The total number of search operations per database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SEARCHES or TOTSEAR (historical name), Total Searches (caption), Total_Searches (attribute name), and TOTSEAR (column name).

**Total Searches In Progress**
The number of search operations that are currently being processed per database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SEARCHES_IN_PROGRESS or TOTSEARP (historical name), Total Searches In Progress (caption), Total_Searches_In_Progress (attribute name), and TOTSEARP (column name).

**Total Successful Search Queries**
The number of search queries that are currently completed per database. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SUCCESSFUL_SEARCH_QUERIES or SUCQUE (historical name), Total Successful Search Queries (caption), Total_Successful_Search_Queries (attribute name), and SUCQUE (column name).

## MS Exchange Lotus Notes Connector Summary data set

This data set provides details about the Lotus Notes connector. This data set is a single instance data set.

This data set contains the following attributes:

**Message Queued Inbound**
The number of messages that are queued to be received from clients and are waiting to be delivered to Exchange Server. The type is integer (32-bit gauge).

The following names are defined for this attribute: MESSAGE_QUEUED_INBOUND or LOTMSGQIN (historical name), Message Queued Inbound (caption), Message_Queued_Inbound (attribute name), and LOTMSGQIN (column name).

**Message Queued Outbound**
The number of messages that are queued to be sent from Exchange Server and are waiting to be delivered to clients. The type is integer (32-bit gauge).

The following names are defined for this attribute: MESSAGE_QUEUED_OUTBOUND or LOTMSGQOUT (historical name), Message Queued Outbound (caption), Message_Queued_Outbound (attribute name), and LOTMSGQOUT (column name).

**Messages Received**
The total number of messages received through Lotus Notes Connector since the connector was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_RECEIVED or LOTMSGSREC (historical name), Messages Received (caption), Messages_Received (attribute name), and LOTMSGSREC (column name).

**Messages Rejected From Exchange**
The total number of messages rejected from Exchange Server since the connector was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_REJECTED_FROM_EXCHANGE or EXCMSGSREJ (historical name), Messages Rejected From Exchange (caption), Messages_Rejected_From_Exchange (attribute name), and EXCMSGSREJ (column name).

**Messages Rejected From Notes**
The total number of messages rejected from Lotus Notes Connector since the connector was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_REJECTED_FROM_NOTES or LOTMSGSREJ (historical name), Messages Rejected From Notes (caption), Messages_Rejected_From_Notes (attribute name), and LOTMSGSREJ (column name).

**Messages Sent**
The total number of messages sent by Lotus Notes Connector since the connector was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_SENT or LOTMSGSSNT (historical name), Messages Sent (caption), Messages_Sent (attribute name), and LOTMSGSSNT (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Rate Of Messages Received**
The number of messages received from clients per hour since the Lotus Notes Connector was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: RATE_OF_MESSAGES_RECEIVED or LOTMSGRECR (historical name), Rate Of Messages Received (caption), Rate_Of_Messages_Received (attribute name), and LOTMSGRECR (column name).

**Rate Of Messages Sent**
The number of messages sent to clients per hour since the Lotus Notes Connector was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: RATE_OF_MESSAGES_SENT or LOTMSGSNTR (historical name), Rate Of Messages Sent (caption), Rate_Of_Messages_Sent (attribute name), and LOTMSGSNTR (column name).

**Rate Of Volume Received**
The number of bytes received from clients per hour since the Lotus Notes Connector was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: RATE_OF_VOLUME_RECEIVED or LOTVOLRECR (historical name), Rate Of Volume Received (caption), Rate_Of_Volume_Received (attribute name), and LOTVOLRECR (column name).

**Rate Of Volume Sent**
The number of bytes sent to clients per hour since the Lotus Notes Connector was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: RATE_OF_VOLUME_SENT or LOTVOLSNTR (historical name), Rate Of Volume Sent (caption), Rate_Of_Volume_Sent (attribute name), and LOTVOLSNTR (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Volume Queued Inbound**
The number of bytes that are queued to be received from clients and are waiting to be delivered to Exchange Server. The type is integer (32-bit gauge).

The following names are defined for this attribute: VOLUME_QUEUED_INBOUND or LOTVOLQIN (historical name), Volume Queued Inbound (caption), Volume_Queued_Inbound (attribute name), and LOTVOLQIN (column name).

**Volume Queued Outbound**
The number of bytes that are queued to be sent from Exchange Server and are waiting to be delivered to clients. The type is integer (32-bit gauge).

The following names are defined for this attribute: VOLUME_QUEUED_OUTBOUND or LOTVOLQOUT (historical name), Volume Queued Outbound (caption), Volume_Queued_Outbound (attribute name), and LOTVOLQOUT (column name).

**Volume Received**
The number of message bytes received from the Lotus Notes system during the collection cycle since the last sampling interval. The type is integer (32-bit gauge).

The following names are defined for this attribute: VOLUME_RECEIVED or LOTVOLREC (historical name), Volume Received (caption), Volume_Received (attribute name), and LOTVOLREC (column name).

**Volume Sent**
The number of message bytes sent by the Lotus Notes system during the collection cycle since the last sampling interval. The type is integer (32-bit gauge).

The following names are defined for this attribute: VOLUME_SENT or LOTVOLSNT (historical name), Volume Sent (caption), Volume_Sent (attribute name), and LOTVOLSNT (column name).

## MS Exchange Mail Submission data set
This data set contains attributes that are related to the Microsoft Exchange Mail Submission service.

This data set contains the following attributes:

**Aggregate Shadow Queue Length**
The current number of messages in all shadow queues. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AGGREGATE_SHADOW_QUEUE_LENGTH or ASQL (historical name), Aggregate Shadow Queue Length (caption), Aggregate_Shadow_Queue_Length (attribute name), and ASQL (column name).

**Failed Submissions/Sec**
The number of message submissions that have failed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILED_SUBMISSIONS/SEC or FSPS (historical name), Failed Submissions/Sec (caption), Failed_Submissions/Sec (attribute name), and FSPS (column name).

**Hub Servers**
The total number of Hub Transport servers that have been available in the same Active Directory site since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: HUB_SERVERS or HUBSVR (historical name), Hub Servers (caption), Hub_Servers (attribute name), and HUBSVR (column name).

**Hub Servers In Retry**
The number of Hub Transport servers that have been in retry mode since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: HUB_SERVERS_IN_RETRY or HUBSVRR (historical name), Hub Servers In Retry (caption), Hub_Servers_In_Retry (attribute name), and HUBSVRR (column name).

**Hub Transport Servers Percent Active**
The current percentage of active Hub Transport servers that are available in the same Active Directory site. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: HUB_TRANSPORT_SERVERS_PERCENT_ACTIVE or HTSPA (historical name), Hub Transport Servers Percent Active (caption), Hub_Transport_Servers_Percent_Active (attribute name), and HTSPA (column name).

**Mail Submission Instance Name**
The name of the Microsoft Exchange Mail Submission instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: MAIL_SUBMISSION_INSTANCE_NAME or MSINST (historical name), Mail Submission Instance Name (caption), Mail_Submission_Instance_Name (attribute name), and MSINST (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Shadow Message Resubmissions Total**
The current number of shadow messages that are waiting for resubmission in all Submission queues. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SHADOW_MESSAGE_RESUBMISSIONS_TOTAL or SMRT (historical name), Shadow Message Resubmissions Total (caption), Shadow_Message_Resubmissions_Total (attribute name), and SMRT (column name).

**Shadow Queue Auto Discards Total**
The total number of shadow messages that have been deleted from all shadow queues because the messages have exceeded the auto discard timeout interval since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SHADOW_QUEUE_AUTO_DISCARDS_TOTAL or SQADT (historical name), Shadow Queue Auto Discards Total (caption), Shadow_Queue_Auto_Discards_Total (attribute name), and SQADT (column name).

**Shadow Resubmission Queue Length**
The current number of shadow messages that are waiting for resubmission in the Submission queue. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SHADOW_RESUBMISSION_QUEUE_LENGTH or SRSOL (historical name), Shadow Resubmission Queue Length (caption), Shadow_Resubmission_Queue_Length (attribute name), and SRSOL (column name).

**Successful Submissions**
The total number of successful message submissions to the Hub Transport server since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUCCESSFUL_SUBMISSIONS or SUCCSUB (historical name), Successful Submissions (caption), Successful_Submissions (attribute name), and SUCCSUB (column name).

**Successful Submissions Per Second**
The total number of successful message submissions to the Hub Transport server per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUCCESSFUL_SUBMISSIONS_PER_SECOND or SUCCSUBS (historical name), Successful Submissions Per Second (caption), Successful_Submissions_Per_Second (attribute name), and SUCCSUBS (column name).

**Temporary Submission Failures/Sec**
The number of message submissions that have temporarily failed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TEMPORARY_SUBMISSION_FAILURES/SEC or TSFPS (historical name), Temporary Submission Failures/Sec (caption), Temporary_Submission_Failures/Sec (attribute name), and TSFPS (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Mail Tips data set

This data set contains attributes that are related to the MailTips transport functionality.

This data set contains the following attributes:

**Automatic Replies One Second**
The current percentage of Automatic Replies MailTip queries that are returned by the Client Access server in 1 second. The queries are returned for the mailboxes for which Automatic Replies is turned on. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AUTOMATIC_REPLIES_ONE_SEC or ARONES (historical name), Automatic Replies One Second (caption), Automatic_Replies_One_Sec (attribute name), and ARONES (column name).

**Automatic Replies Ten Seconds**
The current percentage of Automatic Replies MailTip queries that are returned by the Client Access server in 10 seconds. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AUTOMATIC_REPLIES_TEN_SEC or ARTENS (historical name), Automatic Replies Ten Seconds (caption), Automatic_Replies_Ten_Sec (attribute name), and ARTENS (column name).

**Automatic Replies Three Seconds**
The current percentage of Automatic Replies MailTip queries that are returned by the Client Access server in 3 seconds. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AUTOMATIC_REPLIES_THREE_SEC or ARTHREES (historical name), Automatic Replies Three Seconds (caption), Automatic_Replies_Three_Sec (attribute name), and ARTHREES (column name).

**Automatic Replies Turned On**
The total number of MailTip queries that have been returned by the Client Access server on mailboxes with Automatic Replies turned on since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AUTOMATIC_REPLIES_TURNED_ON or ARTON (historical name), Automatic Replies Turned On (caption), Automatic_Replies_Turned_On (attribute name), and ARTON (column name).

**Average Active Directory Response Time**
The average response time (in milliseconds) that the Active Directory takes to respond to the GetMailTips request. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_ACTIVE_DIRECTORY_RESPONSE_TIME or AADRT (historical name), Average Active Directory Response Time (caption), Average_Active_Directory_Response_Time (attribute name), and AADRT (column name).

**GetMailTips Average Recipient Number**
The average number of recipients that send GetMailTips requests. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GETMAILTIPS_AVERAGE_RECIPIENT_NUMBER or GMTARN (historical name), GetMailTips Average Recipient Number (caption), GetMailTips_Average_Recipient_Number (attribute name), and GMTARN (column name).

**GetMailTips Average Response Time**
The average time (in milliseconds) that is spent between the start and end of a MailTips query. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GETMAILTIPS_AVERAGE_RESPONSE_TIME or GMTART (historical name), GetMailTips Average Response Time (caption), GetMailTips_Average_Response_Time (attribute name), and GMTART (column name).

**GetMailTips Average Response Time For GroupMetrics Queries**
The average amount of time (in milliseconds) that is spent between the start and end of a MailTips GroupMetrics request. This attribute is not available in Exchange Server 2013. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GETMAILTIPS_AVERAGE_RESPONSE_TIME_FOR_GROUPMETRICS_QUERIES or GMTARTGM (historical name), GetMailTips Average Response Time For GroupMetrics Queries (caption), GetMailTips_Average_Response_Time_for_GroupMetrics_Queries (attribute name), and GMTARTGM (column name).

**GetMailTipsConfiguration Average Response Time**
The average amount of time (in milliseconds) that is spent between the start and end of a GetMailTipsConfiguration request. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GETMAILTIPSCONFIGURATION_AVERAGE_RESPONSE_TIME or GMTCART (historical name), GetMailTipsConfiguration Average Response Time (caption), GetMailTipsConfiguration_Average_Response_Time (attribute name), and GMTCART (column name).

**GetServiceConfiguration Average Response Time**
The average amount of time (in milliseconds) that is spent between the start and end of a GetServiceConfiguration request. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GETSERVICECONFIGURATION_AVERAGE_RESPONSE_TIME or GSCART (historical name), GetServiceConfiguration Average Response Time (caption), GetServiceConfiguration_Average_Response_Time (attribute name), and GSCART (column name).

**Group Metrics Queries**
The number of queries that were sent per second to read the group metrics data. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following

values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: COUNT_OF_GROUP_METRICS_QUERIES or COGMQS (historical name), Group Metrics Queries (caption), Count_Of_Group_Metrics_Queries (attribute name), and COGMQS (column name).

**Intra Site MailTips Failures/Sec**
The current number of intrasite mailbox queries that have failed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: INTRA_SITE_MAILTIPS_FAILURES/SEC or ISMTFPS (historical name), Intra Site MailTips Failures/Sec (caption), Intra_Site_MailTips_Failures/sec (attribute name), and ISMTFPS (column name).

**Mailbox Full Answered Within One Second**
The current percentage of Mailbox Full MailTip queries that are returned by the Client Access server in 1 second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOXFULL_ANSWERED_WITHIN_ONE_SECOND or MBFAWOS (historical name), Mailbox Full Answered Within One Second (caption), MailboxFull_Answered_Within_One_Second (attribute name), and MBFAWOS (column name).

**Mailbox Full Answered Within Ten Seconds**
The current percentage of Mailbox Full MailTip queries that are returned by the Client Access server in 10 seconds. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOXFULL_ANSWERED_WITHIN_TEN_SECONDS or MBFAWTS (historical name), Mailbox Full Answered Within Ten Seconds (caption), MailboxFull_Answered_Within_Ten_Seconds (attribute name), and MBFAWTS (column name).

**Mailbox Full Answered Within Three Seconds**
The current percentage of Mailbox Full MailTip queries that are returned by the Client Access server in 3 seconds. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOXFULL_ANSWERED_WITHIN_THREE_SECONDS or MBFAWTHS (historical name), Mailbox Full Answered Within Three Seconds (caption), MailboxFull_Answered_Within_Three_Seconds (attribute name), and MBFAWTHS (column name).

**MailboxFull With Positive Responses**
The total number of GetMailTips MailboxFull queries that returned the mailbox full status for the recipient since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOXFULL_WITH_POSITIVE_RESPONSES or MBFWPS (historical name), MailboxFull With Positive Responses (caption), MailboxFull_With_Positive_Responses (attribute name), and MBFWPS (column name).

**MailTips Accumulated Exception Recipients**
The total number of email clients that received an exception while querying the Mail Tips web service extension since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILTIPS_ACCUMULATED_EXCEPTION_RECIPIENTS or MTAER (historical name), MailTips Accumulated Exception Recipients (caption), MailTips_Accumulated_Exception_Recipients (attribute name), and MTAER (column name).

**MailTips Accumulated Mailbox Sourced Recipients**

The total number of mailbox sourced MailTips recipients that have been processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILTIPS_ACCUMULATED_MAILBOX_SOURCED_RECIPIENTS or MTAMSR (historical name), MailTips Accumulated Mailbox Sourced Recipients (caption), MailTips_Accumulated_Mailbox_Sourced_Recipients (attribute name), and MTAMSR (column name).

**MailTips Accumulated Recipients**

The total number of MailTips recipients that have been processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILTIPS_ACCUMULATED_RECIPIENTS or MTAREP (historical name), MailTips Accumulated Recipients (caption), MailTips_Accumulated_Recipients (attribute name), and MTAREP (column name).

**MailTips Accumulated Requests**

The total number of MailTips requests that have been processed since the service was started. This attribute is available in Microsoft Exchange Server 2010 SP1 only. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILTIPS_ACCUMULATED_REQUESTS or MTAREQ (historical name), MailTips Accumulated Requests (caption), MailTips_Accumulated_Requests (attribute name), and MTAREQ (column name).

**MailTips Current Requests**

The number of MailTips web service requests that are currently processed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILTIPS_CURRENT_REQUESTS or MTCTR (historical name), MailTips Current Requests (caption), MailTips_Current_Requests (attribute name), and MTCTR (column name).

**MailTips Queries Answered Within One Second**

The current percentage of all GetMailTips queries that are returned by the Client Access server in 1 second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILTIPS_QUERIES_ANSWERED_WITHIN_ONE_SECOND or MTQAWOS (historical name), MailTips Queries Answered Within One Second (caption), MailTips_Queries_Answered_Within_One_Second (attribute name), and MTQAWOS (column name).

**MailTips Queries Answered Within Ten Seconds**

The current percentage of all GetMailTips queries that are returned by the Client Access server in 10 seconds. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILTIPS_QUERIES_ANSWERED_WITHIN_TEN_SECOND or MTQAWTNS (historical name), MailTips

Queries Answered Within Ten Seconds (caption), MailTips_Queries_Answered_Within_Ten_Second (attribute name), and MTQAWTNS (column name).

**MailTips Queries Answered Within Three Seconds**
The current percentage of all GetMailTips queries that are returned by the Client Access server in 3 seconds. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILTIPS_QUERIES_ANSWERED_WITHIN_THREE_SECOND or MTQAWTHS (historical name), MailTips Queries Answered Within Three Seconds (caption), MailTips_Queries_Answered_Within_Three_Second (attribute name), and MTQAWTHS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Mailbox Detail data set

This data set provides details about the mailbox usage within a storage group. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Email Addresses**
Email addresses in Active Directory naming format suitable for representation and identification in Exchange Server. Multiple email addresses will be separated by a semicolon. The type is string with enumerated values. The following values are defined: N/P (N/P). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EMAIL_ADDRESSES or EMAILADDRS (historical name), Email Addresses (caption), Email_Addresses (attribute name), and EMAILADDRS (column name).

**Information Store Name**
The name of the information store. The type is string.

The following names are defined for this attribute: INFORMATION_STORE_NAME or ISNAME (historical name), Information Store Name (caption), Information_Store_Name (attribute name), and ISNAME (column name).

**Issue Warning Quota(MB)**
The size (in MB) of the mailbox that triggers a warning message when the mailbox size reaches or exceeds the specified maximum limit. The type is real number (32-bit numeric property) with two decimal places of precision with enumerated values. The following values are defined: Unlimited (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ISSUE_WARNING_QUOTA or ISSWRNQTA (historical name), Issue Warning Quota(MB) (caption), Issue_Warning_Quota (attribute name), and ISSWRNQTA (column name).

**Last Logon**
The last date and time a user logged into a mailbox. The type is timestamp with enumerated values. The following values are defined: N/A (0000000000000001), N/C (0000000000000002), N/P (0000000000000003). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LAST_LOGON or MBXLASTLGN (historical name), Last Logon (caption), Last_Logon (attribute name), and MBXLASTLGN (column name).

**Mailbox Database Name**
The name of the database where the mailbox is created. The type is string.

The following names are defined for this attribute: MAILBOX_DATABASE_NAME or MDBNAME (historical name), Mailbox Database Name (caption), Mailbox_Database_Name (attribute name), and MDBNAME (column name).

**Mailbox Max Send Receive Size(MB)**
The maximum size (in MB) of the mailbox at which messages cannot be sent or received by the mailbox. The type is real number (32-bit numeric property) with two decimal places of precision with enumerated values. The following values are defined: Unlimited (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_MAX_SEND_RECEIVE_SIZE or MAXSRSIZE (historical name), Mailbox Max Send Receive Size(MB) (caption), Mailbox_Max_Send_Receive_Size (attribute name), and MAXSRSIZE (column name).

**Mailbox Max Size(MB)**
The maximum size Mailbox can reach in megabytes. If Mailbox Max Size is configured as unlimited, the amount of free space on the hard disk drive is displayed. The type is real number (32-bit numeric property) with two decimal places of precision with enumerated values. The following values are defined: Unlimited (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_MAX_SIZE or MBXMAXSIZE (historical name), Mailbox Max Size(MB) (caption), Mailbox_Max_Size (attribute name), and MBXMAXSIZE (column name).

**Mailbox Name**
The name assigned to Mailbox Account by Microsoft Exchange Server when mailbox was created. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: MAILBOX_NAME or MBXNAME (historical name), Mailbox Name (caption), Mailbox_Name (attribute name), and MBXNAME (column name).

**Mailbox Size(MB)**
The size of mailbox in megabytes. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MAILBOX_SIZE or MBXSIZE (historical name), Mailbox Size(MB) (caption), Mailbox_Size (attribute name), and MBXSIZE (column name).

**Mailbox Type**
The type of mailbox, such as public or private. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Private (1), PublicFolderPrimary (2),

PublicFolderSecondary (3), TeamMailbox (4), N/A (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_TYPE or MBXTYPE (historical name), Mailbox Type (caption), Mailbox_Type (attribute name), and MBXTYPE (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Number Of Messages**
The total number of messages in mailbox since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: NUMBER_OF_MESSAGES or NUMMBXMSGS (historical name), Number Of Messages (caption), Number_Of_Messages (attribute name), and NUMMBXMSGS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Storage Group Name**
The name of the storage group. The type is string.

The following names are defined for this attribute: STORAGE_GROUP_NAME or SGNAME (historical name), Storage Group Name (caption), Storage_Group_Name (attribute name), and SGNAME (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Mailbox Replication Service data set

This data set represents Exchange Server Mailbox Replication Services. The data set is available in Exchange server 2010, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Last Scan Duration(msec)**
The duration of the last scan for jobs. The type is integer (32-bit gauge).

The following names are defined for this attribute: LAST_SCAN_DURATION_MSEC or LSCNDUR (historical name), Last Scan Duration(msec) (caption), Last_Scan_Duration_msec (attribute name), and LSCNDUR (column name).

**Last Scan Timestamp (UTC)**
The UTC timestamp of the last time this service was scanned for jobs. The type is integer (64-bit gauge).

The following names are defined for this attribute: LAST_SCAN_TIMESTAMP_UTC or LSCNTIM (historical name), Last Scan Timestamp (UTC) (caption), Last_Scan_Timestamp_UTC (attribute name), and LSCNTIM (column name).

**Mailbox databases in Active Directory site**
The number of active mailbox databases in the active directory site that are currently scanned for jobs. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_DATABASES_IN_ACTIVE_DIRECTORY_SITE or MDBINACTD (historical name), Mailbox databases in Active Directory site (caption), Mailbox_databases_in_Active_Directory_site (attribute name), and MDBINACTD (column name).

**Mailbox servers in Active Directory site**
The total number of mailbox servers in the active directory site that are currently scanned for jobs. This attribute is not available in Exchange Server 2013. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_SERVERS_IN_ACTIVE_DIRECTORY_SITE or MBSINACTD (historical name), Mailbox servers in Active Directory site (caption), Mailbox_servers_in_Active_Directory_site (attribute name), and MBSINACTD (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Unreachable Databases**
The number of mailbox databases that are not scanned for jobs. The type is integer (32-bit gauge).

The following names are defined for this attribute: UNREACHABLE_DATABASES or UNRCHDB (historical name), Unreachable Databases (caption), Unreachable_Databases (attribute name), and UNRCHDB (column name).

**Unreachable Servers**
The number of unreachable mailbox servers. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: UNREACHABLE_SERVERS or UNRCHSRVR (historical name), Unreachable Servers (caption), Unreachable_Servers (attribute name), and UNRCHSRVR (column name).

## MS Exchange Mailbox Replication Service per Mdb data set

This data set provides information about the activities of the mailbox replication service. The data set is available in Exchange server 2010, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Active Moves Total Moves**
The number of active moves. The type is integer (32-bit gauge).

The following names are defined for this attribute: ACTIVE_MOVES_TOTAL_MOVES or AMVTOTMV (historical name), Active Moves Total Moves (caption), Active_Moves_Total_Moves (attribute name), and AMVTOTMV (column name).

**Last Scan Duration (msec)**
The duration of the last job scan for the database. The type is integer (32-bit gauge).

The following names are defined for this attribute: LAST_SCAN_DURATION_MSEC or LSCNDUR (historical name), Last Scan Duration (msec) (caption), Last_Scan_Duration_msec (attribute name), and LSCNDUR (column name).

**Last Scan Timestamp (UTC)**
The UTC timestamp of the last job scan for the database. The type is integer (32-bit gauge).

The following names are defined for this attribute: LAST_SCAN_TIMESTAMP_UTC_V623 or LSCNTIME (historical name), Last Scan Timestamp (UTC) (caption), Last_Scan_Timestamp_UTC_v623 (attribute name), and LSCNTIME (column name).

**Last Scan Timestamp (UTC) (Superseded)**
The UTC timestamp of the last job scan for the database. The type is integer (64-bit gauge).

The following names are defined for this attribute: LAST_SCAN_TIMESTAMP_UTC or LSCNTIM (historical name), Last Scan Timestamp (UTC) (Superseded) (caption), Last_Scan_Timestamp_UTC (attribute name), and LSCNTIM (column name).

**Mailbox Database Name**
The name of the mailbox database instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: MAILBOX_DATABASE_NAME_U or MBXDBNAM (historical name), Mailbox Database Name (caption), Mailbox_Database_Name_U (attribute name), and MBXDBNAM (column name).

**MDB Health Content Indexing Lagging**
The database health indicator shows that the content indexing is lagging. The type is integer (32-bit gauge).

The following names are defined for this attribute: MDB_HEALTH_CONTENT_INDEXING_LAGGING or MDBHCONIL (historical name), MDB Health Content Indexing Lagging (caption), MDB_Health_Content_Indexing_Lagging (attribute name), and MDBHCONIL (column name).

**MDB Health Database Replication Lagging**
The database health indicator shows that the database replication is lagging. The type is integer (32-bit gauge).

The following names are defined for this attribute: MDB_HEALTH_DATABASE_REPLICATION_LAGGING or MDBHDBRL (historical name), MDB Health Database Replication Lagging (caption), MDB_Health_Database_Replication_Lagging (attribute name), and MDBHDBRL (column name).

**MDB Health Scan Failure**
The database health indicator shows that the MRS has encountered an exception while scanning for jobs. The type is integer (32-bit gauge).

The following names are defined for this attribute: MDB_HEALTH_SCAN_FAILURE or MDBHSCNF (historical name), MDB Health Scan Failure (caption), MDB_Health_Scan_Failure (attribute name), and MDBHSCNF (column name).

**MDB Queue Auto Suspended**

The number of moves that are currently auto-suspended in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_AUTO_SUSPENDED or MDBQASUS (historical name), MDB Queue Auto Suspended (caption), MDB_Queue_Auto_Suspended (attribute name), and MDBQASUS (column name).

**MDB Queue Completed**

The number of moves that are currently completed in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_COMPLETED or MDBQCMPD (historical name), MDB Queue Completed (caption), MDB_Queue_Completed (attribute name), and MDBQCMPD (column name).

**MDB Queue Completed with Warnings**

The number of moves that are currently completed with warnings in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_COMPLETED_WITH_WARNINGS or MDBQCWWRN (historical name), MDB Queue Completed with Warnings (caption), MDB_Queue_Completed_with_Warnings (attribute name), and MDBQCWWRN (column name).

**MDB Queue Completing**

The number of moves that are currently in the CompletionInProgress state in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_COMPLETING or MDBQCMPG (historical name), MDB Queue Completing (caption), MDB_Queue_Completing (attribute name), and MDBQCMPG (column name).

**MDB Queue Failed**

The number of moves that are currently failed in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_FAILED or MDBQFAIL (historical name), MDB Queue Failed (caption), MDB_Queue_Failed (attribute name), and MDBQFAIL (column name).

**MDB Queue In Progress**

The number of moves that are currently in progress in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_IN_PROGRESS or MDBQIPRG (historical name), MDB Queue In Progress (caption), MDB_Queue_In_Progress (attribute name), and MDBQIPRG (column name).

**MDB Queue Pull**
The number of pull moves that are currently in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_PULL or MDBQPULL (historical name), MDB Queue Pull (caption), MDB_Queue_Pull (attribute name), and MDBQPULL (column name).

**MDB Queue Push**
The number of push moves that are currently in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_PUSH or MDBQPUSH (historical name), MDB Queue Push (caption), MDB_Queue_Push (attribute name), and MDBQPUSH (column name).

**MDB Queue Queued**
The number of queued moves that are currently in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_QUEUED or MDBQQD (historical name), MDB Queue Queued (caption), MDB_Queue_Queued (attribute name), and MDBQQD (column name).

**MDB Queue Remote**
The number of remote (cross-org) moves that are currently in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_REMOTE or MDBQRMT (historical name), MDB Queue Remote (caption), MDB_Queue_Remote (attribute name), and MDBQRMT (column name).

**MDB Queue Remote Legacy**
The number of remote legacy (cross-org) moves that are currently in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_REMOTE_LEGACY or MDBQRMTL (historical name), MDB Queue Remote Legacy (caption), MDB_Queue_Remote_Legacy (attribute name), and MDBQRMTL (column name).

**MDB Queue Suspended**
The number of suspended moves that are currently in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_SUSPENDED or MDBQSUS (historical name), MDB Queue Suspended (caption), MDB_Queue_Suspended (attribute name), and MDBQSUS (column name).

**MDB Queue Total**
The total number of move requests that are in the mailbox database queue. This attribute is not available in Exchange Server 2013. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MDB_QUEUE_TOTAL or MDBQTOT (historical name), MDB Queue Total (caption), MDB_Queue_Total (attribute name), and MDBQTOT (column name).

**Move Requests Canceled/hour**
The average rate of move requests cancellation. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_CANCELED/HOUR or MVRQCAN (historical name), Move Requests Canceled/hour (caption), Move_Requests_Canceled/hour (attribute name), and MVRQCAN (column name).

**Move Requests Completed with Warnings/hour**
The average rate of move requests completion with warnings. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_COMPLETED_WITH_WARNINGS/HOUR or MVRQCWWRN (historical name), Move Requests Completed with Warnings/hour (caption), Move_Requests_Completed_with_Warnings/hour (attribute name), and MVRQCWWRN (column name).

**Move Requests Completed/hour**
The average rate of move requests completion. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_COMPLETED/HOUR or MVRQCMPD (historical name), Move Requests Completed/hour (caption), Move_Requests_Completed/hour (attribute name), and MVRQCMPD (column name).

**Move Requests Failed (Bad Item Limit)/hour**
The average rate of move request failures because a bad-item limit was exceeded. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_FAILED_BAD_ITEM_LIMIT/HOUR or MVRQFLBL (historical name), Move Requests Failed (Bad Item Limit)/hour (caption), Move_Requests_Failed_Bad_Item_Limit/hour (attribute name), and MVRQFLBL (column name).

**Move Requests Failed (Network)/hour**
The average rate of move request failures because of network issues. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_FAILED_NETWORK/HOUR or MVRQFLNT (historical name), Move Requests Failed (Network)/hour (caption), Move_Requests_Failed_Network/hour (attribute name), and MVRQFLNT (column name).

**Move Requests Failed (Other)/hour**
The average rate of move request failures because of other issues. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_FAILED_OTHER/HOUR or MVRQFLOTR (historical name), Move Requests Failed (Other)/hour (caption), Move_Requests_Failed_Other/hour (attribute name), and MVRQFLOTR (column name).

**Move Requests Failed (Stall Content Indexing)/hour**
The average rate of move request failures because of the content indexing. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_FAILED_STALL_CONTENT_INDEXING/HOUR or MVRQFLSCI (historical name), Move Requests Failed (Stall Content Indexing)/hour (caption), Move_Requests_Failed_Stall_Content_Indexing/hour (attribute name), and MVRQFLSCI (column name).

**Move Requests Failed (Stall Database Replication)/hour**
The average rate of move request failures because of database replication. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_FAILED_STALL_DATABASE_REPLICATION/HOUR or MVRQFLSDR (historical name), Move Requests Failed (Stall Database Replication)/hour (caption), Move_Requests_Failed_Stall_Database_Replication/hour (attribute name), and MVRQFLSDR (column name).

**Move Requests Failed/hour**
The average rate of move request failures. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_FAILED/HOUR or MVRQFLPH (historical name), Move Requests Failed/hour (caption), Move_Requests_Failed/hour (attribute name), and MVRQFLPH (column name).

**Move Requests Move Stalls (Content Indexing)/hour**
The average rate of move stalls because of content indexing. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_MOVE_STALLS_CONTENT_INDEXING/HOUR or MVRQMVSCI (historical name), Move Requests Move Stalls (Content Indexing)/hour (caption), Move_Requests_Move_Stalls_Content_Indexing/hour (attribute name), and MVRQMVSCI (column name).

**Move Requests Move Stalls (Database Replication)/hour**
The average rate of stalled moves because of database replication. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_MOVE_STALLS_DATABASE_REPLICATION/HOUR or MVRQMVSDR (historical name), Move Requests Move Stalls (Database Replication)/hour (caption), Move_Requests_Move_Stalls_Database_Replication/hour (attribute name), and MVRQMVSDR (column name).

**Move Requests Move Stalls/hour**
The average rate of stalled moves. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_MOVE_STALLS/HOUR or MVRQMVSPH (historical name), Move Requests Move Stalls/hour (caption), Move_Requests_Move_Stalls/hour (attribute name), and MVRQMVSPH (column name).

**Move Requests Transient Failures (Network)/hour**
The total number of transient failures because of network issues. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_TRANSIENT_FAILURES_NETWORK/HOUR or MVRQTFLN (historical name), Move Requests Transient Failures (Network)/hour (caption), Move_Requests_Transient_Failures_Network/hour (attribute name), and MVRQTFLN (column name).

**Move Requests Transient Failures (Proxy Backoff)/hour**
The average rate of transient failures because of proxy backoff. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_TRANSIENT_FAILURES_PROXY_BACKOFF/HOUR or MVRQTFLPB (historical name), Move Requests Transient Failures (Proxy Backoff)/hour (caption), Move_Requests_Transient_Failures_Proxy_Backoff/hour (attribute name), and MVRQTFLPB (column name).

**Move Requests Transient Failures/hour**
The average rate of transient failures. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MOVE_REQUESTS_TRANSIENT_FAILURES/HOUR or MVRQTFLPH (historical name), Move Requests Transient Failures/hour (caption), Move_Requests_Transient_Failures/hour (attribute name), and MVRQTFLPH (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Managed Folder Assistant data set

This data set monitors the activity of the Exchange Managed Folder Assistant. The data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Items Deleted but Recoverable**
The total number of deleted items that the Managed Folder Assistant can recover through the dumpster since the most recent schedule interval was started. The type is integer (32-bit counter).

The following names are defined for this attribute: ITEMS_DELETED_BUT_RECOVERABLE or IDELREC (historical name), Items Deleted but Recoverable (caption), Items_Deleted_but_Recoverable (attribute name), and IDELREC (column name).

**Items Marked as Past Retention Date**
The total number of items marked as past their retention date by the Managed Folder Assistant since the most recent schedule interval was started. The type is integer (32-bit counter).

The following names are defined for this attribute: ITEMS_MARKED_AS_PAST_RETENTION_DATE or IPASTRET (historical name), Items Marked as Past Retention Date (caption), Items_Marked_as_Past_Retention_Date (attribute name), and IPASTRET (column name).

**Items Moved**
The total number of items that are moved by the Managed Folder Assistant since the most recent schedule interval was started. The type is integer (32-bit counter).

The following names are defined for this attribute: ITEMS_MOVED or ITEMMOV (historical name), Items Moved (caption), Items_Moved (attribute name), and ITEMMOV (column name).

**Items Permanently Deleted**
The total number of items that are permanently deleted by the Managed Folder Assistant since the most recent schedule interval was started. The type is integer (32-bit counter).

The following names are defined for this attribute: ITEMS_PERMANENTLY_DELETED or IPERDEL (historical name), Items Permanently Deleted (caption), Items_Permanently_Deleted (attribute name), and IPERDEL (column name).

**Items Subject to Retention Policy**
The total number of items that are subject to retention policy by the Managed Folder Assistant since the most recent schedule interval was started. The type is integer (32-bit counter).

The following names are defined for this attribute: ITEMS_SUBJECT_TO_RETENTION_POLICY or ISUBRET (historical name), Items Subject to Retention Policy (caption), Items_Subject_to_Retention_Policy (attribute name), and ISUBRET (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange MAPI Connectivity Details data set

This data set provides information about the status of MAPI Connectivity of the server. This data set is a single-instance data set. This data set is not available in Exchange Server 2010.

This data set contains the following attributes:

**Connectivity Status**
The status of MAPI connectivity. The attribute can have one of following values: The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Success (0), Failure (1), Undefined (2). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CONNECTION_STATUS or CONNSTATUS (historical name), Connectivity Status (caption), Connection_Status (attribute name), and CONNSTATUS (column name).

**Database Name**
The name of the database. The type is string.

The following names are defined for this attribute: DATABASE_NAME or DBNAME (historical name), Database Name (caption), Database_Name (attribute name), and DBNAME (column name).

**Mailbox Server Name**
The name of the mailbox server. The type is string.

The following names are defined for this attribute: MAILBOX_SERVER_NAME or MBNAME (historical name), Mailbox Server Name (caption), Mailbox_Server_Name (attribute name), and MBNAME (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange MAPIOVERHTTP data set

This data set provides information about MAPI over HTTP protocol statistics. This data set is available in Exchange Server 2013, or later. This data set is a single instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every minute and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Active User Count***
Active User Count is the number of unique users that have shown some activities in the last 2 minutes. The type is integer (32-bit gauge).

The following names are defined for this attribute: ACTIVE_USER_COUNT or ACTUCNT (historical name), *Active User Count* (caption), Active_User_Count (attribute name), and ACTUCNT (column name).

***Averaged Latency***
Averaged Latency is the latency, in milliseconds, averaged for the past 1024 packets. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGED_LATENCY or AVGLAT (historical name), *Averaged Latency* (caption), Averaged_Latency (attribute name), and AVGLAT (column name).

***Connection Count***
Connection Count is the total number of client connections maintained. The type is integer (32-bit gauge).

The following names are defined for this attribute: CONNECTION_COUNT or CONNCNT (historical name), *Connection Count* (caption), Connection_Count (attribute name), and CONNCNT (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Requests***
Requests is the number of client requests that are currently being processed by the MapiHttp endpoint. The type is integer (32-bit gauge).

The following names are defined for this attribute: REQUESTS or REQ (historical name), *Requests* (caption), Requests (attribute name), and REQ (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

***User Count***
User Count is the number of users that are connected to the service. The type is integer (32-bit gauge).

The following names are defined for this attribute: USER_COUNT or USERCNT (historical name), *User Count* (caption), User_Count (attribute name), and USERCNT (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange MTA data set

This data set represents MS Exchange Message Transfer Agent activity. This data set is not available in Exchange Server 2007 and 2010.

This data set contains the following attributes:

**Adjacent MTA Associations**
The number of open associations of MTA with other MTAs. The type is integer (32-bit gauge).

The following names are defined for this attribute: ADJACENT_MTA_ASSOCIATIONS or ADJMTAASOC (historical name), Adjacent MTA Associations (caption), Adjacent_MTA_Associations (attribute name), and ADJMTAASOC (column name).

**Admin Connections**
The number of Microsoft Exchange administrator programs connected to the MTA. The type is integer (32-bit gauge).

The following names are defined for this attribute: ADMIN_CONNECTIONS or ADMNCONN (historical name), Admin Connections (caption), Admin_Connections (attribute name), and ADMNCONN (column name).

**Deferred Delivery Msgs**
The number of messages in the deferred queue at the time the sample is taken. When many messages are sent to users who are no longer mailbox-enabled, the messages are deferred every half hour and can accumulate in large numbers. The messages are constantly cycled through the information store and back to the deferred delivery queue. The type is integer (32-bit gauge).

The following names are defined for this attribute: DEFERRED_DELIVERY_MSGS or DEFDELMSGS (historical name), Deferred Delivery Msgs (caption), Deferred_Delivery_Msgs (attribute name), and DEFDELMSGS (column name).

**Disk File Deletes/sec**
The rate of disk files that are deleted. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DISK_FILE_DELETES/SEC or DSKFLDPS (historical name), Disk File Deletes/sec (caption), Disk_File_Deletes/sec (attribute name), and DSKFLDPS (column name).

**Disk File Opens/sec**
The rate of disk files that are opened. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DISK_FILE_OPENS/SEC or DSKFLOPS (historical name), Disk File Opens/sec (caption), Disk_File_Opens/sec (attribute name), and DSKFLOPS (column name).

**Disk File Reads/sec**
The rate of the disk file read operation. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DISK_FILE_READS/SEC or DSKFLRPS (historical name), Disk File Reads/sec (caption), Disk_File_Reads/sec (attribute name), and DSKFLRPS (column name).

**Disk File Syncs/sec**
The rate of disk files that are synchronized. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DISK_FILE_SYNCS/SEC or DSKFLSPS (historical name), Disk File Syncs/sec (caption), Disk_File_Syncs/sec (attribute name), and DSKFLSPS (column name).

**Disk File Writes/sec**
The rate of the disk file write operation. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DISK_FILE_WRITES/SEC or DSKFLWPS (historical name), Disk File Writes/sec (caption), Disk_File_Writes/sec (attribute name), and DSKFLWPS (column name).

**Inbound Bytes Total**
The total number of KB received by the MTA Service since MTA initialization. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_BYTES_TOTAL or INBYTTOT (historical name), Inbound Bytes Total (caption), Inbound_Bytes_Total (attribute name), and INBYTTOT (column name).

**Inbound Messages Total**
The total number of messages received since MTA initialization. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_MESSAGES_TOTAL or INMSGTOT (historical name), Inbound Messages Total (caption), Inbound_Messages_Total (attribute name), and INMSGTOT (column name).

**LAN Receive Bytes/sec**
The number of times that bytes are received over a LAN from MTAs per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LAN_RECEIVE_BYTES/SEC or LANRBSEC (historical name), LAN Receive Bytes/sec (caption), LAN_Receive_Bytes/sec (attribute name), and LANRBSEC (column name).

**LAN Transmit Bytes/sec**
The number of times that bytes are transmitted over a LAN to MTAs per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: LAN_TRANSMIT_BYTES/SEC or LANTBSEC (historical name), LAN Transmit Bytes/sec (caption), LAN_Transmit_Bytes/sec (attribute name), and LANTBSEC (column name).

**Message Bytes/sec**
The rate at which message bytes are processed. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGE_BYTES/SEC or MSGBYTEPS (historical name), Message Bytes/sec (caption), Message_Bytes/sec (attribute name), and MSGBYTEPS (column name).

**Messages/sec**
The number of times that messages are processed by MTA per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES/SEC or MSGPERSEC (historical name), Messages/sec (caption), Messages/sec (attribute name), and MSGPERSEC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Outbound Bytes Total**
The total number of KB sent by the MTA Service since MTA initialization since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: OUTBOUND_BYTES_TOTAL or OUTBYTTOT (historical name), Outbound Bytes Total (caption), Outbound_Bytes_Total (attribute name), and OUTBYTTOT (column name).

**Outbound Messages Total**
The total number of messages transmitted since MTA initialization. The type is integer (32-bit counter).

The following names are defined for this attribute: OUTBOUND_MESSAGES_TOTAL or OUTMGTOT (historical name), Outbound Messages Total (caption), Outbound_Messages_Total (attribute name), and OUTMGTOT (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Threads in Use**
The number of threads that are in use by the MTA. This number does not include RPC threads. The number can be used to determine whether additional processors are of benefit. The type is integer (32-bit gauge).

The following names are defined for this attribute: THREADS_IN_USE or THRDINUSE (historical name), Threads in Use (caption), Threads_in_Use (attribute name), and THRDINUSE (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Recipients Inbound**
The total number of recipients inbound since MTA initialization. This value reflects the number of messages generated for inbound recipients. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_RECIPIENTS_INBOUND or TOTRECIN (historical name), Total Recipients Inbound (caption), Total_Recipients_Inbound (attribute name), and TOTRECIN (column name).

**Total Recipients Outbound**
The total number of recipients outbound since MTA initialization. This value reflects the number of messages generated for outbound recipients. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_RECIPIENTS_OUTBOUND or TOTRECOUT (historical name), Total Recipients Outbound (caption), Total_Recipients_Outbound (attribute name), and TOTRECOUT (column name).

**Total Recipients Queued**
The total number of recipients queued to be processed by the MTA Service at the time the sample was taken since the server was started. This value reflects the number of messages generated for inbound and outbound recipients. The type is integer (32-bit gauge).

The following names are defined for this attribute: TOTAL_RECIPIENTS_QUEUED or TOTRECQUE (historical name), Total Recipients Queued (caption), Total_Recipients_Queued (attribute name), and TOTRECQUE (column name).

**Work Queue Bytes(MB)**
The total volume of messages (in MB) stored in the MTA. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: WORK_QUEUE_BYTES or WORKQBYTES (historical name), Work Queue Bytes(MB) (caption), Work_Queue_Bytes (attribute name), and WORKQBYTES (column name).

**Work Queue Length**
The number of outstanding messages in the Work Queue, which indicates the number of messages not yet processed to completion by the MTA. The type is integer (32-bit gauge).

The following names are defined for this attribute: WORK_QUEUE_LENGTH or WORKQLEN (historical name), Work Queue Length (caption), Work_Queue_Length (attribute name), and WORKQLEN (column name).

## MS Exchange MTA Connections data set

This data set provides information about the message transfer agent connections.

This data set contains the following attributes:

**Associations**
The number of associations between the MTA and the connected MTA since the server was started. MTAs can open multiple associations, if additional transfer throughput is necessary. The type is integer (32-bit gauge).

The following names are defined for this attribute: ASSOCIATIONS or ASSOCTION (historical name), Associations (caption), Associations (attribute name), and ASSOCTION (column name).

**Current Inbound Associations**
The current number of inbound (remote initiated) associations with the entity. The type is integer (32-bit gauge).

The following names are defined for this attribute: CURRENT_INBOUND_ASSOCIATIONS or CURIBASSO (historical name), Current Inbound Associations (caption), Current_Inbound_Associations (attribute name), and CURIBASSO (column name).

**Current Outbound Associations**
The current number of outbound (locally initiated) associations with the entity. The type is integer (32-bit gauge).

The following names are defined for this attribute: CURRENT_OUTBOUND_ASSOCIATIONS or CUROBASSO (historical name), Current Outbound Associations (caption), Current_Outbound_Associations (attribute name), and CUROBASSO (column name).

**Failed Outbound Associations**
The number of failed associations with other MTAs to transmit outbound messages since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: FAILED_OUTBOUND_ASSOCIATIONS or FALOUTASS (historical name), Failed Outbound Associations (caption), Failed_Outbound_Associations (attribute name), and FALOUTASS (column name).

**Inbound Bytes Total**
Total KB received between this MTA and all associations with other MTAs since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_BYTES_TOTAL or INBYTETOT (historical name), Inbound Bytes Total (caption), Inbound_Bytes_Total (attribute name), and INBYTETOT (column name).

**Inbound Messages Total**
Total messages received between this MTA and all associations with other MTAs since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_MESSAGES_TOTAL or INMSGSTOT (historical name), Inbound Messages Total (caption), Inbound_Messages_Total (attribute name), and INMSGSTOT (column name).

**Name**
The name of connections established by the Exchange MTA. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NAME_U or NAME (historical name), Name (caption), Name_U (attribute name), and NAME (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Outbound Bytes Total**
Total KB sent between this MTA and all associations with other MTAs since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: OUTBOUND_BYTES_TOTAL or OUTBYTETOT (historical name), Outbound Bytes Total (caption), Outbound_Bytes_Total (attribute name), and OUTBYTETOT (column name).

**Outbound Messages Total**
Total messages sent between this MTA and all associations with other MTAs since server startup. The type is integer (32-bit counter).

The following names are defined for this attribute: OUTBOUND_MESSAGES_TOTAL or OUTMSGSTOT (historical name), Outbound Messages Total (caption), Outbound_Messages_Total (attribute name), and OUTMSGSTOT (column name).

**Queue Length**
The number of outstanding messages queued for transfer to the entity. The type is integer (32-bit gauge).

The following names are defined for this attribute: QUEUE_LENGTH or QLENGTH (historical name), Queue Length (caption), Queue_Length (attribute name), and QLENGTH (column name).

**Queued Bytes(MB)**
The total volume of message content (in MB) that is stored in the queue of the entity. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: QUEUED_BYTES or QUEUEBYTES (historical name), Queued Bytes(MB) (caption), Queued_Bytes (attribute name), and QUEUEBYTES (column name).

**Receive Bytes/sec**
The rate at which bytes are received from the connected entity. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RECEIVE_BYTES/SEC or RECVBYTPS (historical name), Receive Bytes/sec (caption), Receive_Bytes/sec (attribute name), and RECVBYTPS (column name).

**Receive Messages/sec**
The number of times that messages are received from the connected entity per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RECEIVE_MESSAGES/SEC or RCMSGSEC (historical name), Receive Messages/sec (caption), Receive_Messages/sec (attribute name), and RCMSGSEC (column name).

**Rejected Inbound Associations**
The total number of inbound (initiated remotely) associations that are rejected since the MTA initialization. The type is integer (32-bit counter).

The following names are defined for this attribute: REJECTED_INBOUND_ASSOCIATIONS or REJTIBASSO (historical name), Rejected Inbound Associations (caption), Rejected_Inbound_Associations (attribute name), and REJTIBASSO (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Send Bytes/sec**
The rate at which the bytes are sent to the connected entity. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SEND_BYTES/SEC or SENDBYPS (historical name), Send Bytes/sec (caption), Send_Bytes/sec (attribute name), and SENDBYPS (column name).

**Send Messages/sec**
The number of times that messages are sent to the connected entity per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SEND_MESSAGES/SEC or SNDMSGSE (historical name), Send Messages/sec (caption), Send_Messages/sec (attribute name), and SNDMSGSE (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Recipients Inbound**
The number of recipients received by the MTA Service since server startup. This value reflects the number of messages generated for inbound recipients. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_RECIPIENTS_INBOUND or INRECPTOT (historical name), Total Recipients Inbound (caption), Total_Recipients_Inbound (attribute name), and INRECPTOT (column name).

**Total Recipients Outbound**
The number of recipients sent by the MTA Service since the server was started. This value reflects the number of messages generated for outbound recipients. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_RECIPIENTS_OUTBOUND or OUTRECPTOT (historical name), Total Recipients Outbound (caption), Total_Recipients_Outbound (attribute name), and OUTRECPTOT (column name).

**Total Recipients Queued**
The total number of recipients that are stored in the queue of the entity. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_RECIPIENTS_QUEUED or TORECPQUED (historical name), Total Recipients Queued (caption), Total_Recipients_Queued (attribute name), and TORECPQUED (column name).

## MS Exchange NLB Status data set

This data set provides information about the status of the Network Load Balancing server.

This data set contains the following attributes:

**Machine Name**
The name of the machine. The type is string.

The following names are defined for this attribute: MACHINE_NAME or MACHNAME (historical name), Machine Name (caption), Machine_Name (attribute name), and MACHNAME (column name).

**NLB Status**
The NLB status of the computer. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (0), Stopped (1005), Converging (1006), Converged (1007), Default (1008), Draining (1009), Suspended (1013). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NLB_STATUS or NLBSTATUS (historical name), NLB Status (caption), NLB_Status (attribute name), and NLBSTATUS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Non Delivery Report data set

This data set monitors the mailboxes that are full, and provides information about the message delivery failures to these mailboxes. Data is collected for this data set according to the data collection interval that you specify when you configure the agent. For information about specifying the data collection interval, see the "Agent installation and configuration" chapter in the Exchange Server Agent Installation and Configuration Guide. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Email Address**
The email address of the user whose mailbox is full. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: MAILBOX_ID or MBXID (historical name), Email Address (caption), Mailbox_ID (attribute name), and MBXID (column name).

**Failure Count**
The number of message deliveries that failed because the mailboxes were full. This attribute shows the number of failed message deliveries during the last collection interval. The type is integer (32-bit gauge).

The following names are defined for this attribute: FAILURE_COUNT or FAILCT (historical name), Failure Count (caption), Failure_Count (attribute name), and FAILCT (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange OAB Details data set

This data set monitors the offline address book (OAB) that is generated by the Exchange Server. An offline address book is a downloaded copy of the available address list collection on the Exchange Server. Microsoft Outlook users can access the OAB without connecting to the Exchange Server. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Address Lists**
The address lists that are available in the OAB. The type is string with enumerated values. The following values are defined: N/A (N/A). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ADDRESS_LISTS or ADDLIST (historical name), Address Lists (caption), Address_Lists (attribute name), and ADDLIST (column name).

**Days Since Last OAB Updates**
The current number of days since the OAB files were last updated. This attribute is not available in Exchange Server 2007. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), Up-to-date (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DAYS_SINCE_LAST_OAB_UPDATES or DAYSCLOU (historical name), Days Since Last OAB Updates (caption), Days_Since_Last_OAB_Updates (attribute name), and DAYSCLOU (column name).

**Last Number Of Records**
The number of records that were updated during the last OAB generation process since the service was started. This attribute is not available in Exchange Server 2007. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1), N/A (-2). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LAST_NUMBER_OF_RECORDS or LTNUMOFR (historical name), Last Number Of Records (caption), Last_Number_Of_Records (attribute name), and LTNUMOFR (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**OAB Name**
The name of the OAB. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: OAB_NAME or OABNAME (historical name), OAB Name (caption), OAB_Name (attribute name), and OABNAME (column name).

**OAB Size (MB)**
The size (in MB) of the generated OAB files. The type is real number (32-bit counter) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1), N/A (-2). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OAB_SIZE or OABSIZE (historical name), OAB Size (MB) (caption), OAB_Size (attribute name), and OABSIZE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange OAB Request Handler data set

This data set monitors the activities of downloading offline address book (OAB) files. This data set is available in Exchange Server 2013. This data set is a single instance data set.

This data set contains the following attributes:

**Access Denied Failures**

The total number of requests to download OAB files that failed because of access denial problems since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACCESS_DENIED_FAILURES or ACSDNDF (historical name), Access Denied Failures (caption), Access_Denied_Failures (attribute name), and ACSDNDF (column name).

**Access Denied Failures/Sec**

The number of requests to download OAB files that currently failed per second because of access denial problems. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACCESS_DENIED_FAILURES/SEC or ACSDNDFSC (historical name), Access Denied Failures/Sec (caption), Access_Denied_Failures/Sec (attribute name), and ACSDNDFSC (column name).

**Current Requests In Cache**

The number of OAB file generation requests that are currently available in the cache. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CURRENT_REQUESTS_IN_CACHE or CRTREQINC (historical name), Current Requests In Cache (caption), Current_Requests_In_Cache (attribute name), and CRTREQINC (column name).

**Directory Failures**

The total number of requests to download OAB files that failed because of directory access failures since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DIRECTORY_FAILURES or DIRTRYF (historical name), Directory Failures (caption), Directory_Failures (attribute name), and DIRTRYF (column name).

**Directory Failures/Sec**

The number of requests to download OAB files that currently failed per second because of directory access failures. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DIRECTORY_FAILURES/SEC or DIRTRYFSC (historical name), Directory Failures/Sec (caption), Directory_Failures/Sec (attribute name), and DIRTRYFSC (column name).

**File Not Available Failures**

The total number of requests to download OAB files that failed because the OAB files were not available since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FILE_NOT_AVAILABLE_FAILURES or FLNAVLF (historical name), File Not Available Failures (caption), File_Not_Available_Failures (attribute name), and FLNAVLF (column name).

**File Not Available Failures/Sec**
The number of requests to download OAB files that currently failed per second because the OAB files were not available. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FILE_NOT_AVAILABLE_FAILURES/SEC or FLNAVLFSC (historical name), File Not Available Failures/Sec (caption), File_Not_Available_Failures/Sec (attribute name), and FLNAVLFSC (column name).

**Invalid Request Failures**
The total number of requests that failed to download OAB files because of invalid requests since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: INVALID_REQUEST_FAILURES or INDREQF (historical name), Invalid Request Failures (caption), Invalid_Request_Failures (attribute name), and INDREQF (column name).

**Invalid Request Failures/Sec**
The number of requests that currently failed per second to download OAB files because of invalid requests. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: INVALID_REQUEST_FAILURES/SEC or INDREQFSC (historical name), Invalid Request Failures/Sec (caption), Invalid_Request_Failures/Sec (attribute name), and INDREQFSC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Request Handling Average Time**
The average time (in seconds) that is currently taken to process an OAB file download request during the sampling period. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REQUEST_HANDLING_AVERAGE_TIME or REQHDAVGT (historical name), Request Handling Average Time (caption), Request_Handling_Average_Time (attribute name), and REQHDAVGT (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange OWA data set

This data set represents the MS Exchange Outlook Web Access (OWA) statistics activity. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every minute and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Average Response Time***

The average time (in milliseconds) between the beginning and the end of an OEH or an ASPX request. The value should be less than 100 milliseconds. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_RESPONSE_TIME or AVGRT (historical name), *Average Response Time* (caption), Average_Response_Time (attribute name), and AVGRT (column name).

***Average Search Time***

The average time (in milliseconds) that is required for a search to complete. The value should be less than 5000 milliseconds. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_SEARCH_TIME or AVGST (historical name), *Average Search Time* (caption), Average_Search_Time (attribute name), and AVGST (column name).

***Node***

The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Requests/sec***

The number of requests handled by Outlook Web Access per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: REQUESTS/SEC or REQPS (historical name), *Requests/sec* (caption), Requests/sec (attribute name), and REQPS (column name).

***Timestamp***

The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**Active Conversions**

The number of conversions that are being processed by the WebReady Document Viewing service. The type is integer (32-bit gauge).

The following names are defined for this attribute: ACTIVE_CONVERSIONS or ACTCONV (historical name), Active Conversions (caption), Active_Conversions (attribute name), and ACTCONV (column name).

**AS Queries**

The total number of Availability Service queries since the process started. The type is integer (32-bit counter).

The following names are defined for this attribute: AS_QUERIES or ASQUER (historical name), AS Queries (caption), AS_Queries (attribute name), and ASQUER (column name).

**AS Queries Failure %**

The percentage of the last 100 Availability Service lookups that failed. The type is integer (32-bit gauge).

The following names are defined for this attribute: AS_QUERIES_FAILURE_% or ASQRFAIL (historical name), AS Queries Failure % (caption), AS_Queries_Failure_% (attribute name), and ASQRFAIL (column name).

**Current Unique Users**
The number of unique users logged on to Outlook Web Access. This value monitors the number of unique active user sessions. When users log off or if their session times out, they are removed from this count. The type is integer (32-bit gauge).

The following names are defined for this attribute: CURRENT_UNIQUE_USERS or CURUNQUSR (historical name), Current Unique Users (caption), Current_Unique_Users (attribute name), and CURUNQUSR (column name).

**Messages Sent**
The number of messages that are sent by users since the process restarted. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_SENT or MSGSSENT (historical name), Messages Sent (caption), Messages_Sent (attribute name), and MSGSSENT (column name).

**Names Checked**
The number of recipient names to be resolved since the process was started. The type is integer (32-bit counter).

The following names are defined for this attribute: NAMES_CHECKED or NAMECHK (historical name), Names Checked (caption), Names_Checked (attribute name), and NAMECHK (column name).

**Proxy Request Bytes**
The total number of HTTP header and content bytes in requests that are submitted to the proxy server since the beginning of the process. The type is integer (32-bit counter).

The following names are defined for this attribute: PROXY_REQUEST_BYTES or PREQB (historical name), Proxy Request Bytes (caption), Proxy_Request_Bytes (attribute name), and PREQB (column name).

**Proxy Response Bytes**
The total number of HTTP header and content bytes in responses that are submitted to the proxy server since the beginning of the process. The type is integer (32-bit counter).

The following names are defined for this attribute: PROXY_RESPONSE_BYTES or PRESB (historical name), Proxy Response Bytes (caption), Proxy_Response_Bytes (attribute name), and PRESB (column name).

**Proxy Response Time Average**
The average time (in milliseconds) that has elapsed between the beginning and the end of requests sent to the proxy server. The type is integer (32-bit gauge).

The following names are defined for this attribute: PROXY_RESPONSE_TIME_AVERAGE or PRESTA (historical name), Proxy Response Time Average (caption), Proxy_Response_Time_Average (attribute name), and PRESTA (column name).

**Proxy User Requests**
The total number of requests that are made by proxy users since the process was started. The type is integer (32-bit counter).

The following names are defined for this attribute: PROXY_USER_REQUESTS or PUREQ (historical name), Proxy User Requests (caption), Proxy_User_Requests (attribute name), and PUREQ (column name).

**Proxy User Requests/sec**
The number of requests sent to the proxy server per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: PROXY_USER_REQUESTS/SEC or PUREQPS (historical name), Proxy User Requests/sec (caption), Proxy_User_Requests/sec (attribute name), and PUREQPS (column name).

**Queued Conversion Requests**
The number of requests for conversion that are queued to be processed. The type is integer (32-bit gauge).

The following names are defined for this attribute: QUEUED_CONVERSION_REQUESTS or QUCNVREQ (historical name), Queued Conversion Requests (caption), Queued_Conversion_Requests (attribute name), and QUCNVREQ (column name).

**Rejected Conversions**
The total number of conversion requests that are rejected because the documents are in the block list. The type is integer (32-bit counter).

The following names are defined for this attribute: REJECTED_CONVERSIONS or REJCNV (historical name), Rejected Conversions (caption), Rejected_Conversions (attribute name), and REJCNV (column name).

**Request Failed**
The number of requests that failed since the process was restarted. The type is integer (32-bit counter).

The following names are defined for this attribute: REQUEST_FAILED or REQFLD (historical name), Request Failed (caption), Request_Failed (attribute name), and REQFLD (column name).

**Requests**
The number of requests that were executed since the process was restarted. The type is integer (32-bit counter).

The following names are defined for this attribute: REQUESTS or REQS (historical name), Requests (caption), Requests (attribute name), and REQS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Searches**
The number of searches that are executed since the process restarted. The type is integer (32-bit counter).

The following names are defined for this attribute: SEARCHES or SRCH (historical name), Searches (caption), Searches (attribute name), and SRCH (column name).

**Searches Executed**
The total number of times a user requests a search since the process started. This attribute is not available in Exchange Server 2013. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEARCHES_EXECUTED or SRCHEX (historical name), Searches Executed (caption), Searches_Executed (attribute name), and SRCHEX (column name).

**Searches Timed Out**
The number of searches that did not complete in the maximum time allowed since the process restarted. The type is integer (32-bit counter).

The following names are defined for this attribute: SEARCHES_TIMED_OUT or SRCHTOUT (historical name), Searches Timed Out (caption), Searches_Timed_Out (attribute name), and SRCHTOUT (column name).

**Total Users**
The total number of users that are connected to Outlook Web Access since the process started. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_USERS or TOTUSR (historical name), Total Users (caption), Total_Users (attribute name), and TOTUSR (column name).

## MS Exchange Protocol Analysis Agent data set

This data set represents the MS Exchange Protocol Analysis statistics activity. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Change in Senders Blocked Because of Local Open Proxy**
The total number of senders blocked because of a local open proxy in that sampling interval. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CHANGE_IN_SENDERS_BLOCKED_BECAUSE_OF_LOCAL_OPEN_PROXY or CSBBLOP (historical name), Change in Senders Blocked Because of Local Open Proxy (caption), Change_in_Senders_Blocked_Because_of_Local_Open_Proxy (attribute name), and CSBBLOP (column name).

**Change in Senders Blocked Because of Local SRL**
The total number of senders blocked because of a local sender reputation level (SRL) in that sampling interval. The agent resets the attribute to its initial value on startup of the Exchange Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CHANGE_IN_SENDERS_BLOCKED_BECAUSE_OF_LOCAL_SRL or CSBBLSRL (historical name), Change in Senders Blocked Because of Local SRL (caption), Change_in_Senders_Blocked_Because_of_Local_SRL (attribute name), and CSBBLSRL (column name).

**Change in Senders Blocked Because of Remote Open Proxy**
The total number of senders blocked because of a remote open proxy in that sampling interval. The agent resets the attribute to its initial value on startup of the Exchange Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CHANGE_IN_SENDERS_BLOCKED_BECAUSE_OF_REMOTE_OPEN_PROXY or CSBBROP (historical name), Change in Senders Blocked Because of Remote Open Proxy (caption), Change_in_Senders_Blocked_Because_of_Remote_Open_Proxy (attribute name), and CSBBROP (column name).

**Change in Senders Blocked Because of Remote SRL**
The total number of senders blocked because of a remote sender reputation level (SRL) in that sampling interval. The agent resets the attribute to its initial value on startup of the Exchange Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CHANGE_IN_SENDERS_BLOCKED_BECAUSE_OF_REMOTE_SRL or CSBBRSRL (historical name), Change in Senders Blocked Because of Remote SRL (caption), Change_in_Senders_Blocked_Because_of_Remote_SRL (attribute name), and CSBBRSRL (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Senders Blocked Because of Local Open Proxy**
The total number of senders blocked because of a local open proxy. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDERS_BLOCKED_BECAUSE_OF_LOCAL_OPEN_PROXY or SBBLOP (historical name), Senders Blocked Because of Local Open Proxy (caption), Senders_Blocked_Because_of_Local_Open_Proxy (attribute name), and SBBLOP (column name).

**Senders Blocked Because of Local SRL**
The total number of senders blocked because of a local sender reputation level (SRL). The type is integer (32-bit counter).

The following names are defined for this attribute: SENDERS_BLOCKED_BECAUSE_OF_LOCAL_SRL or SBBLSRL (historical name), Senders Blocked Because of Local SRL (caption), Senders_Blocked_Because_of_Local_SRL (attribute name), and SBBLSRL (column name).

**Senders Blocked Because of Remote Open Proxy**
The total number of senders blocked because of a remote open proxy. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDERS_BLOCKED_BECAUSE_OF_REMOTE_OPEN_PROXY or SBBROP (historical name), Senders Blocked Because of Remote Open Proxy (caption), Senders_Blocked_Because_of_Remote_Open_Proxy (attribute name), and SBBROP (column name).

**Senders Blocked Because of Remote SRL**
The total number of senders blocked because of a remote sender reputation level (SRL). The type is integer (32-bit counter).

The following names are defined for this attribute: SENDERS_BLOCKED_BECAUSE_OF_REMOTE_SRL or SBBRSRL (historical name), Senders Blocked Because of Remote SRL (caption), Senders_Blocked_Because_of_Remote_SRL (attribute name), and SBBRSRL (column name).

**Senders Processed**
The total number of senders that are processed. The type is integer (32-bit counter).

The following names are defined for this attribute: SENDERS_PROCESSED or SENDERSP (historical name), Senders Processed (caption), Senders_Processed (attribute name), and SENDERSP (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Public Folder Detail data set

This data set provides details about the public folder.

This data set contains the following attributes:

**Folder Size**
The size of public folder in megabytes. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: FOLDER_SIZE or PFLDSIZE (historical name), Folder Size (caption), Folder_Size (attribute name), and PFLDSIZE (column name).

**Information Store Name**
The name of the Information Store. The type is string.

The following names are defined for this attribute: INFORMATION_STORE_NAME or ISNAME (historical name), Information Store Name (caption), Information_Store_Name (attribute name), and ISNAME (column name).

**Last Logon**
The last date and time a user logged into a public folder. The type is timestamp with enumerated values. The following values are defined: N/A (0000000000000001), N/C (0000000000000002), N/P (0000000000000003). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LAST_LOGON or PFLDLASTLG (historical name), Last Logon (caption), Last_Logon (attribute name), and PFLDLASTLG (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Number Of Messages**
The total number of messages in public folder. The type is integer (32-bit gauge).

The following names are defined for this attribute: NUMBER_OF_MESSAGES or NUMPFLDMSG (historical name), Number Of Messages (caption), Number_Of_Messages (attribute name), and NUMPFLDMSG (column name).

**Public Folder Name**
The name of the public folder. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: PUBLIC_FOLDER_NAME or PFLDNAME (historical name), Public Folder Name (caption), Public_Folder_Name (attribute name), and PFLDNAME (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Storage Group Name**
The name of the storage group. The attribute is not available in Microsoft Exchange Server 2010. The type is string.

The following names are defined for this attribute: STORAGE_GROUP_NAME or SGNAME (historical name), Storage Group Name (caption), Storage_Group_Name (attribute name), and SGNAME (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Reachability data set

This data set provides information about mailbox reachability. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Database Name***
The name of the database. The type is string.

The following names are defined for this attribute: DATABASE_NAME or DBNAME (historical name), *Database Name* (caption), Database_Name (attribute name), and DBNAME (column name).

***Inbound Time***
The time (in seconds) that a message for verifying reachability takes to reach the selected email address. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: INBOUND_TIME or INBOUNDT (historical name), *Inbound Time* (caption), Inbound_Time (attribute name), and INBOUNDT (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Outbound Time***
The time (in seconds) that is taken to receive a reachability confirmation message from the selected email address. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: OUTBOUND_TIME or OUTBOUNDT (historical name), *Outbound Time* (caption), Outbound_Time (attribute name), and OUTBOUNDT (column name).

***Reachable***
An alphabetic value that indicates whether an email address is reachable. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: No (0), Yes (1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REACHABLE (historical name), *Reachable* (caption), Reachable (attribute name), and REACHABLE (column name).

***Round Trip Response Time***
The time (in milliseconds) that is taken to respond to an email that is sent to a target email address. If the email address is not reachable, the response time is zero. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: ROUND_TRIP_RESPONSE_TIME or RESPTIME (historical name), *Round Trip Response Time* (caption), Round_Trip_Response_Time (attribute name), and RESPTIME (column name).

***Target Email Address***
The target email address to which a test email is sent. The type is string.

The following names are defined for this attribute: TARGET_EMAIL_ADDRESS or TRGEADDRS (historical name), *Target Email Address* (caption), Target_Email_Address (attribute name), and TRGEADDRS (column name).

***Target Server***
Target server name test email is sent to. When the Target E-mail Address is unreachable, the Target Server Name is set to "unknown. " This attribute is a key attribute. The type is string.

The following names are defined for this attribute: TARGET_SERVER or TRGSERVER (historical name), *Target Server* (caption), Target_Server (attribute name), and TRGSERVER (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

***User Name***
The name of the user. The type is string.

The following names are defined for this attribute: USER_NAME or USERNAME (historical name), *User Name* (caption), User_Name (attribute name), and USERNAME (column name).

**Reachability Test Run Time**
The last date and time when the response time was captured. The format is MM/DD/YY HH:mm:SS, where the following measures apply: MM Month DD Day YY Year HH Hour mm Minute SS Second The type is timestamp.

The following names are defined for this attribute: REACHABILITY_TEST_RUN_TIME or RUNTIME (historical name), Reachability Test Run Time (caption), Reachability_Test_Run_Time (attribute name), and RUNTIME (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange Recipient Cache data set

This data set provides details about Exchange Recipient Cache. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Address Lookups Pending**
Number of Address Book Lookups that are queued to be processed since the server was started. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ADDRESS_LOOKUPS_PENDING or ADDRKLKUP (historical name), Address Lookups Pending (caption), Address_Lookups_Pending (attribute name), and ADDRKLKUP (column name).

**Batched Address Lookups**
Total number of Batch Address Book Lookups that have been processed since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: BATCHED_ADDRESS_LOOKUPS or BADDRLKUP (historical name), Batched Address Lookups (caption), Batched_Address_Lookups (attribute name), and BADDRLKUP (column name).

**Expand Group Requests**
Total number of requests to Expand Address Group since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXPAND_GROUP_REQUESTS or EXPGRPREQ (historical name), Expand Group Requests (caption), Expand_Group_Requests (attribute name), and EXPGRPREQ (column name).

**Individual Address Lookups**
Total number of Individual Address Book Lookups that have been processed since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: INDIVIDUAL_ADDRESS_LOOKUPS or INADDRLKUP (historical name), Individual Address Lookups (caption), Individual_Address_Lookups (attribute name), and INADDRLKUP (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Recipient Cache Instance Name**
Recipient Cache Instance name. This attribute is a key attribute. The type is string with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RECIPIENT_CACHE_INSTANCE_NAME or RECAHNAME (historical name), Recipient Cache Instance Name (caption), Recipient_Cache_Instance_Name (attribute name), and RECAHNAME (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Recipient Filter Agent data set

This data set represents the MS Exchange Recipient Filter statistics activity. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Recipients Rejected by Block List**
The total number of recipients rejected by the block list. The type is integer (32-bit counter).

The following names are defined for this attribute: RECIPIENTS_REJECTED_BY_BLOCK_LIST or RCPRBBL (historical name), Recipients Rejected by Block List (caption), Recipients_Rejected_by_Block_List (attribute name), and RCPRBBL (column name).

**Recipients Rejected by Block List/sec**
The total number of recipients rejected by the block list per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RECIPIENTS_REJECTED_BY_BLOCK_LIST/SEC or RCPRBL (historical name), Recipients Rejected by Block List/sec (caption), Recipients_Rejected_by_Block_List/sec (attribute name), and RCPRBL (column name).

**Recipients Rejected by Recipient Validation**
The total number of recipients rejected by the recipient validation. The type is integer (32-bit counter).

The following names are defined for this attribute: RECIPIENTS_REJECTED_BY_RECIPIENT_VALIDATION or RCPRBRV (historical name), Recipients Rejected by Recipient Validation (caption), Recipients_Rejected_by_Recipient_Validation (attribute name), and RCPRBRV (column name).

**Recipients Rejected by Recipient Validation/sec**
The total number of recipients rejected by the recipient validation per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: RECIPIENTS_REJECTED_BY_RECIPIENT_VALIDATION/SEC or RCPRRV (historical name), Recipients Rejected by Recipient Validation/sec (caption), Recipients_Rejected_by_Recipient_Validation/sec (attribute name), and RCPRRV (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Replica Seeder data set

This data set monitors the replica seeder. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Database Seeding Bytes Read**
The total amount of data (in KB) that has been read by the database seeder since the seeding was started. This attribute is not available in Exchange Server 2007. The type is integer (32-bit counter)

with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DATABASE_SEEDING_BYTES_READ or DBSBR (historical name), Database Seeding Bytes Read (caption), Database_Seeding_Bytes_Read (attribute name), and DBSBR (column name).

**Database Seeding Bytes Written**
The total amount of data (in KB) that has been written by the database seeder since the seeding was started. This attribute is not available in Exchange Server 2007. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DATABASE_SEEDING_BYTES_WRITTEN or DBSBW (historical name), Database Seeding Bytes Written (caption), Database_Seeding_Bytes_Written (attribute name), and DBSBW (column name).

**Database Seeding Progress Percent**
The percentage of database seeding that has been completed since the seeding was started. This attribute is not available in Exchange Server 2013. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DATABASE_SEEDING_PROGRESS_PERCENT or DBSPPER (historical name), Database Seeding Progress Percent (caption), Database_Seeding_Progress_Percent (attribute name), and DBSPPER (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Replica Seeder Instance Name**
The name of the replica seeder instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: REPLICA_SEEDER_INSTANCE_NAME or RPSDINSN (historical name), Replica Seeder Instance Name (caption), Replica_Seeder_Instance_Name (attribute name), and RPSDINSN (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Replication data set

This data set monitors the replication activity on the Exchange Server in the cluster environment. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every minute and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Copy Generation Number***
The generation sequence number of the last log file that has been copied. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: COPY_GENERATION_NUMBER or RPLCGNUM (historical name), *Copy Generation Number* (caption), Copy_Generation_Number (attribute name), and RPLCGNUM (column name).

***Copy Notification Generation Number***
The generation sequence number of the last log file that is known to the Microsoft Exchange Replication service. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: COPY_NOTIFICATION_GENERATION_NUMBER or RPLCNGNUM (historical name), *Copy Notification Generation Number* (caption), Copy_Notification_Generation_Number (attribute name), and RPLCNGNUM (column name).

***Copy Queue Length***
The number of log files that are waiting to be copied and inspected. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: COPY_QUEUE_LENGTH or RPLCQLEN (historical name), *Copy Queue Length* (caption), Copy_Queue_Length (attribute name), and RPLCQLEN (column name).

***MS Exchange Replication Instance Name***
The storage group instance name of the Microsoft Exchange Server. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: MS_EXCHANGE_REPLICATION_INSTANCE_NAME or MSERINSTN (historical name), *MS Exchange Replication Instance Name* (caption), MS_Exchange_Replication_Instance_Name (attribute name), and MSERINSTN (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Replay Generations Complete***
The number of log files that have been replayed in the current replay batch. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_GENERATIONS_COMPLETE or RPLRGENCOM (historical name), *Replay Generations Complete* (caption), Replay_Generations_Complete (attribute name), and RPLRGENCOM (column name).

***Replay Generations Remaining***
The number of log files that remain to be replayed in the current replay batch. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_GENERATIONS_REMAINING or RPLRGENREM (historical name), *Replay Generations Remaining* (caption), Replay_Generations_Remaining (attribute name), and RPLRGENREM (column name).

***Replay Queue Length***
The number of log files that are waiting to be replayed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_QUEUE_LENGTH or RPLRQLEN (historical name), *Replay Queue Length* (caption), Replay_Queue_Length (attribute name), and RPLRQLEN (column name).

***Replication Status***
The replication status of the storage group. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Replication Initializing (0), Replication Suspended (1), Replication Failed (2), Replication Disabled (3), Replication Healthy (4), Replication ServiceDown (5), Replication Resynchronizing (6), Replication Not Supported (7), Replication Stopped (8), Replication Not Configured (9), Replication Seeding (10), Failed Suspended (11), SinglePageRestore (12), SeedingSource (13), Mounted (14), Dismounted (15), Mounting (16), Dismounting (17), DisconnectedAndHealthy (18), DisconnectedAndResynchronizing (19), N/A (-1), Not Available (-2). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLICATION_STATUS or REPLSTAT (historical name), *Replication Status* (caption), Replication_Status (attribute name), and REPLSTAT (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**Activation Suspended**
A numeric value that indicates whether the automatic activation of the database copy is suspended. This attribute is available only in Exchange Server 2010, or later. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVATION_SUSPENDED or RPLACTSUS (historical name), Activation Suspended (caption), Activation_Suspended (attribute name), and RPLACTSUS (column name).

**Copy Queue Exceeds Mount Threshold**
A numeric value that indicates whether the copy queue length is greater than the threshold that is specified by the auto database mount dial. This attribute is used only in the cluster continuous replication (CCR) environment. In the CCR environment, of this attribute is 1 if the auto database mount dial is exceeded. In the local continuous replication (LCR) environment, this attribute value is always 0. This attribute is not available in Exchange Server 2013. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: CCR Queue High (1), CCR Queue Good (0), Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: COPY_QUEUE_EXCEEDS_MOUNT_THRESHOLD or RPLCQUEXC (historical name), Copy Queue Exceeds Mount Threshold (caption), Copy_Queue_Exceeds_Mount_Threshold (attribute name), and RPLCQUEXC (column name).

**Disconnected**
A numeric value that indicates whether the database copy is disconnected. The Disconnected state indicates that no connection exists between the active database and the database copy. This attribute is available only in Exchange Server 2010, or later. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DISCONNECTED or RPLDISCN (historical name), Disconnected (caption), Disconnected (attribute name), and RPLDISCN (column name).

**Failed Suspended**
A numeric value that indicates whether the database copy is failed and suspended. The Failed and Suspended state indicates that an unrecoverable difference has been detected between the active mailbox database and the database copy. This attribute is available only in Exchange Server 2010, or later. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILED_SUSPENDED or RPLFLSUS (historical name), Failed Suspended (caption), Failed_Suspended (attribute name), and RPLFLSUS (column name).

**Inspector Generation Number**
The generation sequence number of the last log file that was inspected. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: INSPECTOR_GENERATION_NUMBER or RPLIGNUM (historical name), Inspector Generation Number (caption), Inspector_Generation_Number (attribute name), and RPLIGNUM (column name).

**Log Copy KB/Sec**
The size of the log files (in KB) that are copied per second. This attribute is available only in Exchange Server 2010, or later. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOG_COPY_KB/SEC or RPLLCPSES (historical name), Log Copy KB/Sec (caption), Log_Copy_KB/Sec (attribute name), and RPLLCPSES (column name).

**Node Type**
The type of node that indicates whether the node is active or passive. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Active (0), Passive (1), N/A (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NODE_TYPE or NODETYPE (historical name), Node Type (caption), Node_Type (attribute name), and NODETYPE (column name).

**Replay Batch Size**
The number of log files that are replayed together. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_BATCH_SIZE or RPLRBSIZ (historical name), Replay Batch Size (caption), Replay_Batch_Size (attribute name), and RPLRBSIZ (column name).

**Replay Generation Number**
The generation sequence number of the last log file that was replayed. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_GENERATION_NUMBER or RPLRGNUM (historical name), Replay Generation Number (caption), Replay_Generation_Number (attribute name), and RPLRGNUM (column name).

**Replay Generations Per Minute**
The number of generated log files that are replayed per minute in the current replay batch. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_GENERATIONS_PER_MINUTE or RPLRGENPMN (historical name), Replay Generations Per Minute (caption), Replay_Generations_Per_Minute (attribute name), and RPLRGENPMN (column name).

**Replay Notification Generation Number**

The generation sequence number of the last log file that is known to the Microsoft Exchange Replication service. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_NOTIFICATION_GENERATION_NUMBER or RPLRNGNUM (historical name), Replay Notification Generation Number (caption), Replay_Notification_Generation_Number (attribute name), and RPLRNGNUM (column name).

**Replica Instance Failed**

A numeric value that indicates if the continuous replication for the selected instance (storage group) has failed. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLICA_INSTANCE_FAILED or RPLRINTFA (historical name), Replica Instance Failed (caption), Replica_Instance_Failed (attribute name), and RPLRINTFA (column name).

**Replication Initializing**

A numeric value that indicates if the continuous replication for the selected instance (storage group) has initialized. The initialization indicates that the storage group performs initial startup checks or the Microsoft Exchange Replication service performs an incremental reseed. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLICATION_INITIALIZING or RPLRINIT (historical name), Replication Initializing (caption), Replication_Initializing (attribute name), and RPLRINIT (column name).

**Replication Suspended**

A numeric value that indicates if the continuous replication for the selected instance (storage group) has suspended. When the continuous replication is suspended, log files are not copied and replayed into the passive node. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLICATION_SUSPENDED or RPLRSUSP (historical name), Replication Suspended (caption), Replication_Suspended (attribute name), and RPLRSUSP (column name).

**Resynchronizing**

A numeric value that indicates whether the database copy is resynchronizing. The Resynchronizing state indicates that the mailbox database copy is being compared with the active mailbox database to check for any differences between the two database copies. The Resynchronizing state remains until all the differences between the two database copies are detected and resolved. This attribute is available only in Exchange Server 2010, or later. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RESYNCHRONIZING or RPLRESYN (historical name), Resynchronizing (caption), Resynchronizing (attribute name), and RPLRESYN (column name).

**ROWNO**

The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Seeding**
A numeric value that indicates whether the passive database copy is being seeded. This attribute is available only in Exchange Server 2010 SP1, or later. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEEDING or REPLSEED (historical name), Seeding (caption), Seeding (attribute name), and REPLSEED (column name).

**Seeding Source**
A numeric value that indicates whether the passive database copy has been used as a source for seeding. This attribute is available only in Exchange Server 2010 SP1, or later. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEEDING_SOURCE or RPLSDSRC (historical name), Seeding Source (caption), Seeding_Source (attribute name), and RPLSDSRC (column name).

**Single Page Restore**
A numeric value that indicates whether the single page restore operation has been performed on the database copy. This attribute is available only in Exchange Server 2010, or later. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SINGLE_PAGE_RESTORE or RPLSPGRES (historical name), Single Page Restore (caption), Single_Page_Restore (attribute name), and RPLSPGRES (column name).

**Suspended and not Seeding**
A numeric value that indicates whether the continuous replication for the passive database copy has been suspended and the database copy has not been seeded. When the continuous replication is suspended, log files are not copied and replayed into the passive database copy. This attribute is available only in Exchange Server 2010 SP1, or later. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1), N/A (-2), YES (1), NO (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUSPENDED_NOT_SEEDING or RPLSSNTSD (historical name), Suspended and not Seeding (caption), Suspended_Not_Seeding (attribute name), and RPLSSNTSD (column name).

## MS Exchange Replication Server data set

This data set contains attributes that are related to the Replication Server.

This data set contains the following attributes:

**GetCopyStatus Server Side Calls**
The total number of GetCopyStatus requests to retrieve the status of database copies that are created on the mailbox server between the start and end of the process. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GETCOPYSTATUS_SERVER_SIDE_CALLS or GCSSSC (historical name), GetCopyStatus Server Side Calls (caption), GetCopyStatus_Server_Side_Calls (attribute name), and GCSSSC (column name).

**GetCopyStatus Server Side Calls/Sec**
The current rate at which a remote client queries for the status of database copies on the mailbox server. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: GETCOPYSTATUS_SERVER_SIDE_CALLS/SEC or GCSSSCPS (historical name), GetCopyStatus Server Side Calls/Sec (caption), GetCopyStatus_Server_Side_Calls/sec (attribute name), and GCSSSCPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Replication(Superseded) data set

This data set monitors the Exchange Server Mailbox Store replication activity.

This data set contains the following attributes:

**Copy Generation Number**
The generation number of the last log file that is copied. The type is integer (32-bit numeric property).

The following names are defined for this attribute: COPY_GENERATION_NUMBER or RPLCGNUM (historical name), Copy Generation Number (caption), Copy_Generation_Number (attribute name), and RPLCGNUM (column name).

**Copy Notification Generation Number**
The generation number of the last log file that the copier is aware of. This attribute is a key attribute. The type is integer (32-bit numeric property).

The following names are defined for this attribute: COPY_NOTIFICATION_GENERATION_NUMBER or RPLCNGNUM (historical name), Copy Notification Generation Number (caption), Copy_Notification_Generation_Number (attribute name), and RPLCNGNUM (column name).

**Copy Queue Exceeds Mount Threshold**
Is 1 if the copy queue length is larger than the Mount Threshold specified by the Auto Database Mount Dial that is with cluster continuous replication and it will always be undefined with Local Continuous Replication (LCR). This attribute is not available in Microsoft Exchange Server 2010 and 2010 SP1. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: CCR Queue High (1), CCR Queue Good (0), Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: COPY_QUEUE_EXCEEDS_MOUNT_THRESHOLD or RPLCQUEXC (historical name), Copy Queue Exceeds Mount Threshold (caption), Copy_Queue_Exceeds_Mount_Threshold (attribute name), and RPLCQUEXC (column name).

**Copy Queue Length**
The number of log generations that is waiting to be inspected and copied successfully. The type is integer (32-bit gauge).

The following names are defined for this attribute: COPY_QUEUE_LENGTH or RPLCQLEN (historical name), Copy Queue Length (caption), Copy_Queue_Length (attribute name), and RPLCQLEN (column name).

**Inspector Generation Number**
The generation number of the last log file that is inspected. The type is integer (32-bit numeric property).

The following names are defined for this attribute: INSPECTOR_GENERATION_NUMBER or RPLIGNUM (historical name), Inspector Generation Number (caption), Inspector_Generation_Number (attribute name), and RPLIGNUM (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Replay Batch Size**
The number of log generations that are replayed together. This attribute is not available in Microsoft Exchange Server 2010 SP1. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_BATCH_SIZE or RPLRBSIZ (historical name), Replay Batch Size (caption), Replay_Batch_Size (attribute name), and RPLRBSIZ (column name).

**Replay Generation Number**
The generation number of the last log file that is replayed successfully. The type is integer (32-bit numeric property).

The following names are defined for this attribute: REPLAY_GENERATION_NUMBER or RPLRGNUM (historical name), Replay Generation Number (caption), Replay_Generation_Number (attribute name), and RPLRGNUM (column name).

**Replay Generations Complete**
The number of log generations that are already played in the current replay batch. This attribute is not available in Microsoft Exchange Server 2010 SP1. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_GENERATIONS_COMPLETE or RPLRGENCOM (historical name), Replay Generations Complete (caption), Replay_Generations_Complete (attribute name), and RPLRGENCOM (column name).

**Replay Generations Per Minute**
The rate of replay in the log generations per minute in the current replay batch. This attribute is not available in Microsoft Exchange Server 2010 and 2010 SP1. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_GENERATIONS_PER_MINUTE or RPLRGENPMN (historical name), Replay Generations Per Minute (caption), Replay_Generations_Per_Minute (attribute name), and RPLRGENPMN (column name).

**Replay Generations Remaining**
The number of log generations that remain to be played in current replay batch. This attribute is not available in Microsoft Exchange Server 2010 SP1. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLAY_GENERATIONS_REMAINING or RPLRGENREM (historical name), Replay Generations Remaining (caption), Replay_Generations_Remaining (attribute name), and RPLRGENREM (column name).

**Replay Notification Generation Number**
The generation number of the last log file that replay knows about. The type is integer (32-bit numeric property).

The following names are defined for this attribute: REPLAY_NOTIFICATION_GENERATION_NUMBER or RPLRNGNUM (historical name), Replay Notification Generation Number (caption), Replay_Notification_Generation_Number (attribute name), and RPLRNGNUM (column name).

**Replay Queue Length**
The number of log generations that is waiting to be replayed. The type is integer (32-bit gauge).

The following names are defined for this attribute: REPLAY_QUEUE_LENGTH or RPLRQLEN (historical name), Replay Queue Length (caption), Replay_Queue_Length (attribute name), and RPLRQLEN (column name).

**Replica Instance Failed**
Failed is 1 if the replica instance is set to failed, otherwise 0. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Replication Failed (1), Replication Running (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLICA_INSTANCE_FAILED or RPLRINTFA (historical name), Replica Instance Failed (caption), Replica_Instance_Failed (attribute name), and RPLRINTFA (column name).

**Replication Initializing**
Initializing has a value of 1 when the Microsoft Exchange Replication service performs initial startup checks or when incremental reseeding occurs for any storage group. Otherwise, initializing has a value of 0. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Initializing (1), Running (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLICATION_INITIALIZING or RPLRINIT (historical name), Replication Initializing (caption), Replication_Initializing (attribute name), and RPLRINIT (column name).

**Replication Suspended**
Suspended is 1 if continuous replication is suspended. When continuous replication is suspended, logs are not copied and replayed into the passive copy. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Replication Suspended (1), Replication Running (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REPLICATION_SUSPENDED or RPLRSUSP (historical name), Replication Suspended (caption), Replication_Suspended (attribute name), and RPLRSUSP (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Resource Booking data set

This data set monitors the activities of the Resource Booking Attendant on the Microsoft Exchange Server. This data set is available in Exchange Server 2007, or later. This data set is a single-instance data set.

This data set contains the following attributes:

**Average Resource Booking Processing Time**
The average time that is required for the Resource Booking Attendant to process a resource booking request. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_RESOURCE_BOOKING_PROCESSING_TIME or ARBPT (historical name), Average Resource Booking Processing Time (caption), Average_Resource_Booking_Processing_Time (attribute name), and ARBPT (column name).

**Cancelled Meeting Requests**
The total number of meeting requests that have been cancelled by the Resource Booking Attendant since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CANCELLED_MEETING_REQUESTS or CANRB (historical name), Cancelled Meeting Requests (caption), Cancelled_Meeting_Requests (attribute name), and CANRB (column name).

**Declined Meeting Requests**
The total number of meeting requests that have been declined by the Resource Booking Attendant since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DECLINED_MEETING_REQUESTS or DECRB (historical name), Declined Meeting Requests (caption), Declined_Meeting_Requests (attribute name), and DECRB (column name).

**Meetings Requests Failed**
The total number of requests that have not been processed by the Resource Booking Attendant since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MEETINGS_REQUESTS_FAILED or REQFAIL (historical name), Meetings Requests Failed (caption), Meetings_Requests_Failed (attribute name), and REQFAIL (column name).

**Meetings Requests Processed**
The total number of meeting requests that have been processed by the Resource Booking Attendant since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MEETINGS_REQUESTS_PROCESSED or REQPRO (historical name), Meetings Requests Processed (caption), Meetings_Requests_Processed (attribute name), and REQPRO (column name).

**Meetings Requests Submitted**
The total number of meeting requests that have been submitted for processing to the Resource Booking Attendant since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MEETINGS_REQUESTS_SUBMITTED or REQSUB (historical name), Meetings Requests Submitted (caption), Meetings_Requests_Submitted (attribute name), and REQSUB (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Resource Health data set

This data set contains attributes that include the health information for the resources that are used by the Exchange Server.

This data set contains the following attributes:

**Fair To Unhealthy Latency Threshold**
The current latency value at which the resource state changes from the Fair state to the Unhealthy state. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAIR_TO_UNHEALTHY_LATENCY_THRESHOLD or FTULATT (historical name), Fair To Unhealthy Latency Threshold (caption), Fair_To_Unhealthy_Latency_Threshold (attribute name), and FTULATT (column name).

**Healthy To Fair Latency Threshold**
The current latency value at which the resource state changes from the Healthy state to the Fair state. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: HEALTHY_TO_FAIR_LATENCY_THRESHOLD or HTFLATT (historical name), Healthy To Fair Latency Threshold (caption), Healthy_To_Fair_Latency_Threshold (attribute name), and HTFLATT (column name).

**Max Resource Delay Per Minute**
The maximum amount of time (in milliseconds) that the server waits to access the resource in 1 minute. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAX_RESOURCE_DELAY_PER_MINUTE or MRDPM (historical name), Max Resource Delay Per Minute (caption), Max_Resource_Delay_Per_Minute (attribute name), and MRDPM (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Overflow Queue Count**
The number of new requests that are currently in the overflow queue. The new requests are redirected to the overflow queue when the count for target queue reaches a maximum value. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OVERFLOW_QUEUE_COUNT or OVFQC (historical name), Overflow Queue Count (caption), Overflow_Queue_Count (attribute name), and OVFQC (column name).

**Overflow Queue Count Peak**
The maximum number of new requests that are redirected to the overflow queue. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OVERFLOW_QUEUE_COUNT_PEAK or OVFQCP (historical name), Overflow Queue Count Peak (caption), Overflow_Queue_Count_Peak (attribute name), and OVFQCP (column name).

**Overflow Wait Time Peak**
The maximum amount of time (in milliseconds) that the current request waits in the overflow queue before being redirected to the target queue. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OVERFLOW_WAIT_TIME_PEAK or OVFWTP (historical name), Overflow Wait Time Peak (caption), Overflow_Wait_Time_Peak (attribute name), and OVFWTP (column name).

**Raw Resource Value**
The parameter that is used to measure the current state of the resource since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RAW_RESOURCE_VALUE or RAWRV (historical name), Raw Resource Value (caption), Raw_Resource_Value (attribute name), and RAWRV (column name).

**Requests Per Second**
The total number of requests that are received by the protected resource per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REQUESTS_PER_SECOND or REQPERS (historical name), Requests Per Second (caption), Requests_Per_Second (attribute name), and REQPERS (column name).

**Resource Health Instance Name**
The name of the Microsoft Exchange Resource Health instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: RESOURCE_HEALTH_INSTANCE_NAME or RHINTN (historical name), Resource Health Instance Name (caption), Resource_Health_Instance_Name (attribute name), and RHINTN (column name).

**Resource Health Measure**
The current resource health measure that is determined by the Exchange Server since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RESOURCE_HEALTH_MEASURE or RESHM (historical name), Resource Health Measure (caption), Resource_Health_Measure (attribute name), and RESHM (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Semaphore Count**
The current number of semaphores that control access to a shared resource, which is used by the Exchange Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEMAPHORE_COUNT or SEMACNT (historical name), Semaphore Count (caption), Semaphore_Count (attribute name), and SEMACNT (column name).

**Semaphore Count Peak**
The maximum number of semaphores that control access to a shared resource, which is used by the Exchange Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SEMAPHORE_COUNT_PEAK or SEMACNTP (historical name), Semaphore Count Peak (caption), Semaphore_Count_Peak (attribute name), and SEMACNTP (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Semaphore Size**
The number of processes that can concurrently access the semaphore since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SEMAPHORE_SIZE or TOTSS (historical name), Total Semaphore Size (caption), Total_Semaphore_Size (attribute name), and TOTSS (column name).

**Total Semaphore Size Peak**
The maximum number of processes that can concurrently access the semaphore. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_SEMAPHORE_SIZE_PEAK or TOTSSP (historical name), Total Semaphore Size Peak (caption), Total_Semaphore_Size_Peak (attribute name), and TOTSSP (column name).

**Total Threads Beyond Acceptable Latency**
The total number of threads that exceed the predefined maximum latency since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_THREADS_BEYOND_ACCEPTABLE_LATENCY or TOTTBAL (historical name), Total Threads Beyond Acceptable Latency (caption), Total_Threads_Beyond_Acceptable_Latency (attribute name), and TOTTBAL (column name).

**Unhealthy Health Measure**
The server health measure that is returned when the resource that is used by the Exchange Server is unhealthy. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: UNHEALTHY_HEALTH_MEASURE or UNHMS (historical name), Unhealthy Health Measure (caption), Unhealthy_Health_Measure (attribute name), and UNHMS (column name).

## MS Exchange Rights Management Service data set

This data set represents Exchange Server Rights Management Service. The data set is available in Exchange Server 2010, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Average time for successful AcquireLicense()**
The average time that is consumed by a single successful AcquireLicense() in milliseconds. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_TIME_FOR_SUCCESSFUL_ACQUIRELICENSE or AVGTSAQL (historical name), Average time for successful AcquireLicense() (caption), Average_time_for_successful_AcquireLicense (attribute name), and AVGTSAQL (column name).

**Average time for successful AcquirePreLicense()**
The average time that is consumed by a single successful AcquirePreLicense() in milliseconds. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_TIME_FOR_SUCCESSFUL_ACQUIREPRELICENSE or AVGTSAQPL (historical name), Average time for successful AcquirePreLicense() (caption), Average_time_for_successful_AcquirePreLicense (attribute name), and AVGTSAQPL (column name).

**Average time for successful AcquireTemplates()**
The average time that is consumed by a single successful AcquireTemplates() in milliseconds. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_TIME_FOR_SUCCESSFUL_ACQUIRETEMPLATES or AVGTSAQT (historical name), Average time for successful AcquireTemplates() (caption), Average_time_for_successful_AcquireTemplates (attribute name), and AVGTSAQT (column name).

**Average time for successful Certify()**
The average time that is consumed by a single successful Certify() in milliseconds. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_TIME_FOR_SUCCESSFUL_CERTIFY or AVGTSCER (historical name), Average time for successful Certify() (caption), Average_time_for_successful_Certify (attribute name), and AVGTSCER (column name).

**Average time for successful FindServiceLocations()**
The average time that is consumed by a single successful FindServiceLocations() in milliseconds. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_TIME_FOR_SUCCESSFUL_FINDSERVICELOCATIONS or AVGTSFSL (historical name), Average time for successful FindServiceLocations() (caption), Average_time_for_successful_FindServiceLocations (attribute name), and AVGTSFSL (column name).

**Average time for successful GetClientLicensorCert()**
The average time that is consumed by a single successful GetClientLicensorCert() in milliseconds. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_TIME_FOR_SUCCESSFUL_GETCLIENTLICENSORCERT or AVGTSGCL (historical name), Average time for successful GetClientLicensorCert() (caption), Average_time_for_successful_GetClientLicensorCert (attribute name), and AVGTSGCL (column name).

**Cache-hit of RMS Server Info/sec**
The number of cache-hits of RMS server information per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CACHE-HIT_OF_RMS_SERVER_INFO/SEC or CACHHIT (historical name), Cache-hit of RMS Server Info/sec (caption), Cache-hit_of_RMS_Server_Info/sec (attribute name), and CACHHIT (column name).

**Cache-miss of RMS Server Info/sec**
The number of cache-misses of RMS server information per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CACHE-MISS_OF_RMS_SERVER_INFO/SEC or CACHMIS (historical name), Cache-miss of RMS Server Info/sec (caption), Cache-miss_of_RMS_Server_Info/sec (attribute name), and CACHMIS (column name).

**Entries added into RMS License Store/sec**
The number of entries that are added into the RMS license store per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: ENTRIES_ADDED_INTO_RMS_LICENSE_STORE/SEC or EADRMSLS (historical name), Entries added into RMS License Store/sec (caption), Entries_added_into_RMS_License_Store/sec (attribute name), and EADRMSLS (column name).

**Entries added into RMS Server Info cache/sec**
The number of entries that are added into the RMS server information cache per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: ENTRIES_ADDED_INTO_RMS_SERVER_INFO_CACHE/SEC or EADRMSSIC (historical name), Entries added into RMS Server Info cache/sec (caption), Entries_added_into_RMS_Server_Info_cache/sec (attribute name), and EADRMSSIC (column name).

**Entries removed from RMS License Store/sec**
The number of entries that are removed from the RMS license store per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute:
ENTRIES_REMOVED_FROM_RMS_LICENSE_STORE/SEC or ERMRMSLS (historical name), Entries removed from RMS License Store/sec (caption), Entries_removed_from_RMS_License_Store/sec (attribute name), and ERMRMSLS (column name).

**Entries removed from RMS Server Info cache/sec**
The number of entries that are removed from the RMS server information cache per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute:
ENTRIES_REMOVED_FROM_RMS_SERVER_INFO_CACHE/SEC or ERMRMSSIC (historical name), Entries removed from RMS Server Info cache/sec (caption), Entries_removed_from_RMS_Server_Info_cache/sec (attribute name), and ERMRMSSIC (column name).

**Failed AcquireLicense()/sec**
The number of AcquireLicense() requests that are invoked but failed per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: FAILED_ACQUIRELICENSE/SEC or FAILAQL (historical name), Failed AcquireLicense()/sec (caption), Failed_AcquireLicense/sec (attribute name), and FAILAQL (column name).

**Failed AcquirePreLicense()/sec**
The number of AcquirePreLicense() requests that are invoked but failed per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: FAILED_ACQUIREPRELICENSE/SEC or FAILAQPL (historical name), Failed AcquirePreLicense()/sec (caption), Failed_AcquirePreLicense/sec (attribute name), and FAILAQPL (column name).

**Failed AcquireTemplates()/sec**
The number of AcquireTemplates() requests that are invoked but failed per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: FAILED_ACQUIRETEMPLATES/SEC or FAILAQT (historical name), Failed AcquireTemplates()/sec (caption), Failed_AcquireTemplates/sec (attribute name), and FAILAQT (column name).

**Failed Certify()/sec**
The number of Certify() requests that are invoked but failed per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: FAILED_CERTIFY/SEC or FAILCERT (historical name), Failed Certify()/sec (caption), Failed_Certify/sec (attribute name), and FAILCERT (column name).

**Failed External AcquireLicense Requests/sec**
The total number of failed AcquireLicense() requests that are made to external RMS servers per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute:
FAILED_EXTERNAL_ACQUIRELICENSE_REQUESTS/SEC or FAILEXALR (historical name), Failed External AcquireLicense Requests/sec (caption), Failed_External_AcquireLicense_Requests/sec (attribute name), and FAILEXALR (column name).

**Failed External Certification Requests/sec**
The total number of failed certification requests that are made for external RMS servers per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute:
FAILED_EXTERNAL_CERTIFICATION_REQUESTS/SEC or FAILEXCR (historical name), Failed External Certification Requests/sec (caption), Failed_External_Certification_Requests/sec (attribute name), and FAILEXCR (column name).

**Failed FindServiceLocations()/sec**
The number of FindServiceLocations() requests that are invoked but failed per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: FAILED_FINDSERVICELOCATIONS/SEC or FAILFSL (historical name), Failed FindServiceLocations()/sec (caption), Failed_FindServiceLocations/sec (attribute name), and FAILFSL (column name).

**Failed GetClientLicensorCert()/sec**
The number of GetClientLicensorCert() requests that are invoked but failed per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: FAILED_GETCLIENTLICENSORCERT/SEC or FAILGETC (historical name), Failed GetClientLicensorCert()/sec (caption), Failed_GetClientLicensorCert/sec (attribute name), and FAILGETC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Successful AcquireLicense()/sec**
The number of AcquireLicense() requests that are invoked and processed successfully per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SUCCESSFUL_ACQUIRELICENSE/SEC or SUCAQL (historical name), Successful AcquireLicense()/sec (caption), Successful_AcquireLicense/sec (attribute name), and SUCAQL (column name).

**Successful AcquirePreLicense()/sec**
The number of AcquirePreLicense() requests that are invoked and processed successfully per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SUCCESSFUL_ACQUIREPRELICENSE/SEC or SUCAQPL (historical name), Successful AcquirePreLicense()/sec (caption), Successful_AcquirePreLicense/sec (attribute name), and SUCAQPL (column name).

**Successful AcquireTemplates()/sec**
The number of AcquireTemplates() requests that are invoked and processed successfully per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SUCCESSFUL_ACQUIRETEMPLATES/SEC or SUCAQT (historical name), Successful AcquireTemplates()/sec (caption), Successful_AcquireTemplates/sec (attribute name), and SUCAQT (column name).

**Successful Certify()/sec**
The number of Certify() requests that are invoked and processed successfully per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SUCCESSFUL_CERTIFY/SEC or SUCCERT (historical name), Successful Certify()/sec (caption), Successful_Certify/sec (attribute name), and SUCCERT (column name).

**Successful External AcquireLicense Requests/sec**
The total number of successful AcquireLicense() requests that are made for external RMS servers per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SUCCESSFUL_EXTERNAL_ACQUIRELICENSE_REQUESTS/SEC or SUCEXALR (historical name), Successful External AcquireLicense Requests/sec (caption), Successful_External_AcquireLicense_Requests/sec (attribute name), and SUCEXALR (column name).

**Successful External Certification Requests/sec**
The total number of successful certification requests that are made for external RMS servers per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SUCCESSFUL_EXTERNAL_CERTIFICATION_REQUESTS/SEC or SUCEXCR (historical name), Successful External Certification Requests/sec (caption), Successful_External_Certification_Requests/sec (attribute name), and SUCEXCR (column name).

**Successful FindServiceLocations()/sec**
The number of FindServiceLocations() requests that are invoked and processed successfully per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SUCCESSFUL_FINDSERVICELOCATIONS/SEC or SUCFNDL (historical name), Successful FindServiceLocations()/sec (caption), Successful_FindServiceLocations/sec (attribute name), and SUCFNDL (column name).

**Successful GetClientLicensorCert()/sec**
The number of GetClientLicensorCert() requests that are invoked and processed successfully per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: SUCCESSFUL_GETCLIENTLICENSORCERT/SEC or SUCGETCL (historical name), Successful GetClientLicensorCert()/sec (caption), Successful_GetClientLicensorCert/sec (attribute name), and SUCGETCL (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total cache-hit of RMS Server Info**
The total number of cache-hit of RMS Server Info. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_CACHE_HIT_OF_RMS_SERVER_INFO or TOTCHIT (historical name), Total cache-hit of RMS Server Info (caption), Total_cache_hit_of_RMS_Server_Info (attribute name), and TOTCHIT (column name).

**Total cache-miss of RMS Server Info**
The total number of cache-misses of RMS server information. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_CACHE_MISS_OF_RMS_SERVER-INFO or TOTCMIS (historical name), Total cache-miss of RMS Server Info (caption), Total_cache_miss_of_RMS_Server-Info (attribute name), and TOTCMIS (column name).

## MS Exchange Role Based Services data set

This data set provides the status of the MS Exchange system service on the server. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Role Name**
The MS Exchange Server roles. The type is string.

The following names are defined for this attribute: ROLES or ROLENAME (historical name), Role Name (caption), Roles (attribute name), and ROLENAME (column name).

**ROWNO**
The row number of the sample. This attribute is a key attribute. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Service Name**
The name of the MS Exchange server service. The type is string.

The following names are defined for this attribute: SERVICE_NAME_V622 or SRVCNAME (historical name), Service Name (caption), Service_Name_v622 (attribute name), and SRVCNAME (column name).

**Service Name (Superseded)**
The name of the MS Exchange system service. The type is string.

The following names are defined for this attribute: SERVICE_NAME or SRVNAME (historical name), Service Name (Superseded) (caption), Service_Name (attribute name), and SRVNAME (column name).

**Service Status**
The status of MS Exchange system service. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Unknown (0), Stopped (1), Start Pending (2), Stop Pending (3), Running (4), Continue Pending (5), Paused Pending (6), Paused (7). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: STATE or SRVSTATUS (historical name), Service Status (caption), State (attribute name), and SRVSTATUS (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Role Topology data set

This data set provides details about the Topology of Exchange Server. The following attributes are available in Microsoft Exchange Server 2007 and 2010. No data will be returned for all other Microsoft Exchange Servers. The name of the Microsoft Exchange 2007 and 2010 Server role to be used with each data set is in the "Attribute groups and Microsoft Exchange 2007 and 2010 Server roles" table in the User's Guide for this monitoring agent.

This data set contains the following attributes:

**Domain Name**
The fully qualified domain name. The type is string.

The following names are defined for this attribute: DOMAIN_NAME or DOMNAME (historical name), Domain Name (caption), Domain_Name (attribute name), and DOMNAME (column name).

**Exchange Server Name**
The name of the machine part of the organizational Exchange setup. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: EXCHANGE_SERVER_NAME or MACHNAME (historical name), Exchange Server Name (caption), Exchange_Server_Name (attribute name), and MACHNAME (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Roles**
The list of roles installed on the machine. The type is string.

The following names are defined for this attribute: ROLES (historical name), Roles (caption), Roles (attribute name), and ROLES (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Rpc Client Access data set

This data set monitors the activities of the RPC Client Access service on the Microsoft Exchange Server. By using the RPC Client Access service, the clients can access the Mailbox Server through the Client Access Server. This data set is available in Exchange Server 2010, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Active User Count**
The total number of users who have been logged on to the server and have done some activity during the last 2 minutes since the service was started. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVE_USER_COUNT or ACUSCONT (historical name), Active User Count (caption), Active_User_Count (attribute name), and ACUSCONT (column name).

**Client Background RPCs Failed**
The total number of background RPC requests that have been reported by the clients, and that have failed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_BACKGROUND_RPCS_FAILED or CLBCRFA (historical name), Client Background RPCs Failed (caption), Client_Background_RPCs_Failed (attribute name), and CLBCRFA (column name).

**Client Background RPCs succeeded**
The total number of background RPC requests that have been reported by the clients, and that have been processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_BACKGROUND_RPCS_SUCCEEDED or CBCRPCS (historical name), Client Background RPCs succeeded (caption), Client_Background_RPCs_succeeded (attribute name), and CBCRPCS (column name).

**Client Foreground RPCs Failed**
The total number of foreground RPC requests that have been reported by the clients, and that have failed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_FOREGROUND_RPCS_FAILED or CLFRRFA (historical name), Client Foreground RPCs Failed (caption), Client_Foreground_RPCs_Failed (attribute name), and CLFRRFA (column name).

**Client Foreground RPCs succeeded**
The total number of foreground RPC requests that have been reported by the clients, and that have been processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_FOREGROUND_RPCS_SUCCEEDED or CFRRPCS (historical name), Client Foreground RPCs succeeded (caption), Client_Foreground_RPCs_succeeded (attribute name), and CFRRPCS (column name).

**Client RPCs attempted**
The total number of RPC requests that have been attempted by the users since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_RPCS_ATTEMPTED or CRPCATEM (historical name), Client RPCs attempted (caption), Client_RPCs_attempted (attribute name), and CRPCATEM (column name).

**Client RPCs Failed**
The total number of RPC requests that have been reported by the clients, and that have failed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_RPCS_FAILED or CLRPCFAL (historical name), Client RPCs Failed (caption), Client_RPCs_Failed (attribute name), and CLRPCFAL (column name).

**Client RPCs succeeded**
The total number of RPC requests that have been processed by the Outlook client since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_RPCS_SUCCEEDED or CRPCSUC (historical name), Client RPCs succeeded (caption), Client_RPCs_succeeded (attribute name), and CRPCSUC (column name).

**Connection Count**
The number of clients who are currently connected to the server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CONNECTION_COUNT or CONCONT (historical name), Connection Count (caption), Connection_Count (attribute name), and CONCONT (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**RPC Averaged Latency**
The average RPC latency (in milliseconds) of the server for the last 1024 packets. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_AVERAGED_LATENCY or RPCAVLAT (historical name), RPC Averaged Latency (caption), RPC_Averaged_Latency (attribute name), and RPCAVLAT (column name).

**RPC Clients Bytes Read**
The number of bytes that are currently read from the RPC clients. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_CLIENTS_BYTES_READ or RPCCLBR (historical name), RPC Clients Bytes Read (caption), RPC_Clients_Bytes_Read (attribute name), and RPCCLBR (column name).

**RPC Clients Bytes Written**
The number of bytes that are currently written to the RPC clients. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_CLIENTS_BYTES_WRITTEN or RPCCBW (historical name), RPC Clients Bytes Written (caption), RPC_Clients_Bytes_Written (attribute name), and RPCCBW (column name).

**RPC Operations/Sec**
The number of RPC operations that are currently requested from the server per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_OPERATIONS/SEC or RPCOPSEC (historical name), RPC Operations/Sec (caption), RPC_Operations/sec (attribute name), and RPCOPSEC (column name).

**RPC Packets/sec**
The number of RPC packets that are currently processed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_PACKETS/SEC or RPCPKSEC (historical name), RPC Packets/sec (caption), RPC_Packets/sec (attribute name), and RPCPKSEC (column name).

**RPC Requests**
The number of RPC requests that are currently being processed by the RPC Client Access service. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_REQUESTS or RPCREQ (historical name), RPC Requests (caption), RPC_Requests (attribute name), and RPCREQ (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**User Count**
The number of users who are currently using the RPC Client Access service. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: USER_COUNT or USERCONT (historical name), User Count (caption), User_Count (attribute name), and USERCONT (column name).

## MS Exchange Search Indices data set

This data set monitors the activities of the Microsoft Exchange Search Indexer service. This data set is available only in Exchange Server 2007 and 2010. This data set is a multi-instance data set.

This data set contains the following attributes:

**Average document indexing time**
The average time (in milliseconds) that is taken to index documents. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_DOCUMENT_INDEXING_TIME or AVGDIT (historical name), Average document indexing time (caption), Average_document_indexing_time (attribute name), and AVGDIT (column name).

**Average Latency of RPCs to Obtain Content**
The average latency (in milliseconds) of the current RPC requests that retrieve the content from the specified database for the filter daemon. This attribute is not available in Exchange Server 2010. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RECENT_AVERAGE_LATENCY_OF_RPCS_USED_TO_OBTAIN_CONTENT or RAVGLR (historical name), Average Latency of RPCs to Obtain Content (caption), Recent_Average_Latency_of_RPCs_Used_to_Obtain_Content (attribute name), and RAVGLR (column name).

**Average size of indexed attachments**
The average size of the attachments that have been indexed since the filter daemon process was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_SIZE_OF_INDEXED_ATTACHMENTS or AVGSZIA (historical name), Average size of indexed attachments (caption), Average_size_of_indexed_attachments (attribute name), and AVGSZIA (column name).

**Average Size Of Indexed Attachments For Protected Messages**
The average size of the indexed attachments in the messages with Information Rights Management (IRM) protection. This attribute is not available in Exchange Server 2007. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_SIZE_OF_INDEXED_ATTACHMENTS_FOR_PROTECTED_MESSAGES or AVGIAFPM (historical name), Average Size Of Indexed Attachments For Protected Messages (caption), Average_Size_Of_Indexed_Attachments_For_Protected_Messages (attribute name), and AVGIAFPM (column name).

**Full Crawl Mode Status**
A numeric value that indicates whether a full-text crawl has occurred on a database. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: YES (1), NO (0), Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FULL_CRAWL_MODE_STATUS or FCRWLMST (historical name), Full Crawl Mode Status (caption), Full_Crawl_Mode_Status (attribute name), and FCRWLMST (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Number of Failed Retries**
The total number of indexing attempts that have failed again for the documents for which indexing had initially failed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_FAILED_RETRIES or NUMFRET (historical name), Number of Failed Retries (caption), Number_of_Failed_Retries (attribute name), and NUMFRET (column name).

**Number of Items in a Notification Queue**
The current number of items in the notification queue that are waiting to be indexed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_ITEMS_IN_A_NOTIFICATION_QUEUE or NUMINQ (historical name), Number of Items in a Notification Queue (caption), Number_of_Items_in_a_Notification_Queue (attribute name), and NUMINQ (column name).

**Number of Outstanding Batches**
The number of batches that are currently sent to the Microsoft Search Indexer service, and that are being processed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_OUTSTANDING_BATCHES or NUMOBTCH (historical name), Number of Outstanding Batches (caption), Number_of_Outstanding_Batches (attribute name), and NUMOBTCH (column name).

**Number of Successful Retries**
The total number of indexing attempts that have been processed for the documents for which indexing had initially failed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_SUCCESSFUL_RETRIES or NUMSRET (historical name), Number of Successful Retries (caption), Number_of_Successful_Retries (attribute name), and NUMSRET (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Search Indices Instance Name**
The name of the Search Indices instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: SEARCH_INDICES_INSTANCE_NAME or SIINAME (historical name), Search Indices Instance Name (caption), Search_Indices_Instance_Name (attribute name), and SIINAME (column name).

**Throttling Delay Value**
The total time (in milliseconds) for which a worker thread waits before retrieving a document from the Microsoft Exchange Information Store service. The throttling delay value is set by the throttling monitor thread. This attribute is not available in Exchange Server 2010. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: THROTTLING_DELAY_VALUE or THDVAL (historical name), Throttling Delay Value (caption), Throttling_Delay_Value (attribute name), and THDVAL (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Indexing Time For Protected Messages**
The total time (in milliseconds) that is taken to index the messages with IRM protection. This attribute is not available in Exchange Server 2007. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_TIME_TAKEN_FOR_INDEXING_PROTECTED_MESSAGES or TTFIPM (historical name), Total Indexing Time For Protected Messages (caption), Total_Time_Taken_For_Indexing_Protected_Messages (attribute name), and TTFIPM (column name).

## MS Exchange Search Mailbox Operators data set

This data set monitors the activities to search mailboxes on the Exchange Server. This data set is available in Exchange Server 2013. This data set is a multi-instance data set.

This data set contains the following attributes:

**Items Processed in 0 - 50 ms**

The total number of items that were processed in the range 0 - 50 milliseconds since the search process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_PROCESSED_IN_0_-_50_MS or ITMPRFT (historical name), Items Processed in 0 - 50 ms (caption), Items_Processed_in_0_-_50_ms (attribute name), and ITMPRFT (column name).

**Items Processed in 100 - 2000 ms**

The total number of items that were processed in the range 100 - 2000 milliseconds since the search process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_PROCESSED_IN_100_-_2000_MS or ITMPRHT (historical name), Items Processed in 100 - 2000 ms (caption), Items_Processed_in_100_-_2000_ms (attribute name), and ITMPRHT (column name).

**Items Processed in 50 - 100 ms**

The total number of items that were processed in the range 50 - 100 milliseconds since the search process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_PROCESSED_IN_50_-_100_MS or ITMPRFH (historical name), Items Processed in 50 - 100 ms (caption), Items_Processed_in_50_-_100_ms (attribute name), and ITMPRFH (column name).

**Items Processed in Greater than 2000 ms**

The total number of items that were processed in the duration greater than 2000 milliseconds since the search process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_PROCESSED_IN_GREATER_THAN_2000_MS or ITMPRGT (historical name), Items Processed in Greater than 2000 ms (caption), Items_Processed_in_Greater_than_2000_ms (attribute name), and ITMPRGT (column name).

**Items with Rights Management Attempted for Processing**

The total number of Information Rights Management (IRM) - protected items that were attempted for processing since the search process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_WITH_RIGHTS_MANAGEMENT_ATTEMPTED_FOR_PROCESSING or IRGHMGPR (historical name), Items with Rights Management Attempted for Processing (caption), Items_with_Rights_Management_Attempted_for_Processing (attribute name), and IRGHMGPR (column name).

**Items with Rights Management Partially Processed**
The total number of IRM-protected items that were partially processed since the search process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_WITH_RIGHTS_MANAGEMENT_PARTIALLY_PROCESSED or IRGHMGPP (historical name), Items with Rights Management Partially Processed (caption), Items_with_Rights_Management_Partially_Processed (attribute name), and IRGHMGPP (column name).

**Items with Rights Management Skipped**
The total number of IRM-protected messages that were not processed since the search process was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_WITH_RIGHTS_MANAGEMENT_SKIPPED or IRGHMGSK (historical name), Items with Rights Management Skipped (caption), Items_with_Rights_Management_Skipped (attribute name), and IRGHMGSK (column name).

**Items with Valid Annotation Token**
The number of items with a valid annotation token. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_WITH_VALID_ANNOTATION_TOKEN or ITMVATKN (historical name), Items with Valid Annotation Token (caption), Items_with_Valid_Annotation_Token (attribute name), and ITMVATKN (column name).

**Items without Annotation Token**
The number of items without an annotation token. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_WITHOUT_ANNOTATION_TOKEN or ITMWTKN (historical name), Items without Annotation Token (caption), Items_without_Annotation_Token (attribute name), and ITMWTKN (column name).

**Mailbox Database Name**
The name of the mailbox database. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: MAILBOX_DATABASE_NAME or MBXDBNM (historical name), Mailbox Database Name (caption), Mailbox_Database_Name (attribute name), and MBXDBNM (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Search Mailbox Session Cache data set

This data set monitors the cache access activities that occur during search operations on the Exchange Server. This data set is available in Exchange Server 2013. This data set is a multi-instance data set.

This data set contains the following attributes:

**Cache Hit Ratio**
The percentage of cache access attempts out of total cache access attempts when the required data was available in the cache. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CACHE_HIT_RATIO or CACHHTRT (historical name), Cache Hit Ratio (caption), Cache_Hit_Ratio (attribute name), and CACHHTRT (column name).

**Cache Hits**
The total number of cache access attempts when the required data was available in the cache since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CACHE_HITS or CACHHITS (historical name), Cache Hits (caption), Cache_Hits (attribute name), and CACHHITS (column name).

**Cache Instance Name**
The name of the cache instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: CACHE_INSTANCE_NAME or CACHINSN (historical name), Cache Instance Name (caption), Cache_Instance_Name (attribute name), and CACHINSN (column name).

**Cache Miss Ratio**
The percentage of cache access attempts out of total cache access attempts when the required data was not available in the cache. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CACHE_MISS_RATIO or CACHMSRT (historical name), Cache Miss Ratio (caption), Cache_Miss_Ratio (attribute name), and CACHMSRT (column name).

**Cache Misses**
The total number of cache access attempts when the required data was not available in the cache since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CACHE_MISSES or CACHMISS (historical name), Cache Misses (caption), Cache_Misses (attribute name), and CACHMISS (column name).

**Cache Requests**
The total number of cache access requests that were processed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CACHE_REQUESTS or CACHREQS (historical name), Cache Requests (caption), Cache_Requests (attribute name), and CACHREQS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Sender Filter Agent data set

This data set provides details about the MS Exchange Sender Filter statistics activity. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Messages Evaluated by Sender Filter**
The total number of messages evaluated by the Sender Filter agent. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_EVALUATED_BY_SENDER_FILTER or MEBSF (historical name), Messages Evaluated by Sender Filter (caption), Messages_Evaluated_by_Sender_Filter (attribute name), and MEBSF (column name).

**Messages Evaluated by Sender Filter/sec**
The total number of messages evaluated by the Sender Filter agent per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_EVALUATED_BY_SENDER_FILTER/SEC or MEBSFPS (historical name), Messages Evaluated by Sender Filter/sec (caption), Messages_Evaluated_by_Sender_Filter/sec (attribute name), and MEBSFPS (column name).

**Messages Filtered by Sender Filter**
The total number of messages filtered by the Sender Filter agent. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_FILTERED_BY_SENDER_FILTER or MFBSF (historical name), Messages Filtered by Sender Filter (caption), Messages_Filtered_by_Sender_Filter (attribute name), and MFBSF (column name).

**Messages Filtered by Sender Filter/sec**
The total number of messages filtered by the Sender Filter agent per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_FILTERED_BY_SENDER_FILTER/SEC or MFBSFPS (historical name), Messages Filtered by Sender Filter/sec (caption), Messages_Filtered_by_Sender_Filter/sec (attribute name), and MFBSFPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Sender Id Agent data set

This data set provides details about the MS Exchange Sender ID Agent. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**DNS Queries**
The total number of DNS Queries performed by Sender ID Agent since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DNS_QUERIES or DNSQUERIES (historical name), DNS Queries (caption), DNS_Queries (attribute name), and DNSQUERIES (column name).

**DNS Queries/sec**
The total of DNS Queries per second performed by Sender ID Agent since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DNS_QUERIES/SEC_V6201 or DNSQURPSEC (historical name), DNS Queries/sec (caption), DNS_Queries/sec_v6201 (attribute name), and DNSQURPSEC (column name).

**DNS Queries/sec (Superseded)**
The total of DNS Queries per second performed by Sender ID Agent since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DNS_QUERIES/SEC or DNSQUERSEC (historical name), DNS Queries/sec (Superseded) (caption), DNS_Queries/sec (attribute name), and DNSQUERSEC (column name).

**Messages That Bypassed Validation**
The total number of messages that bypass validation by the Sender Id agent. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_THAT_BYPASSED_VALIDATION or MTBPVAL (historical name), Messages That Bypassed Validation (caption), Messages_That_Bypassed_Validation (attribute name), and MTBPVAL (column name).

**Messages That Bypassed Validation/sec**
The number of messages that bypass validation per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_THAT_BYPASSED_VALIDATION/SEC or MTBPVALPS (historical name), Messages That Bypassed Validation/sec (caption), Messages_That_Bypassed_Validation/sec (attribute name), and MTBPVALPS (column name).

**Messages Validated**
The total number of messages that are validated by the Sender Id agent. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_VALIDATED or MSGSVALD (historical name), Messages Validated (caption), Messages_Validated (attribute name), and MSGSVALD (column name).

**Messages Validated/sec**
The number of messages that are validated per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_VALIDATED/SEC or MSGSVALDPS (historical name), Messages Validated/sec (caption), Messages_Validated/sec (attribute name), and MSGSVALDPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Server data set

This data set provides information about the status of the server.

This data set contains the following attributes:

**Application Percent Free Space**
The percent of free space available on the logical drive where the Exchange Server application is installed. The agent will use the Exchange Home directory to determine the root directory for the Exchange Application. The agent will then determine the size of the disk and amount of free space from performance objects to determine the free space available to the Exchange Application. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: APPLICATION_PERCENT_FREE_SPACE or APPPCTFREE (historical name), Application Percent Free Space (caption), Application_Percent_Free_Space (attribute name), and APPPCTFREE (column name).

**Client Access Role**
This server is configured to processes client access. The Client Access server role supports Outlook 2007 and earlier versions, Outlook Web Access, and Exchange ActiveSync in addition to the Post Office Protocol version 3 (POP3) and Internet Message Access Protocol version 4 rev1 (IMAP4)

protocols. The type is string with enumerated values. The following values are defined: Yes (Y), No (N). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CLIENT_ACCESS_ROLE or CLIENTACC (historical name), Client Access Role (caption), Client_Access_Role (attribute name), and CLIENTACC (column name).

**Edge Transport Role**
This is an Edge Transport Server. Edge Transport servers are deployed in your organization's perimeter network and handle all Internet-facing mail flow, provide protection against spam, and provide secure message paths between business partners. The type is string with enumerated values. The following values are defined: Yes (Y), No (N). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EDGE_TRANSPORT_ROLE or EDGETRANS (historical name), Edge Transport Role (caption), Edge_Transport_Role (attribute name), and EDGETRANS (column name).

**Exchange Server FQDN**
The fully qualified domain name (FQDN) of the Exchange Server. The type is string.

The following names are defined for this attribute: EXCHANGE_SERVER_FQDN or SRVRADDN (historical name), Exchange Server FQDN (caption), Exchange_Server_FQDN (attribute name), and SRVRADDN (column name).

**Exchange Server Installation Path**
The path where the Exchange Server is installed. The type is string.

The following names are defined for this attribute: EXCHANGE_SERVER_INSTALLATION_PATH or INSPATH (historical name), Exchange Server Installation Path (caption), Exchange_Server_Installation_Path (attribute name), and INSPATH (column name).

**Hub Transport Role**
The Hub Transport role is responsible for all internal mail flow. The type is string with enumerated values. The following values are defined: Yes (Y), No (N). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: HUB_TRANSPORT_ROLE or HUBTRANS (historical name), Hub Transport Role (caption), Hub_Transport_Role (attribute name), and HUBTRANS (column name).

**Information Store Status**
The Status of Exchange Information Store service. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Unknown (0), Stopped (1), Start Pending (2), Stop Pending (3), Running (4), Continue Pending (5), Paused Pending (6), Paused (7). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHG_IS_STATUS or ISSTATUS (historical name), Information Store Status (caption), Exchg_IS_Status (attribute name), and ISSTATUS (column name).

**Log Percent Free Space**
Reports the percent free space of log data space between the current sample and previous sample. The agent will obtain the names and location of the Exchange Server Log files. The agent will then determine the free space available to each Log file. The information returned will then be aggregated by Exchange Server Storage Group name in order to determine the total size of all log files within the Storage Group and the Total free space available to that Storage Group. The Total Free Space must then be divided by the Total Logical Disk Size and that result multiplied by 100 to arrive at the Total Percent Free Space available. Configure mailbox role to display Log Percent Free Space values. If mailbox role is not available on Exchange Server 2007, the value is 0 or undefined. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LOG_PERCENT_FREE_SPACE or LOGPCTFREE (historical name), Log Percent Free Space (caption), Log_Percent_Free_Space (attribute name), and LOGPCTFREE (column name).

**Mailbox Server Role**

This is a Mailbox Server. The Exchange Server 2007 Mailbox server role hosts both mailbox and public folder databases, and provides calendar access for users and messaging records management (MRM). The Mailbox server role is required if you plan to host user mailboxes, public folders, or both, on an Exchange 2007 server. However, if you want to implement all the features and functionality found in Exchange 2007, you will also have to install each of the other server roles. The type is string with enumerated values. The following values are defined: Yes (Y), No (N). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_SERVER_ROLE or MAILSRVR (historical name), Mailbox Server Role (caption), Mailbox_Server_Role (attribute name), and MAILSRVR (column name).

**MTA Status**

The Status of Exchange Mail Transfer Agent service. This attribute is not available for Microsoft Exchange Server 2007, and will return a value of 0 for this server. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Unknown (0), Stopped (1), Start Pending (2), Stop Pending (3), Running (4), Continue Pending (5), Paused Pending (6), Paused (7). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHG_MTA_STATUS or MTASTATUS (historical name), MTA Status (caption), Exchg_MTA_Status (attribute name), and MTASTATUS (column name).

**Node**

The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Routing Engine Status**

The Status of Exchange Routing Engine service. This attribute is not available for Microsoft Exchange Server 2007, and will return a value of 0 for this server. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Unknown (0), Stopped (1), Start Pending (2), Stop Pending (3), Running (4), Continue Pending (5), Paused Pending (6), Paused (7). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RES_STATUS or RESSTATUS (historical name), Routing Engine Status (caption), Res_Status (attribute name), and RESSTATUS (column name).

**ROWNO**

The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**

The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Server Status**

The status of the MS Exchange server. The tables below identify the default Windows services that must be running for the Server Status attribute to return an Up or Down state. These are the default Windows services unless they are configured through the agent configuration. The default Windows services for Exchange Server 2007 and 2010 are same. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: up (1), down (0). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SERVER_STATUS or STATUS (historical name), Server Status (caption), Server_Status (attribute name), and STATUS (column name).

**Server Version**
The version of the Exchange Server. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Unknown (-1), 2000 (0), 2003 (1), 2007 (2), 2010 (3), 2013 (4), 2016 (5), 2019 (6). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SERVER_VERSION or VERSION (historical name), Server Version (caption), Server_Version (attribute name), and VERSION (column name).

**SMTP Status**
The Status of SMTP service. This attribute is not available for Microsoft Exchange Server 2007, and will return a value of 0 for this server. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Unknown (0), Stopped (1), Start Pending (2), Stop Pending (3), Running (4), Continue Pending (5), Paused Pending (6), Paused (7). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SMTP_STATUS or SMTPSTATUS (historical name), SMTP Status (caption), SMTP_Status (attribute name), and SMTPSTATUS (column name).

**Sys Attendant Svc Status**
The Status of Exchange System Attendant service. This attribute is not available for Microsoft Exchange Server 2007, and will return a value of 0 for this server. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Unknown (0), Stopped (1), Start Pending (2), Stop Pending (3), Running (4), Continue Pending (5), Paused Pending (6), Paused (7). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SYSTEM_ATTENDANT_SVC_STATUS or SASTATUS (historical name), Sys Attendant Svc Status (caption), System_Attendant_Svc_Status (attribute name), and SASTATUS (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Unified Messaging Role**
This server is configured in a unified messaging role. The Unified Messaging server role enables voice mail, email, and fax messages to be stored in a user's mailbox. Users can then access their Exchange 2007 mailbox from a telephone or from a computer. The type is string with enumerated values. The following values are defined: Yes (Y), No (N). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: UNIFIED_MESSAGING_ROLE or UNIFIEDMSG (historical name), Unified Messaging Role (caption), Unified_Messaging_Role (attribute name), and UNIFIEDMSG (column name).

**WWW Service Status**
The Status of WWW publishing service. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Unknown (0), Stopped (1), Start Pending (2), Stop Pending (3), Running (4), Continue Pending (5), Paused Pending (6), Paused (7). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: WWW_STATUS or WWWSTATUS (historical name), WWW Service Status (caption), WWW_Status (attribute name), and WWWSTATUS (column name).

## MS Exchange Services Detail data set

This data set provides details about the services that are available in the Exchange Server. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Mandatory Service***
This attribute will show the category of Exchange Services. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Non Critical (0), Configured (1), Mandatory (2), NA (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MANDATORY_SERVICE or MANDATESRV (historical name), *Mandatory Service* (caption), Mandatory_Service (attribute name), and MANDATESRV (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Service Name***
The name of the Exchange service. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: SERVICE_NAME or SRVCNAME (historical name), *Service Name* (caption), Service_Name (attribute name), and SRVCNAME (column name).

***Service Start Mode***
Defined start mode for the service. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Automatic (1), Manual (2), Disabled (3), Delayed (4), Unknown (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SERVICE_START_MODE or STARTMODE (historical name), *Service Start Mode* (caption), Service_Start_Mode (attribute name), and STARTMODE (column name).

***Service State***
Current service state. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Stopped (0), Start Pending (1), Stop Pending (2), Running (3), Continue Pending (4), Pause Pending (5), Paused (6), Unknown (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SERVICE_STATE or SRVCSTATE (historical name), *Service State* (caption), Service_State (attribute name), and SRVCSTATE (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Service Status**
Current service status. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: OK (0), Error (1), Degraded (2), Unknown (3), Pred Fail (4), Starting (5), Stopping (6), Service (7). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SERVICE_STATUS or SRVCSTATUS (historical name), Service Status (caption), Service_Status (attribute name), and SRVCSTATUS (column name).

## MS Exchange Storage Group Detail data set

This data set provides details about the storage groups that are available in the Exchange Server. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Number Of Mailboxes in Storage Group***
The number of mailboxes in a particular storage group. The type is integer (32-bit counter).

The following names are defined for this attribute: NO_OF_MAILBOXES_IN_STORAGE_GROUP or NUMMBX (historical name), *Number Of Mailboxes in Storage Group* (caption), No_Of_MailBoxes_in_Storage_Group (attribute name), and NUMMBX (column name).

***Storage Group Name***
The name assigned to Exchange storage group by system or selected at installation. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: STORAGE_GROUP_NAME or SGNAME (historical name), *Storage Group Name* (caption), Storage_Group_Name (attribute name), and SGNAME (column name).

***Storage Group Percent Free Space***
The percent of free space available on the logical drive where the Exchange Server application is installed. The agent will use the Exchange Home directory to determine the root directory for the Exchange Application. The agent will then determine the size of the disk and amount of free space from performance objects to determine the free space available to the Exchange storage group. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: STORAGE_GROUP_PERCENT_FREE_SPACE or SGPCTFREE (historical name), *Storage Group Percent Free Space* (caption), Storage_Group_Percent_Free_Space (attribute name), and SGPCTFREE (column name).

***Storage Group Percent Growth***
The growth (in percentage) of the storage group between the current sample and previous sample. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: STORAGE_GROUP_PERCENT_GROWTH or SGPCTGRWTH (historical name), *Storage Group Percent Growth* (caption), Storage_Group_Percent_Growth (attribute name), and SGPCTGRWTH (column name).

***Storage Group Size***
The size in megabytes of storage group. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: STORAGE_GROUP_SIZE or SGSIZE (historical name), *Storage Group Size* (caption), Storage_Group_Size (attribute name), and SGSIZE (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Storage Group Distinguished Name**
The distinguished name of the storage group. The type is string.

The following names are defined for this attribute: STORAGE_GROUP_DISTINGUISHED_NAME or DISTNAME (historical name), Storage Group Distinguished Name (caption), Storage_Group_Distinguished_Name (attribute name), and DISTNAME (column name).

## MS Exchange Store Driver data set

This data set monitors the movement of messages from the transport pipeline into the appropriate mailbox. The data set is available only in Exchange Server 2007 and 2010. This data set is a multi-instance data set.

This data set contains the following attributes:

**Inbound Bytes Delivered**
The number of bytes delivered. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_BYTES_DELIVERED or INBYTDEL (historical name), Inbound Bytes Delivered (caption), Inbound_Bytes_Delivered (attribute name), and INBYTDEL (column name).

**Inbound Failed Recipients**
The number of failed deliveries. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_FAILED_RECIPIENTS or INFAILREC (historical name), Inbound Failed Recipients (caption), Inbound_Failed_Recipients (attribute name), and INFAILREC (column name).

**Inbound Local Delivery Calls**
The number of local delivery calls. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_LOCAL_DELIVERY_CALLS or INLOCDELC (historical name), Inbound Local Delivery Calls (caption), Inbound_Local_Delivery_Calls (attribute name), and INLOCDELC (column name).

**Inbound Local Delivery Calls Per Second**
The local delivery calls per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: INBOUND_LOCAL_DELIVERY_CALLS_PER_SECOND or INLOCDELS (historical name), Inbound Local Delivery Calls Per Second (caption), Inbound_Local_Delivery_Calls_Per_Second (attribute name), and INLOCDELS (column name).

**Inbound Message Delivery Attempts**
The number of attempts for delivering transport mail item. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_MESSAGE_DELIVERY_ATTEMPTS or INMSGDELAT (historical name), Inbound Message Delivery Attempts (caption), Inbound_Message_Delivery_Attempts (attribute name), and INMSGDELAT (column name).

**Inbound Message Delivery Attempts Per Second**
The number of attempts for delivering transport mail item per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: INBOUND_MESSAGE_DELIVERY_ATTEMPTS_PER_SECOND or INMSGDELS (historical name), Inbound Message Delivery Attempts Per Second (caption), Inbound_Message_Delivery_Attempts_Per_Second (attribute name), and INMSGDELS (column name).

**Inbound Number of Delivering Threads**
The number of threads in delivery. The type is integer (32-bit gauge).

The following names are defined for this attribute: INBOUND_NUMBER_OF_DELIVERING_THREADS or INNUMDELT (historical name), Inbound Number of Delivering Threads (caption), Inbound_Number_of_Delivering_Threads (attribute name), and INNUMDELT (column name).

**Inbound Recipients Delivered**
Recipients delivered. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_RECIPIENTS_DELIVERED or INRECPDEL (historical name), Inbound Recipients Delivered (caption), Inbound_Recipients_Delivered (attribute name), and INRECPDEL (column name).

**Inbound Recipients Delivered Per Second**
The number of inbound recipients delivered per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: INBOUND_RECIPIENTS_DELIVERED_PER_SECOND or INRECDELS (historical name), Inbound Recipients Delivered Per Second (caption), Inbound_Recipients_Delivered_Per_Second (attribute name), and INRECDELS (column name).

**Inbound Rerouted Recipients**
The number of deliveries rerouted. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_REROUTED_RECIPIENTS or INREROUTR (historical name), Inbound Rerouted Recipients (caption), Inbound_Rerouted_Recipients (attribute name), and INREROUTR (column name).

**Inbound Retried Recipients**
The number of deliveries retried. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_RETRIED_RECIPIENTS or INRETREC (historical name), Inbound Retried Recipients (caption), Inbound_Retried_Recipients (attribute name), and INRETREC (column name).

**Inbound Succeeded Recipients**
The number of successful deliveries. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_SUCCEEDED_RECIPIENTS or INSUCRECP (historical name), Inbound Succeeded Recipients (caption), Inbound_Succeeded_Recipients (attribute name), and INSUCRECP (column name).

**Inbound Total Meeting Failures**
The number of errors seen when processing meeting messages. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_TOTAL_MEETING_FAILURES or TOTINMTGF (historical name), Inbound Total Meeting Failures (caption), Inbound_Total_Meeting_Failures (attribute name), and TOTINMTGF (column name).

**Inbound Total Meeting Messages**
The total number of meeting messages processed. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_TOTAL_MEETING_MESSAGES or TOTINMTGM (historical name), Inbound Total Meeting Messages (caption), Inbound_Total_Meeting_Messages (attribute name), and TOTINMTGM (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Outbound Mapi Events Without Message**
The number of submitted MAPI events without message item. This attribute is not available in Microsoft Exchange Server 2010 SP1, or later. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OUTBOUND_MAPI_EVENTS_WITHOUT_MESSAGE or OUTMEVTWM (historical name), Outbound Mapi Events Without Message (caption), Outbound_Mapi_Events_Without_Message (attribute name), and OUTMEVTWM (column name).

**Outbound Submitted Mail Items**
The number of submitted mail items. The type is integer (32-bit counter).

The following names are defined for this attribute: OUTBOUND_SUBMITTED_MAIL_ITEMS or OUTSUBIT (historical name), Outbound Submitted Mail Items (caption), Outbound_Submitted_Mail_Items (attribute name), and OUTSUBIT (column name).

**Outbound Submitted Mail Items Per Second**
The number of mail items that are submitted per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: OUTBOUND_SUBMITTED_MAIL_ITEMS_PER_SECOND or OUTSUBIS (historical name), Outbound Submitted Mail Items Per Second (caption), Outbound_Submitted_Mail_Items_Per_Second (attribute name), and OUTSUBIS (column name).

**Outbound Total Recipients**
The total number of recipients handled. The type is integer (32-bit counter).

The following names are defined for this attribute: OUTBOUND_TOTAL_RECIPIENTS or OUTTOTREC (historical name), Outbound Total Recipients (caption), Outbound_Total_Recipients (attribute name), and OUTTOTREC (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Store Driver Name**
The name of the store driver. This attribute is not available in Microsoft Exchange Server 2010 SP1, or later. This attribute is a key attribute. The type is string with enumerated values. The following values are defined: N/A (N/A). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: STORE_DRIVER_U or SDRVNAME (historical name), Store Driver Name (caption), Store_Driver_U (attribute name), and SDRVNAME (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Store Driver Database data set

This data set contains attributes that are related to the Exchange store driver database.

This data set contains the following attributes:

**Delivery Attempts Per Minute Over The Last Five Minutes**
The average number of attempts to deliver inbound messages by the store driver to Exchange stores in the last 5 minutes. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DELIVERY_ATTEMPTS_PER_MINUTE_OVER_THE_LAST_FIVE_MINUTES or DAPMOLFM (historical name), Delivery Attempts Per Minute Over The Last Five Minutes (caption), Delivery_Attempts_Per_Minute_Over_The_Last_Five_Minutes (attribute name), and DAPMOLFM (column name).

**Delivery Failures Per Minute Over The Last Five Minutes**
The average number of message deliveries by the store driver that have failed in the last 5 minutes. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DELIVERY_FAILURES_PER_MINUTE_OVER_THE_LAST_FIVE_MINUTES or DFPMOLFM (historical name), Delivery Failures Per Minute Over The Last Five Minutes (caption), Delivery_Failures_Per_Minute_Over_The_Last_Five_Minutes (attribute name), and DFPMOLFM (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Store Driver Database Instance Name**
The name of the Microsoft Exchange Store Driver Database instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: STORE_DRIVER_DATABASE_INSTANCE_NAME or SDDINSTN (historical name), Store Driver Database Instance Name (caption), Store_Driver_Database_Instance_Name (attribute name), and SDDINSTN (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Store Driver Server data set

This data set contains attributes that display data for the Exchange store driver in each mailbox server.

This data set contains the following attributes:

**Delivery Attempts Per Minute Over The Last Five Minutes**
The average number of attempts to deliver inbound messages by the store driver to Exchange stores in the last five minutes. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DELIVERY_ATTEMPTS_PER_MINUTE_OVER_THE_LAST_FIVE_MINUTES_SERVER or DAPMOLFMS (historical name), Delivery Attempts Per Minute Over The Last Five Minutes (caption), Delivery_Attempts_Per_Minute_Over_The_Last_Five_Minutes_Server (attribute name), and DAPMOLFMS (column name).

**Delivery Failures Per Minute Over The Last Five Minutes**
The average number of message deliveries by the store driver that have failed in the last five minutes. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DELIVERY_FAILURES_PER_MINUTE_OVER_THE_LAST_FIVE_MINUTES_SERVER or DFPMOLFMS (historical name), Delivery Failures Per Minute Over The Last Five Minutes (caption), Delivery_Failures_Per_Minute_Over_The_Last_Five_Minutes_Server (attribute name), and DFPMOLFMS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Store Driver Server Instance Name**
The name of the Microsoft Exchange Store Driver instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: STORE_DRIVER_SERVER_INSTANCE_NAME or SDSINSTN (historical name), Store Driver Server Instance Name (caption), Store_Driver_Server_Instance_Name (attribute name), and SDSINSTN (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Store Interface data set

This data set monitors the interface between the Exchange Information Store service on the Mailbox Server and the Hub Transport servers. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Average Latency of RPC Requests**
The average latency (in milliseconds) of RPC requests that are processed by using RPC context handle pools since the exrpc32. dll process was loaded. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_LATENCY_OF_RPC_REQUESTS or RPCPAVGL (historical name), Average Latency of RPC Requests (caption), Average_Latency_of_RPC_Requests (attribute name), and RPCPAVGL (column name).

**ExRpcConnection Creation Events**
The number of ExRpcConnection object creation events that have occurred since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXRPCCONNECTION_CREATION_EVENTS or EXRPCCEV (historical name), ExRpcConnection Creation Events (caption), ExRpcConnection_Creation_Events (attribute name), and EXRPCCEV (column name).

**ExRpcConnection Disposal Events**
The number of ExRpcConnection object disposal events that have occurred since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXRPCCONNECTION_DISPOSAL_EVENTS or EXRPCDEV (historical name), ExRpcConnection Disposal Events (caption), ExRpcConnection_Disposal_Events (attribute name), and EXRPCDEV (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Open RPC Context Handles**
The number of RPC context handles that are currently open in all the RPC context handle pools. This attribute is not available in Exchange Server 2007. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OPEN_RPC_CONTEXT_HANDLES or RPCPCONH (historical name), Open RPC Context Handles (caption), Open_RPC_Context_Handles (attribute name), and RPCPCONH (column name).

**Percent of RPC Requests Failed**
The percentage of RPC requests that have failed. The failed RPC requests are the requests with error codes and exceptions. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_REQUESTS_FAILED_% or RPCREQF (historical name), Percent of RPC Requests Failed (caption), RPC_Requests_failed_% (attribute name), and RPCREQF (column name).

**Percent of Slow RPC Requests**
The percentage of RPC requests with a processing time of more than 500 ms. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_SLOW_REQUESTS_% or RPCSREQP (historical name), Percent of Slow RPC Requests (caption), RPC_Slow_requests_% (attribute name), and RPCSREQP (column name).

**ROP Requests outstanding**
The number of remote operation (ROP) requests that are currently pending to be processed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ROP_REQUESTS_OUTSTANDING or ROPRQO (historical name), ROP Requests outstanding (caption), ROP_Requests_outstanding (attribute name), and ROPRQO (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**RPC Bytes Received**
The total amount of data (in bytes) that has been received from the server since the exrpc32. dll process was loaded. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1), Value Exceeds Maximum (-2). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_BYTES_RECEIVED or RPCBYRE (historical name), RPC Bytes Received (caption), RPC_Bytes_Received (attribute name), and RPCBYRE (column name).

**RPC Latency Average**
The average latency (in milliseconds) of RPC requests since the exrpc32. dll process was loaded. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_LATENCY_AVERAGE_MSEC or RPCLTAVG (historical name), RPC Latency Average (caption), RPC_Latency_average_msec (attribute name), and RPCLTAVG (column name).

**RPC Latency Total**
The total time (in seconds) that has been spent to process RPC calls since the exrpc32. dll process was loaded. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_LATENCY_TOTAL_SEC or RPCLATT (historical name), RPC Latency Total (caption), RPC_Latency_total_sec (attribute name), and RPCLATT (column name).

**RPC Requests Failed with Exception**
The total number of RPC requests that have failed because of exceptions since the exrpc32. dll process was loaded. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_REQUESTS_FAILED_WITH_EXCEPTION or RPCREQFE (historical name), RPC Requests Failed with Exception (caption), RPC_Requests_Failed_with_Exception (attribute name), and RPCREQFE (column name).

**RPC Requests Outstanding**
The number of RPC requests that are currently pending to be processed. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_REQUESTS_OUTSTANDING or RPCREQO (historical name), RPC Requests Outstanding (caption), RPC_Requests_outstanding (attribute name), and RPCREQO (column name).

**RPC Requests Sent**
The total number of RPC requests that have been initiated for processing since the exrpc32. dll process was loaded. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_REQUESTS_SENT or RPCREQS (historical name), RPC Requests Sent (caption), RPC_Requests_Sent (attribute name), and RPCREQS (column name).

**RPC Requests Sent/Sec**
The number of RPC requests that are currently initiated for processing per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_REQUESTS_SENT/SEC or RPCREQSS (historical name), RPC Requests Sent/Sec (caption), RPC_Requests_Sent/Sec (attribute name), and RPCREQSS (column name).

**RPC Requests Succeeded**
The number of RPC requests that have succeeded since the exrpc32. dll process was loaded. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_REQUESTS_SUCCEEDED or RPCREQSU (historical name), RPC Requests Succeeded (caption), RPC_Requests_Succeeded (attribute name), and RPCREQSU (column name).

**RPC Slow Requests**
The total number of RPC requests that have taken more than 500 ms for processing since the exrpc32. dll process was loaded. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_SLOW_REQUESTS or RPCSREQ (historical name), RPC Slow Requests (caption), RPC_Slow_Requests (attribute name), and RPCSREQ (column name).

**RPC Slow Requests latency average msec**
The average latency (in milliseconds) of the RPC requests with a processing time of more than 500 ms. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_SLOW_REQUESTS_LATENCY_AVERAGE_MSEC or RPCRQL (historical name), RPC Slow Requests latency average msec (caption), RPC_Slow_Requests_latency_average_msec (attribute name), and RPCRQL (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Store Interface Instance Name**
The name of the store interface instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: STORE_INTERFACE_INSTANCE_NAME or STRINTIN (historical name), Store Interface Instance Name (caption), Store_Interface_Instance_Name (attribute name), and STRINTIN (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Latency of RPC Slow Requests**
The total processing time (in seconds) for the RPC calls with more than 500 ms processing time. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_LATENCY_OF_RPC_SLOW_REQUESTS or RPCSRQLT (historical name), Total Latency of RPC Slow Requests (caption), Total_Latency_of_RPC_Slow_Requests (attribute name), and RPCSRQLT (column name).

## MS Exchange Submission data set

This data set monitors the activity of message submissions from the Mailbox server to the Hub Transport server. This data set is available in Exchange Server 2013. This data set is a single instance data set.

This data set contains the following attributes:

**Failed Submissions**
The total number of message submissions that were failed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILED_SUBMISSIONS or FAILSUBM (historical name), Failed Submissions (caption), Failed_Submissions (attribute name), and FAILSUBM (column name).

**Failed Submissions/Sec**
The number of message submissions that currently failed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILED_SUBMISSIONS/SEC or FSUBMPS (historical name), Failed Submissions/Sec (caption), Failed_Submissions/Sec (attribute name), and FSUBMPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Pending Submissions**
The number of messages that are currently waiting for submission. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PENDING_SUBMISSIONS or PENDSUBM (historical name), Pending Submissions (caption), Pending_Submissions (attribute name), and PENDSUBM (column name).

**Percent of Permanent Failed Submissions in Last 5 Minutes**
The percentage of current message submissions that permanently failed in the last 5 minutes. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PERCENT_OF_PERMANENT_FAILED_SUBMISSIONS_IN_LAST_5_MINUTES or PFSUBMPC (historical name), Percent of Permanent Failed Submissions in Last 5 Minutes (caption), Percent_of_Permanent_Failed_Submissions_in_Last_5_Minutes (attribute name), and PFSUBMPC (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Successful Submissions**
The total number of messages that were submitted since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUCCESSFUL_SUBMISSIONS or SUCCSUBM (historical name), Successful Submissions (caption), Successful_Submissions (attribute name), and SUCCSUBM (column name).

**Successful Submissions/Sec**
The number of messages that are currently submitted per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUCCESSFUL_SUBMISSIONS/SEC or SUCSUBPS (historical name), Successful Submissions/Sec (caption), Successful_Submissions/Sec (attribute name), and SUCSUBPS (column name).

**Temporary Submission Failures**
The number of current message submissions that temporarily failed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TEMPORARY_SUBMISSION_FAILURES or TMPSUBFL (historical name), Temporary Submission Failures (caption), Temporary_Submission_Failures (attribute name), and TMPSUBFL (column name).

**Temporary Submission Failures/Sec**
The number of current message submissions that temporarily failed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TEMPORARY_SUBMISSION_FAILURES/SEC or TSUBFPS (historical name), Temporary Submission Failures/Sec (caption), Temporary_Submission_Failures/Sec (attribute name), and TSUBFPS (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Submission DSN data set

This data set monitors the delivery status notifications (DSN) for messages that are sent to the Mailbox Transport Submission service on the Exchange Server. DSN messages provide delivery failure reports and other status messages to message senders. This data set is available in Exchange Server 2013. This data set is a multi-instance data set.

This data set contains the following attributes:

**Delay DSNs**
The total number of delay DSN messages that were generated since the service was started. A delay DSN message is generated after each message delivery failure. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DELAY_DSNS or DLYDDSN (historical name), Delay DSNs (caption), Delay_DSNs (attribute name), and DLYDDSN (column name).

**Delivered DSNs**
The total number of DSN messages that were generated for the completed message deliveries since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DELIVERED_DSNS or DLVRDSN (historical name), Delivered DSNs (caption), Delivered_DSNs (attribute name), and DLVRDSN (column name).

**DSN Type**
The type of DSN. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: DSN_TYPE or SDSNTYPE (historical name), DSN Type (caption), DSN_Type (attribute name), and SDSNTYPE (column name).

**Expanded DSNs**
The total number of expanded DSN messages that were generated since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXPANDED_DSNS or EXPNDSN (historical name), Expanded DSNs (caption), Expanded_DSNs (attribute name), and EXPNDSN (column name).

**Failure DSNs in Last Hour that can be Alerted**
The number of failure DSN messages that can be alerted within the last hour because of message delivery failures. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILURE_DSNS_IN_LAST_HOUR_THAT_CAN_BE_ALERTED or LSHRAFLD (historical name), Failure DSNs in Last Hour that can be Alerted (caption), Failure_DSNs_in_Last_Hour_that_can_be_Alerted (attribute name), and LSHRAFLD (column name).

**Failure DSNs Total**
The total number of failure DSN messages that were generated because of message delivery failures since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILURE_DSNS_TOTAL or FLRDSNTO (historical name), Failure DSNs Total (caption), Failure_DSNs_Total (attribute name), and FLRDSNTO (column name).

**Last Hour Delayed DSNs**
The number of delay DSN messages that are generated within the last hour. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LAST_HOUR_DELAYED_DSNS or LHDLDSN (historical name), Last Hour Delayed DSNs (caption), Last_Hour_Delayed_DSNs (attribute name), and LHDLDSN (column name).

**Last Hour Failure DSNs**
The number of failure DSN messages that are generated within the last hour because of message delivery failures. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: LAST_HOUR_FAILURE_DSNS or LHFLRDSN (historical name), Last Hour Failure DSNs (caption), Last_Hour_Failure_DSNs (attribute name), and LHFLRDSN (column name).

**NDRs Generated for Catch-All Recipients**
The total number of delivery failure reports that were generated because the messages delivery to the catch-all mailbox recipients failed since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NDRS_GENERATED_FOR_CATCH-ALL_RECIPIENTS or NDRGENRD (historical name), NDRs Generated for Catch-All Recipients (caption), NDRs_Generated_for_Catch-All_Recipients (attribute name), and NDRGENRD (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Relay DSNs**
The total number of relay DSN messages that were generated since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RELAY_DSNS or RLAYDSNS (historical name), Relay DSNs (caption), Relay_DSNs (attribute name), and RLAYDSNS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Text Messaging data set

This data set monitors the text messaging activity of the Exchange Server. This data set is available in Exchange Server 2010, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Average Text Message Delivery Latency (milliseconds)**
The average time (in milliseconds) to send the recent 1024 text messages that have been processed by the Text Messaging Transport agent. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_TEXT_MESSAGE_DELIVERY_LATENCY_IN_MILLISECONDS or AVTMDLATMS (historical name), Average Text Message Delivery Latency (milliseconds) (caption), Average_Text_Message_Delivery_Latency_In_Milliseconds (attribute name), and AVTMDLATMS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Text Messages Pending Delivery**
The total number of text messages that are currently being processed by the Text Messaging Transport agent. The type is integer (32-bit counter).

The following names are defined for this attribute: TEXT_MESSAGES_PENDING_DELIVERY or TXTMSGPDEL (historical name), Text Messages Pending Delivery (caption), Text_Messages_Pending_Delivery (attribute name), and TXTMSGPDEL (column name).

**Text messages Sent via SMTP/sec**
The number of text messages that have been sent by the Hub Transport Server per second via SMTP. The type is integer (32-bit gauge).

The following names are defined for this attribute: TEXT_MESSAGES_SENT_VIA_SMTP/SEC or TMSVSMTP (historical name), Text messages Sent via SMTP/sec (caption), Text_messages_Sent_via_SMTP/sec (attribute name), and TMSVSMTP (column name).

**Text Messages Sent/sec**
The number of text messages that have been sent by the Hub Transport Server per second. The type is integer (32-bit gauge).

The following names are defined for this attribute: TEXT_MESSAGES_SENT/SEC or TXTMSGSPS (historical name), Text Messages Sent/sec (caption), Text_Messages_Sent/sec (attribute name), and TXTMSGSPS (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Messages Sent via SMTP**
The total number of text messages that have been sent via SMTP since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_MESSAGES_SENT_VIA_SMTP or TMSGSVSMTP (historical name), Total Messages Sent via SMTP (caption), Total_Messages_Sent_via_SMTP (attribute name), and TMSGSVSMTP (column name).

**Total Text Messages Sent**
The total number of text messages that have been sent since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_TEXT_MESSAGES_SENT or TTXTMSGSNT (historical name), Total Text Messages Sent (caption), Total_Text_Messages_Sent (attribute name), and TTXTMSGSNT (column name).

## MS Exchange Throttling data set

This data set contains attributes that are related to the client throttling policies.

This data set contains the following attributes:

**Active PowerShell Runspaces**
The number of currently active Windows PowerShell runspaces that have been hosted by the Exchange Server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVE_POWERSHELL_RUNSPACES or ACTPSR (historical name), Active PowerShell Runspaces (caption), Active_PowerShell_Runspaces (attribute name), and ACTPSR (column name).

**Active PowerShell Runspaces/Sec**
The number of currently active Windows PowerShell runspaces that are hosted by the Exchange Server per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVE_POWERSHELL_RUNSPACES/SEC or ACTPSRPS (historical name), Active PowerShell Runspaces/Sec (caption), Active_PowerShell_Runspaces/Sec (attribute name), and ACTPSRPS (column name).

**Average Task Wait Time**
The average amount of time (in milliseconds) that was spent between adding and removing a task from the task queue. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_TASK_WAIT_TIME or AVGTWT (historical name), Average Task Wait Time (caption), Average_Task_Wait_Time (attribute name), and AVGTWT (column name).

**Average Thread Sleep Time**
The average amount of time (in milliseconds) for which the threads are idle. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_THREAD_SLEEP_TIME or AVGTST (historical name), Average Thread Sleep Time (caption), Average_Thread_Sleep_Time (attribute name), and AVGTST (column name).

**Current Delayed Tasks**
The number of tasks that are currently delayed because of throttling. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CURRENT_DELAYED_TASKS or CURTDT (historical name), Current Delayed Tasks (caption), Current_Delayed_Tasks (attribute name), and CURTDT (column name).

**Delay Time Threshold**
The amount of time (in milliseconds) a single operation must be delayed in 1 minute before in the Users Delayed X Milliseconds attribute is incremented. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DELAY_TIME_THRESHOLD or DELYTT (historical name), Delay Time Threshold (caption), Delay_Time_Threshold (attribute name), and DELYTT (column name).

**Exchange Executing Cmdlets**
The number of Exchange cmdlets that are currently processed. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHANGE_EXECUTING_CMDLETS or EXECMD (historical name), Exchange Executing Cmdlets (caption), Exchange_Executing_Cmdlets (attribute name), and EXECMD (column name).

**Exchange Executing Cmdlets/Sec**
The number of Exchange cmdlets that are currently processed per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHANGE_EXECUTING_CMDLETS/SEC or EXECMDPS (historical name), Exchange Executing Cmdlets/Sec (caption), Exchange_Executing_Cmdlets/Sec (attribute name), and EXECMDPS (column name).

**Max Delay Per Minute**
The maximum amount of time for which a caller was delayed in the current 1-minute window because of throttling. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAX_DELAY_PER_MINUTE or MAXDLYPM (historical name), Max Delay Per Minute (caption), Max_Delay_Per_Minute (attribute name), and MAXDLYPM (column name).

**Max Delayed Tasks**
The maximum number of tasks that have been delayed since the service was started. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAX_DELAYED_TASKS or MAXDLYT (historical name), Max Delayed Tasks (caption), Max_Delayed_Tasks (attribute name), and MAXDLYT (column name).

**Max Effective Time In Active Directory Per Minute**
The maximum percentage of time that is spent on processing LDAP requests in the current 1-minute window. This attribute is not available in Exchange Server 2013. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAX_EFFECTIVE_TIME_IN_ACTIVE_DIRECTORY_PER_MINUTE or METIADPM (historical name), Max Effective Time In Active Directory Per Minute (caption), Max_Effective_Time_In_Active_Directory_Per_Minute (attribute name), and METIADPM (column name).

**Max Effective Time In Address Book Per Minute**
The maximum percentage of time that is spent on processing AddressBook requests in the current 1-minute window. This attribute is not available in Exchange Server 2013. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAX_EFFECTIVE_TIME_IN_ADDRESS_BOOK_PER_MINUTE or METIABPM (historical name), Max Effective Time In Address Book Per Minute (caption), Max_Effective_Time_In_Address_Book_Per_Minute (attribute name), and METIABPM (column name).

**Max Effective Time In CAS Per Minute**
The maximum percentage of time that was spent to process the Client Access server code in the last 1 minute. This attribute is not available in Exchange Server 2013. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAX_EFFECTIVE_TIME_IN_CAS_PER_MINUTE or METCASPM (historical name), Max Effective Time In CAS Per Minute (caption), Max_Effective_Time_In_CAS_Per_Minute (attribute name), and METCASPM (column name).

**Max Effective Time In MailboxRPC Per Minute**
The maximum percentage of time that is spent on processing MailboxRPC requests in the current 1-minute window. This attribute is not available in Exchange Server 2013. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAX_EFFECTIVE_TIME_IN_MAILBOXRPC_PER_MINUTE or METMRPCM (historical name), Max Effective Time In MailboxRPC Per Minute (caption), Max_Effective_Time_In_MailboxRPC_Per_Minute (attribute name), and METMRPCM (column name).

**Max Task Queue Length**
The maximum length of the task queue. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAX_TASK_QUEUE_LENGTH or MAXTQL (historical name), Max Task Queue Length (caption), Max_Task_Queue_Length (attribute name), and MAXTQL (column name).

**Max Worker Thread Count**
The maximum number of worker threads to which work items are assigned. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit counter) with enumerated

values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAX_WORKER_THREAD_COUNT or MAXWTC (historical name), Max Worker Thread Count (caption), Max_Worker_Thread_Count (attribute name), and MAXWTC (column name).

**New Task Rejections**
The total number of new tasks that are rejected. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NEW_TASK_REJECTIONS or NEWTR (historical name), New Task Rejections (caption), New_Task_Rejections (attribute name), and NEWTR (column name).

**New Task Rejections/sec**
The current number of new tasks that are rejected per second. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NEW_TASK_REJECTIONS/SEC or NEWTRPS (historical name), New Task Rejections/sec (caption), New_Task_Rejections/sec (attribute name), and NEWTRPS (column name).

**New Tasks Submitted/sec**
The number of new tasks that are submitted per second. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NEW_TASKS_SUBMITTED/SEC or NEWTSPS (historical name), New Tasks Submitted/sec (caption), New_Tasks_Submitted/sec (attribute name), and NEWTSPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Noninteractive Cutoff Percent**
The cut-off percentage at which noninteractive client connections to the mailbox server are interrupted. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NON_INTERACTIVE_CUTOFF_PERCENT or NONICP (historical name), Noninteractive Cutoff Percent (caption), Non_Interactive_Cutoff_Percent (attribute name), and NONICP (column name).

**OverBudget Threshold**
The number of times a user must go over budget in 1 minute to increment the Users X Times OverBudget attribute. This attribute is not available in Exchange Server 2013. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: OVER_BUDGET_THRESHOLD or OVERBT (historical name), OverBudget Threshold (caption), Over_Budget_Threshold (attribute name), and OVERBT (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Task Failures/Sec**
The total number of tasks that have failed per second. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TASK_FAILURES/SEC or TASKFPS (historical name), Task Failures/Sec (caption), Task_Failures/sec (attribute name), and TASKFPS (column name).

**Task Queue Length**
The total length of the task queue. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TASK_QUEUE_LENGTH or TASKQL (historical name), Task Queue Length (caption), Task_Queue_Length (attribute name), and TASKQL (column name).

**Task Timeouts Per Minute**
The total number of tasks that have timed out in the current 1-minute window. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TASK_TIMEOUTS_PER_MINUTE or TASKTPM (historical name), Task Timeouts Per Minute (caption), Task_Timeouts_Per_Minute (attribute name), and TASKTPM (column name).

**Throttling Instance Name**
The name of the Microsoft Exchange Throttling instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: THROTTLING_INSTANCE_NAME or TINSTN (historical name), Throttling Instance Name (caption), Throttling_Instance_Name (attribute name), and TINSTN (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total New Tasks**
The total number of new tasks that are submitted for processing. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_NEW_TASKS or TOTNT (historical name), Total New Tasks (caption), Total_New_Tasks (attribute name), and TOTNT (column name).

**Total Task Failures**
The total number of tasks that have failed. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit counter) with enumerated values. The following values are

defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_TASK_FAILURES or TOTTF (historical name), Total Task Failures (caption), Total_Task_Failures (attribute name), and TOTTF (column name).

**Total Unique Budgets**
The total number of unique budgets that are processed in the current 1-minute window. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_UNIQUE_BUDGETS or TOTUNQB (historical name), Total Unique Budgets (caption), Total_Unique_Budgets (attribute name), and TOTUNQB (column name).

**Unique Budgets OverBudget**
The number of unique budgets that have exceeded the OverBudget threshold in the current 1-minute window. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: UNIQUE_BUDGETS_OVERBUDGET or UNQBOB (historical name), Unique Budgets OverBudget (caption), Unique_Budgets_OverBudget (attribute name), and UNQBOB (column name).

**Users Delayed X Milliseconds**
The number of users that have to wait for X or more milliseconds in 1 minute. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: USERS_DELAYED_X_MILLISECONDS or UDXMS (historical name), Users Delayed X Milliseconds (caption), Users_Delayed_X_Milliseconds (attribute name), and UDXMS (column name).

**Users X Times OverBudget**
The total number of users for which the requests are rejected more than X times in the current 1-minute window. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: USERS_X_TIMES_OVERBUDGET or UXTOB (historical name), Users X Times OverBudget (caption), Users_X_Times_OverBudget (attribute name), and UXTOB (column name).

**Worker Thread Count**
The total number of worker threads to which work items are assigned. This attribute is available only in Exchange Server 2010 Service Pack 1. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: WORKER_THREAD_COUNT or WORKTC (historical name), Worker Thread Count (caption), Worker_Thread_Count (attribute name), and WORKTC (column name).

## MS Exchange Transport Database data set

This data set monitors the activity of the MS Exchange Transport Database.

This data set contains the following attributes:

**Column cache load total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: COLUMN_CACHE_LOAD_TOTAL or CCLODTOT (historical name), Column cache load total (caption), Column_cache_load_total (attribute name), and CCLODTOT (column name).

**Column cache load/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: COLUMN_CACHE_LOAD/SEC or CCLODPS (historical name), Column cache load/sec (caption), Column_cache_load/sec (attribute name), and CCLODPS (column name).

**Column cache loaded bytes total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: COLUMN_CACHE_LOADED_BYTES_TOTAL or CCLODBTOT (historical name), Column cache loaded bytes total (caption), Column_cache_loaded_bytes_total (attribute name), and CCLODBTOT (column name).

**Column cache loaded bytes/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: COLUMN_CACHE_LOADED_BYTES/SEC or CCLODBPS (historical name), Column cache loaded bytes/sec (caption), Column_cache_loaded_bytes/sec (attribute name), and CCLODBPS (column name).

**Column cache loaded columns total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: COLUMN_CACHE_LOADED_COLUMNS_TOTAL or CCLODCTOT (historical name), Column cache loaded columns total (caption), Column_cache_loaded_columns_total (attribute name), and CCLODCTOT (column name).

**Column cache loaded columns/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: COLUMN_CACHE_LOADED_COLUMNS/SEC or CCLODCPS (historical name), Column cache loaded columns/sec (caption), Column_cache_loaded_columns/sec (attribute name), and CCLODCPS (column name).

**Column cache save total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: COLUMN_CACHE_SAVE_TOTAL or CCSAVTOT (historical name), Column cache save total (caption), Column_cache_save_total (attribute name), and CCSAVTOT (column name).

**Column cache save/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: COLUMN_CACHE_SAVE/SEC or CCSAVPS (historical name), Column cache save/sec (caption), Column_cache_save/sec (attribute name), and CCSAVPS (column name).

**Column cache saved columns total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: COLUMN_CACHE_SAVED_COLUMNS_TOTAL or CCSAVCTOT (historical name), Column cache saved columns total (caption), Column_cache_saved_columns_total (attribute name), and CCSAVCTOT (column name).

**Column cache saved columns/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: COLUMN_CACHE_SAVED_COLUMNS/SEC or CCSAVCPS (historical name), Column cache saved columns/sec (caption), Column_cache_saved_columns/sec (attribute name), and CCSAVCPS (column name).

**DataRow deletes total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: DATAROW_DELETES_TOTAL or DRDELTOT (historical name), DataRow deletes total (caption), DataRow_deletes_total (attribute name), and DRDELTOT (column name).

**DataRow deletes/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DATAROW_DELETES/SEC or DRDELPS (historical name), DataRow deletes/sec (caption), DataRow_deletes/sec (attribute name), and DRDELPS (column name).

**DataRow loads total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: DATAROW_LOADS_TOTAL or DRLODTOT (historical name), DataRow loads total (caption), DataRow_loads_total (attribute name), and DRLODTOT (column name).

**DataRow loads/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DATAROW_LOADS/SEC or DRLODPS (historical name), DataRow loads/sec (caption), DataRow_loads/sec (attribute name), and DRLODPS (column name).

**DataRow moves total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: DATAROW_MOVES_TOTAL or DRMOVTOT (historical name), DataRow moves total (caption), DataRow_moves_total (attribute name), and DRMOVTOT (column name).

**DataRow moves/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DATAROW_MOVES/SEC or DRMOVPS (historical name), DataRow moves/sec (caption), DataRow_moves/sec (attribute name), and DRMOVPS (column name).

**DataRow seeks total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: DATAROW_SEEKS_TOTAL or DRSEKTOT (historical name), DataRow seeks total (caption), DataRow_seeks_total (attribute name), and DRSEKTOT (column name).

**DataRow seeks/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DATAROW_SEEKS/SEC or DRSEKPS (historical name), DataRow seeks/sec (caption), DataRow_seeks/sec (attribute name), and DRSEKPS (column name).

**DataRow updates total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: DATAROW_UPDATES_TOTAL or DRUPDTOT (historical name), DataRow updates total (caption), DataRow_updates_total (attribute name), and DRUPDTOT (column name).

**DataRow updates/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DATAROW_UPDATES/SEC or DRUPDPS (historical name), DataRow updates/sec (caption), DataRow_updates/sec (attribute name), and DRUPDPS (column name).

**MailItem load total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: MAILITEM_LOAD_TOTAL or MAILLTOT (historical name), MailItem load total (caption), MailItem_load_total (attribute name), and MAILLTOT (column name).

**MailItem load/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MAILITEM_LOAD/SEC or MAILLPS (historical name), MailItem load/sec (caption), MailItem_load/sec (attribute name), and MAILLPS (column name).

**MailItem new total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: MAILITEM_NEW_TOTAL or MAILNWTOT (historical name), MailItem new total (caption), MailItem_new_total (attribute name), and MAILNWTOT (column name).

**MailItem new/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MAILITEM_NEW/SEC or MAILNWPS (historical name), MailItem new/sec (caption), MailItem_new/sec (attribute name), and MAILNWPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Stream bytes read total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: STREAM_BYTES_READ_TOTAL or SBYTRDTOT (historical name), Stream bytes read total (caption), Stream_bytes_read_total (attribute name), and SBYTRDTOT (column name).

**Stream bytes read/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: STREAM_BYTES_READ/SEC or SBYTRDPS (historical name), Stream bytes read/sec (caption), Stream_bytes_read/sec (attribute name), and SBYTRDPS (column name).

**Stream bytes written total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: STREAM_BYTES_WRITTEN_TOTAL or SBYTWTOT (historical name), Stream bytes written total (caption), Stream_bytes_written_total (attribute name), and SBYTWTOT (column name).

**Stream bytes written/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: STREAM_BYTES_WRITTEN/SEC or SBYTWPS (historical name), Stream bytes written/sec (caption), Stream_bytes_written/sec (attribute name), and SBYTWPS (column name).

**Stream read total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: STREAM_READ_TOTAL or STRRDTOT (historical name), Stream read total (caption), Stream_read_total (attribute name), and STRRDTOT (column name).

**Stream read/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: STREAM_READ/SEC or STRRDPS (historical name), Stream read/sec (caption), Stream_read/sec (attribute name), and STRRDPS (column name).

**Stream writes total**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is integer (32-bit counter).

The following names are defined for this attribute: STREAM_WRITES_TOTAL or STRWTOT (historical name), Stream writes total (caption), Stream_writes_total (attribute name), and STRWTOT (column name).

**Stream writes/sec**
The counter that is used to troubleshoot a complex issue that is related to the Exchange Server Extension (ESE). This information is required by the Microsoft Product Support Services. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: STREAM_WRITES/SEC or STRWPS (historical name), Stream writes/sec (caption), Stream_writes/sec (attribute name), and STRWPS (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Transport Database Instance Name**
The name of the Microsoft Exchange Transport Database instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: TRANSPORT_DATABASE_INSTANCE_NAME or TRDBINST (historical name), Transport Database Instance Name (caption), Transport_Database_Instance_Name (attribute name), and TRDBINST (column name).

## MS Exchange Transport Dumpster data set

This data set provides information about the transport dumpster.

This data set contains the following attributes:

**Dumpster Deletes Quota**

The total number of messages that the transport dumpster deletes when the quota exceeds the specified limit. This attribute is not available on Microsoft Exchange Server 2007. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DUMPSTER_DELETES_QUOTA or DUMPDELQ (historical name), Dumpster Deletes Quota (caption), Dumpster_Deletes_Quota (attribute name), and DUMPDELQ (column name).

**Dumpster Deletes/sec**

The rate at which items are deleted from the transport dumpster. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DUMPSTER_DELETES/SEC or DUMPDEL (historical name), Dumpster Deletes/sec (caption), Dumpster_Deletes/sec (attribute name), and DUMPDEL (column name).

**Dumpster Inserts/sec**

The rate at which items are inserted into the transport dumpster. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DUMPSTER_INSERTS/SEC or DUMPINS (historical name), Dumpster Inserts/sec (caption), Dumpster_Inserts/sec (attribute name), and DUMPINS (column name).

**Dumpster Item Count**

The total number of mail items that are currently in the transport dumpster. The type is integer (32-bit gauge).

The following names are defined for this attribute: DUMPSTER_ITEM_COUNT or DUMPITM (historical name), Dumpster Item Count (caption), Dumpster_Item_Count (attribute name), and DUMPITM (column name).

**Dumpster Mailbox Database Count**

The current number of associated mailbox databases for messages that are stored in the transport dumpster. This attribute is not available on Microsoft Exchange Server 2007. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DUMPSTER_MAILBOX_DATABASE_COUNT or DUMPMDB (historical name), Dumpster Mailbox Database Count (caption), Dumpster_Mailbox_Database_Count (attribute name), and DUMPMDB (column name).

**Dumpster Size**

The total size (in bytes) of mail items that are currently in the transport dumpster on the server. The type is integer (32-bit counter).

The following names are defined for this attribute: DUMPSTER_SIZE or DUMPSIZE (historical name), Dumpster Size (caption), Dumpster_Size (attribute name), and DUMPSIZE (column name).

**Node**

The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Redelivery Count**
The number of mail items that were re-delivered from the transport dumpster on the server. The type is integer (32-bit counter).

The following names are defined for this attribute: REDELIVERY_COUNT or REDELCNT (historical name), Redelivery Count (caption), Redelivery_Count (attribute name), and REDELCNT (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange Transport Queues data set

This data set provides details about the Exchange Server Transport Queues. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every minute and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Active Mailbox Delivery Queue Length***
The number of messages queued for delivery to an active mailbox. The value should be less than 250. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVE_MAILBOX_DELIVERY_QUEUE_LENGTH or AMDQUELNG (historical name), *Active Mailbox Delivery Queue Length* (caption), Active_Mailbox_Delivery_Queue_Length (attribute name), and AMDQUELNG (column name).

***Active Non-SMTP Delivery Queue Length***
The number of messages queued for delivery to a Non-SMTP transport. The value should be less than 250. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVE_NON-SMTP_DELIVERY_QUEUE_LENGTH or ANDQUELNG (historical name), *Active Non-SMTP Delivery Queue Length* (caption), Active_Non-SMTP_Delivery_Queue_Length (attribute name), and ANDQUELNG (column name).

***Active Remote Delivery Queue Length***
The number of messages queued for remote delivery. This attribute is not available in Exchange Server 2013. The value should be less than 250. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ACTIVE_REMOTE_DELIVERY_QUEUE_LENGTH or ARDQUELNG (historical name), *Active Remote Delivery Queue Length* (caption), Active_Remote_Delivery_Queue_Length (attribute name), and ARDQUELNG (column name).

***Node***

The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Poison Queue Length***

The number of messages in the poison message queue. The value should always be zero. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: POISON_QUEUE_LENGTH or POIQUELNG (historical name), *Poison Queue Length* (caption), Poison_Queue_Length (attribute name), and POIQUELNG (column name).

***Retry Mailbox Delivery Queue Length***

The number of messages queued for retry delivery to active mailbox since the server was started. The value should be less than 100. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RETRY_MAILBOX_DELIVERY_QUEUE_LENGTH or RMDQUELNG (historical name), *Retry Mailbox Delivery Queue Length* (caption), Retry_Mailbox_Delivery_Queue_Length (attribute name), and RMDQUELNG (column name).

***Retry Non-SMTP Delivery Queue Length***

The number of messages queued for delivery retry to a Non-SMTP transport since the server was started. The value should be less than 100. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RETRY_NON-SMTP_DELIVERY_QUEUE_LENGTH or RNDQUELNG (historical name), *Retry Non-SMTP Delivery Queue Length* (caption), Retry_Non-SMTP_Delivery_Queue_Length (attribute name), and RNDQUELNG (column name).

***Retry Remote Delivery Queue Length***

The number of messages queued for delivery retry since the server was started. This attribute is not available in Exchange Server 2013. The value should be less than 100. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RETRY_REMOTE_DELIVERY_QUEUE_LENGTH or REDQUELNG (historical name), *Retry Remote Delivery Queue Length* (caption), Retry_Remote_Delivery_Queue_Length (attribute name), and REDQUELNG (column name).

***Submission Queue Length***

The number of items in the submission queue when sample was taken. The value should be less than 100. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUBMISSION_QUEUE_LENGTH or SUBQUELNG (historical name), *Submission Queue Length* (caption), Submission_Queue_Length (attribute name), and SUBQUELNG (column name).

***Timestamp***

The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

***Transport Queue Instance Name***
The Exchange Server Instance name where Transport Queue activity is reported from. This attribute is a key attribute. The type is string with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TRANSPORT_QUEUE_INSTANCE_NAME or TRQUENAME (historical name), *Transport Queue Instance Name* (caption), Transport_Queue_Instance_Name (attribute name), and TRQUENAME (column name).

***Unreachable Queue Length***
The number of messages in Unreachable Queue when sample was taken. The value should be less than 100. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: UNREACHABLE_QUEUE_LENGTH or UNREQUELNG (historical name), *Unreachable Queue Length* (caption), Unreachable_Queue_Length (attribute name), and UNREQUELNG (column name).

**Aggregate Delivery Queue Length**
The number of messages queued for aggregate delivery. This attribute is not available in Exchange Server 2013. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AGGREGATE_DELIVERY_QUEUE_LENGTH or AGDQUELNG (historical name), Aggregate Delivery Queue Length (caption), Aggregate_Delivery_Queue_Length (attribute name), and AGDQUELNG (column name).

**Exchange Version**
The version of the Exchange Server. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Unknown (0), 2000 (2), 2003 (1), 2007 (3), 2010 (5), 2013 (12). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: EXCHANGE_VERSION or VERSION (historical name), Exchange Version (caption), Exchange_Version (attribute name), and VERSION (column name).

**Items Completed Delivery Total**
The total number of messages that completed delivery since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_COMPLETED_DELIVERY_TOTAL or ITEMSCMTOT (historical name), Items Completed Delivery Total (caption), Items_Completed_Delivery_Total (attribute name), and ITEMSCMTOT (column name).

**Items Completed Delivery/sec**
The number of times that messages completed delivery since the server was started per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_COMPLETED_DELIVERY/SEC or ITEMSCMSEC (historical name), Items Completed Delivery/sec (caption), Items_Completed_Delivery/sec (attribute name), and ITEMSCMSEC (column name).

**Items Deleted by Admin Total**
The total number of items deleted by Admin since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_DELETED_BY_ADMIN_TOTAL or ITEMSDLTOT (historical name), Items Deleted by Admin Total (caption), Items_Deleted_by_Admin_Total (attribute name), and ITEMSDLTOT (column name).

**Items Queued For Delivery Expired Total**
The total number of items queued for delivery that have expired since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_QUEUED_FOR_DELIVERY_EXPIRED_TOTAL or ITEMSEXTOT (historical name), Items Queued For Delivery Expired Total (caption), Items_Queued_For_Delivery_Expired_Total (attribute name), and ITEMSEXTOT (column name).

**Items Queued For Delivery Total**
The total number of messages queued for delivery since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_QUEUED_FOR_DELIVERY_TOTAL or ITEMSQUTOT (historical name), Items Queued For Delivery Total (caption), Items_Queued_For_Delivery_Total (attribute name), and ITEMSQUTOT (column name).

**Items Queued For Delivery/sec**
The number of times that messages are queued for delivery since the server was started per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_QUEUED_FOR_DELIVERY/SEC or ITEMSQUSEC (historical name), Items Queued For Delivery/sec (caption), Items_Queued_For_Delivery/sec (attribute name), and ITEMSQUSEC (column name).

**Items Resubmitted Total**
The total number of items resubmitted since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: ITEMS_RESUBMITTED_TOTAL or ITEMSRSTOT (historical name), Items Resubmitted Total (caption), Items_Resubmitted_Total (attribute name), and ITEMSRSTOT (column name).

**Largest Delivery Queue Length**
The number of items in the largest delivery queue. The type is integer (32-bit counter).

The following names are defined for this attribute: LARGEST_DELIVERY_QUEUE_LENGTH or LDELQLEN (historical name), Largest Delivery Queue Length (caption), Largest_Delivery_Queue_Length (attribute name), and LDELQLEN (column name).

**Messages Completed Delivery Total**
The total number of messages that completed delivery since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_COMPLETED_DELIVERY_TOTAL or MSGCMDLTOT (historical name), Messages Completed Delivery Total (caption), Messages_Completed_Delivery_Total (attribute name), and MSGCMDLTOT (column name).

**Messages Completed Delivery/sec**
The number of times that messages completed delivery since the server was started per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_COMPLETED_DELIVERY/SEC or MSGCMDPSEC (historical name), Messages Completed Delivery/sec (caption), Messages_Completed_Delivery/sec (attribute name), and MSGCMDPSEC (column name).

**Messages Queued For Delivery**
The number of messages queued to be delivered when sample was taken. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_QUEUED_FOR_DELIVERY or MSGQUDELIV (historical name), Messages Queued For Delivery (caption), Messages_Queued_For_Delivery (attribute name), and MSGQUDELIV (column name).

**Messages Queued For Delivery Total**
The total number of messages that were queued for delivery since server started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_QUEUED_FOR_DELIVERY_TOTAL or MSGQUDLTOT (historical name), Messages Queued For Delivery Total (caption), Messages_Queued_For_Delivery_Total (attribute name), and MSGQUDLTOT (column name).

**Messages Queued For Delivery/sec**
The number of times that messages are queued for delivery since the server was started per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_QUEUED_FOR_DELIVERY/SEC or MSGQUDPSEC (historical name), Messages Queued For Delivery/sec (caption), Messages_Queued_For_Delivery/sec (attribute name), and MSGQUDPSEC (column name).

**Messages Queued Total**
The total number messages that are queued. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_QUEUED_TOTAL or MSGQUETOT (historical name), Messages Queued Total (caption), Messages_Queued_Total (attribute name), and MSGQUETOT (column name).

**Messages Submitted Total**
The total number of messages submitted since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_SUBMITTED_TOTAL or MSGSUBTOT (historical name), Messages Submitted Total (caption), Messages_Submitted_Total (attribute name), and MSGSUBTOT (column name).

**Messages Submitted/sec**
The number of times that messages are being submitted per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_SUBMITTED/SEC or MSGSUBPSEC (historical name), Messages Submitted/sec (caption), Messages_Submitted/sec (attribute name), and MSGSUBPSEC (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Submission Queue Items Expired Total**
The total number of items in submission queue that have expired since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SUBMISSION_QUEUE_ITEMS_EXPIRED_TOTAL or SUBQUEXTOT (historical name), Submission Queue Items Expired Total (caption), Submission_Queue_Items_Expired_Total (attribute name), and SUBQUEXTOT (column name).

## MS Exchange Transport Rules data set

This data set reports Transport rules activity performed by the Exchange Server. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Messages Evaluated**
The total number of messages evaluated by Exchange Server Transport Rules since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_EVALUATED or MSGSEVAL (historical name), Messages Evaluated (caption), Messages_Evaluated (attribute name), and MSGSEVAL (column name).

**Messages Evaluated/sec**
The number of times that messages are evaluated by Exchange Server Transport Rules per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_EVALUATED/SEC or MSGEVALSEC (historical name), Messages Evaluated/sec (caption), Messages_Evaluated/sec (attribute name), and MSGEVALSEC (column name).

**Messages Processed**
The total number of messages passed through Exchange Server Transport Rules since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_PROCESSED or MSGSPROC (historical name), Messages Processed (caption), Messages_Processed (attribute name), and MSGSPROC (column name).

**Messages Processed/sec**
The number of times that messages are processed by Exchange Server Transport Rules per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_PROCESSED/SEC or MSGPROCSEC (historical name), Messages Processed/sec (caption), Messages_Processed/sec (attribute name), and MSGPROCSEC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Transport Rule Name**
Transport Rule Name that is confirmed by the Exchange Administrator. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: TRANSPORT_RULE_NAME or RULENAME (historical name), Transport Rule Name (caption), Transport_Rule_Name (attribute name), and RULENAME (column name).

## MS Exchange Transport Shadow Redundancy data set

This data set monitors the activity of the Exchange Transport Shadow Redundancy. The data set is available in the Exchange Server 2010, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Current Messages Acknowledged before Relay Completed**
The current number of messages that are received and acknowledged before the relay is complete. The type is integer (32-bit gauge).

The following names are defined for this attribute: CURRENT_MESSAGES_ACKNOWLEDGED_BEFORE_RELAY_COMPLETED or MSGACK (historical name), Current Messages Acknowledged before Relay Completed (caption), Current_Messages_Acknowledged_before_Relay_Completed (attribute name), and MSGACK (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Redundant Message Discard Events**
The current number of discarded messages that are in queue for all shadow servers. The type is integer (32-bit counter).

The following names are defined for this attribute: REDUNDANT_MESSAGE_DISCARD_EVENTS or RDMSGDIS (historical name), Redundant Message Discard Events (caption), Redundant_Message_Discard_Events (attribute name), and RDMSGDIS (column name).

**Redundant Message Discard Events Expired**
The total number of discarded messages that were in queue and are expired. The type is integer (32-bit counter).

The following names are defined for this attribute: REDUNDANT_MESSAGE_DISCARD_EVENTS_EXPIRED or RDMSGDISE (historical name), Redundant Message Discard Events Expired (caption), Redundant_Message_Discard_Events_Expired (attribute name), and RDMSGDISE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Transport Shadow Redundancy Instance Name**
The name of the Microsoft Exchange Transport Shadow Redundancy instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: TRANSPORT_SHADOW_REDUNDANCY_INSTANCE_NAME or TRSRINST (historical name), Transport Shadow Redundancy Instance Name (caption), Transport_Shadow_Redundancy_Instance_Name (attribute name), and TRSRINST (column name).

## MS Exchange Transport SMTP Availability data set

This data set contains attributes that are related to the Exchange Transport SMTP Availability.

This data set contains the following attributes:

**% Activity**
The combination of % Availability and Total Connections attribute values that are used for sending alerts. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: %_ACTIVITY or PERACT (historical name), % Activity (caption), %_Activity (attribute name), and PERACT (column name).

**% Availability**
The ratio of successful connections to the total valid connections in the sliding window. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: %_AVAILABILITY or PERAVLB (historical name), % Availability (caption), %_Availability (attribute name), and PERAVLB (column name).

**% Failures Due To Active Directory Down**
The current percentage of valid connections in the sliding window that have failed because the Active Directory is unavailable. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: %_FAILURES_DUE_TO_ACTIVE_DIRECTORY_DOWN or PERFDADD (historical name), % Failures Due

To Active Directory Down (caption), %_Failures_Due_To_Active_Directory_Down (attribute name), and PERFDADD (column name).

**% Failures Due To Back Pressure**
The current percentage of valid connections in the sliding window that have failed because of back pressure. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: %_FAILURES_DUE_TO_BACK_PRESSURE or PERFDBP (historical name), % Failures Due To Back Pressure (caption), %_Failures_Due_To_Back_Pressure (attribute name), and PERFDBP (column name).

**% Failures Due To I/O Exceptions**
The current percentage of valid connections in the sliding window that have failed because of input/output exceptions. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: %_FAILURES_DUE_TO_IO_EXCEPTIONS or PERFDIOE (historical name), % Failures Due To I/O Exceptions (caption), %_Failures_Due_To_IO_Exceptions (attribute name), and PERFDIOE (column name).

**% Failures Due To Max Inbound Connection Limit**
The current percentage of valid connections in the sliding window that have failed because the maximum inbound connection limit was exceeded. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: %_FAILURES_DUE_TO_MAX_INBOUND_CONNECTION_LIMIT or PERFDMICL (historical name), % Failures Due To Max Inbound Connection Limit (caption), %_Failures_Due_To_Max_Inbound_Connection_Limit (attribute name), and PERFDMICL (column name).

**% Failures Due To TLS Errors**
The current percentage of valid connections in the sliding window that have failed because of Transport Layer Security (TLS) errors. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: %_FAILURES_DUE_TO_TLS_ERRORS or PERFDTLSE (historical name), % Failures Due To TLS Errors (caption), %_Failures_Due_To_TLS_Errors (attribute name), and PERFDTLSE (column name).

**Failures Due To Maximum Local Loop Count**
The number of message deliveries that have failed because the maximum number of local loop count was exceeded since the service was started. This attribute is available in Microsoft Exchange Server 2010 SP1 only. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILURES_DUE_TO_MAXIMUM_LOCAL_LOOP_COUNT or FDTMLLC (historical name), Failures Due To Maximum Local Loop Count (caption), Failures_Due_To_Maximum_Local_Loop_Count (attribute name), and FDTMLLC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Connections**
The total number of valid connections in the sliding window since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_CONNECTIONS or TOTCONCT (historical name), Total Connections (caption), Total_Connections (attribute name), and TOTCONCT (column name).

**Transport SMTP Availability Instance Name**
The name of the Microsoft Exchange Transport SMTP instance. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: TRANSPORT_SMTP_AVAILABILITY_INSTANCE_NAME or TPSAINSTN (historical name), Transport SMTP Availability Instance Name (caption), Transport_SMTP_Availability_Instance_Name (attribute name), and TPSAINSTN (column name).

## MS Exchange Transport SmtpReceive data set

This data set provides details about inbound message traffic. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set. This data set is configured for historical collection. Thresholds for this data set are associated with the Microsoft Exchange Server component. A data sample is sent to the server every 5 minutes and is maintained for 8 days by default. The attributes shown in italic are visible in the UI. All attributes are available for thresholds.

This data set contains the following attributes:

***Average bytes/connection(MB)***
The average number of bytes (in MB) that are received per connection. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_BYTES/CONNECTION or AVGBYTEPC (historical name), *Average bytes/connection(MB)* (caption), Average_bytes/connection (attribute name), and AVGBYTEPC (column name).

***Average bytes/message(MB)***
The average number of message bytes (in MB) that are received per inbound message. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_BYTES/MESSAGE or AVGBYTEPM (historical name), *Average bytes/message(MB)* (caption), Average_bytes/message (attribute name), and AVGBYTEPM (column name).

***Average messages/connection***
The average number of messages that are received per connection. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_MESSAGES/CONNECTION or AVGMSGSPC (historical name), *Average messages/connection* (caption), Average_messages/connection (attribute name), and AVGMSGSPC (column name).

***Average Recipients/Message***
The average messages received since SMTP initialization. This value reflects the number of messages generated for inbound and outbound recipients. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_RECIPIENTS_MESSAGE or AVGMSGR (historical name), *Average Recipients/Message* (caption), Average_Recipients_Message (attribute name), and AVGMSGR (column name).

***Bytes Received/sec***
The number of bytes received by SMTP Receive Service per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: BYTES_RECEIVED/SEC or BYTESRSEC (historical name), *Bytes Received/sec* (caption), Bytes_Received/Sec (attribute name), and BYTESRSEC (column name).

***BytesReceived Total***
Total bytes received by SMTP Receive Service since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: BYTES_RECEIVED_TOTAL or BYTESREC (historical name), *BytesReceived Total* (caption), Bytes_Received_Total (attribute name), and BYTESREC (column name).

***Connections Current***
The number of current connections to SMTP Receive Service since the server was started. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CONNECTIONS_CURRENT or NUMCURCON (historical name), *Connections Current* (caption), Connections_Current (attribute name), and NUMCURCON (column name).

***Connections Total***
The total number of connections to SMTP Receive Service since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CONNECTIONS_TOTAL or NUMCURTOT (historical name), *Connections Total* (caption), Connections_Total (attribute name), and NUMCURTOT (column name).

***Disconnections by Agents/second***
The number of inbound connections that are dropped by agent actions per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DISCONNECTIONS_BY_AGENTS/SECOND or DCONBYAGPS (historical name), *Disconnections by Agents/second* (caption), Disconnections_by_Agents/second (attribute name), and DCONBYAGPS (column name).

***Disconnections By Agents***
The number of inbound connections that are dropped by agent actions. The type is integer (32-bit gauge).

The following names are defined for this attribute: DISCONNECTIONS_BY_AGENTS or DISCONBYAG (historical name), *Disconnections By Agents* (caption), Disconnections_By_Agents (attribute name), and DISCONBYAG (column name).

***Message Bytes Received Total***
The number of message bytes received by SMTP Receive Service since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGE_BYTES_RECEIVED_TOTAL or MSGBYSREC (historical name), *Message Bytes Received Total* (caption), Message_Bytes_Received_Total (attribute name), and MSGBYSREC (column name).

***Message Bytes Received/sec***
The number of message bytes received by SMTP Receive Service per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGE_BYTES_RECEIVED/SEC or MSGBYSRSEC (historical name), *Message Bytes Received/sec* (caption), Message_Bytes_Received/Sec (attribute name), and MSGBYSRSEC (column name).

***Messages Received Total***
The total number of messages received by SMTP Receive Service since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_RECEIVED_TOTAL or MSGSRECTOT (historical name), *Messages Received Total* (caption), Messages_Received_Total (attribute name), and MSGSRECTOT (column name).

***Messages Received/sec***
The number of messages received by SMTP Receive Service per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_RECEIVED/SEC or MSGRECSEC (historical name), *Messages Received/sec* (caption), Messages_Received/Sec (attribute name), and MSGRECSEC (column name).

***Messages Refused For Size***
The total number messages refused for size by SMTP Receive Service since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_REFUSED_FOR_SIZE or MSGSRFSIZE (historical name), *Messages Refused For Size* (caption), Messages_Refused_For_Size (attribute name), and MSGSRFSIZE (column name).

***Node***
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), *Node* (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

***Recipients accepted Total***
The number of recipients accepted. The type is integer (32-bit gauge).

The following names are defined for this attribute: RECIPIENTS_ACCEPTED_TOTAL or REPSACPTTO (historical name), *Recipients accepted Total* (caption), Recipients_accepted_Total (attribute name), and REPSACPTTO (column name).

***SMTP Receive Instance Name***
The network name of the source of this information. This attribute is a key attribute. The type is string with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SMTP_RECEIVE_INSTANCE_NAME or SMTPRNAME (historical name), *SMTP Receive Instance Name* (caption), SMTP_Receive_Instance_Name (attribute name), and SMTPRNAME (column name).

***Timestamp***
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), *Timestamp* (caption), *Timestamp* (attribute name), and TIMESTAMP (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

## MS Exchange Transport SmtpSend data set

This data set provides details about the SMTP Send service. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Average bytes/connection(MB)**
The average number of bytes that are sent by the SmtpSend connector per connection. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_BYTES/CONNECTION or AVBYTEPC (historical name), Average bytes/connection(MB) (caption), Average_bytes/connection (attribute name), and AVBYTEPC (column name).

**Average message bytes/message(MB)**
The average number of bytes that are sent by the SmtpSend connector per message. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_MESSAGE_BYTES/MESSAGE or AVMSGPM (historical name), Average message bytes/message(MB) (caption), Average_message_bytes/message (attribute name), and AVMSGPM (column name).

**Average messages/connection**
The average number of messages that are sent by the SmtpSend connector per connection. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_MESSAGES/CONNECTION or AVMSGPC (historical name), Average messages/connection (caption), Average_messages/connection (attribute name), and AVMSGPC (column name).

**Average Recipients/Message**
The average messages sent since SMTP initialization. This value reflects the number of messages generated for inbound and outbound recipients. The type is integer (32-bit gauge) with enumerated

values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_RECIPIENTS_MESSAGE or AVGMSGS (historical name), Average Recipients/Message (caption), Average_Recipients_Message (attribute name), and AVGMSGS (column name).

**Bytes Sent Total**
Total bytes sent by SMTP Send Service since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: BYTES_SENT_TOTAL or BYTESSENT (historical name), Bytes Sent Total (caption), Bytes_Sent_Total (attribute name), and BYTESSENT (column name).

**Bytes Sent/sec**
The number of times that the bytes are sent by SMTP Send Service per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: BYTES_SENT/SEC or BYTESSSEC (historical name), Bytes Sent/sec (caption), Bytes_Sent/Sec (attribute name), and BYTESSSEC (column name).

**Connections Created/sec**
The number of outbound connections that are established by the SmtpSend connector per second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CONNECTIONS_CREATED/SEC or CONCRPC (historical name), Connections Created/sec (caption), Connections_Created/sec (attribute name), and CONCRPC (column name).

**Connections Current**
The number of current connections to SMTP Send Service since the server was started. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CONNECTIONS_CURRENT or NUMCURCON (historical name), Connections Current (caption), Connections_Current (attribute name), and NUMCURCON (column name).

**Connections Total**
The total number of connections to SMTP Send Service since server last started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CONNECTIONS_TOTAL or NUMCURTOT (historical name), Connections Total (caption), Connections_Total (attribute name), and NUMCURTOT (column name).

**Message Bytes Sent Total**
The number of message bytes sent by SMTP Send Service since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGE_BYTES_SENT_TOTAL or MSGBYTSSNT (historical name), Message Bytes Sent Total (caption), Message_Bytes_Sent_Total (attribute name), and MSGBYTSSNT (column name).

**Message Bytes Sent/sec**
The number of times that the message bytes are sent by SMTP Send Service per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGE_BYTES_SENT/SEC or MSGBYSTSEC (historical name), Message Bytes Sent/sec (caption), Message_Bytes_Sent/Sec (attribute name), and MSGBYSTSEC (column name).

**Messages Sent Total**
The total number of messages sent by SMTP Send Service since the server was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_SENT_TOTAL or MSGSSNTTOT (historical name), Messages Sent Total (caption), Messages_Sent_Total (attribute name), and MSGSSNTTOT (column name).

**Messages Sent/sec**
The number of times that the messages are sent by SMTP Send service per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MESSAGES_SENT/SEC or MSGSNTSEC (historical name), Messages Sent/sec (caption), Messages_Sent/Sec (attribute name), and MSGSNTSEC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Recipients sent**
The number of recipients sent by the SmtpSend connector. The type is integer (32-bit gauge).

The following names are defined for this attribute: RECIPIENTS_SENT or RECPSENT (historical name), Recipients sent (caption), Recipients_sent (attribute name), and RECPSENT (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**SMTP Send Instance Name**
The network name of the source of this information. This attribute is a key attribute. The type is string with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: SMTP_SEND_INSTANCE_NAME or SMTPSNAME (historical name), SMTP Send Instance Name (caption), SMTP_Send_Instance_Name (attribute name), and SMTPSNAME (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange UM Auto Attendant data set

This data set monitors the activities of the Unified Messaging (UM) auto attendants. This data set is available in Exchange Server 2007, or later. This data set is a multi-instance data set.

This data set contains the following attributes:

**Auto Attendant Name**
The name of the UM auto attendant. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: AUTO_ATTENDANT_NAME or AUTOATTDNM (historical name), Auto Attendant Name (caption), Auto_Attendant_Name (attribute name), and AUTOATTDNM (column name).

**Average Call Time**
The average call duration with the UM auto attendant. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_CALL_TIME or AVGCTIME (historical name), Average Call Time (caption), Average_Call_Time (attribute name), and AVGCTIME (column name).

**Average Recent Call Time**
The average time (in seconds) of the last 50 calls that have been answered by the UM auto attendant. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_RECENT_CALL_TIME or AVGRCTIME (historical name), Average Recent Call Time (caption), Average_Recent_Call_Time (attribute name), and AVGRCTIME (column name).

**Business Hours Calls**
The total number of calls that have been answered by the UM auto attendant during business hours since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: BUSINESS_HOURS_CALLS or BUSSHCALLS (historical name), Business Hours Calls (caption), Business_Hours_Calls (attribute name), and BUSSHCALLS (column name).

**Calls with Speech Input**
The total number of UM auto attendant calls for which callers have provided speech inputs since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALLS_WITH_SPEECH_INPUT or CWSPCHIP (historical name), Calls with Speech Input (caption), Calls_with_Speech_Input (attribute name), and CWSPCHIP (column name).

**Calls with Spoken Name**
The total number of UM auto attendant calls for which callers have spoken their names since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALLS_WITH_SPOKEN_NAME or CWSPKNNAME (historical name), Calls with Spoken Name (caption), Calls_with_Spoken_Name (attribute name), and CWSPKNNAME (column name).

**Directory Accessed**
The number of times the UM auto attendant has accessed the directory since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_ACCESSED or DIRACCED (historical name), Directory Accessed (caption), Directory_Accessed (attribute name), and DIRACCED (column name).

**Directory Accessed by Dial by Name**
The total number of times the subscriber has accessed the directory by using the Dial by Name feature since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_ACCESSED_BY_DIAL_BY_NAME or DIRABDBNAM (historical name), Directory Accessed by Dial by Name (caption), Directory_Accessed_by_Dial_by_Name (attribute name), and DIRABDBNAM (column name).

**Directory Accessed by Extension**
The total number of times the subscriber has accessed the directory by specifying the extension number since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_ACCESSED_BY_EXTENSION or DIRABEXTN (historical name), Directory Accessed by Extension (caption), Directory_Accessed_by_Extension (attribute name), and DIRABEXTN (column name).

**Directory Accessed by Spoken Name**
The total number of times the subscriber has accessed the directory by providing the recipient name verbally since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_ACCESSED_BY_SPOKEN_NAME or DIRABSNAME (historical name), Directory Accessed by Spoken Name (caption), Directory_Accessed_by_Spoken_Name (attribute name), and DIRABSNAME (column name).

**Directory Accessed Successfully by Dial by Name**
The total number of times the caller has accessed the directory by using the Dial by Name feature since the service was started. This attribute value is incremented only when the caller connects with the user who is specified by using the Dial by Name feature after accessing the directory. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_ACCESSED_SUCCESSFULLY_BY_DIAL_BY_NAME or DRASBDBNAM (historical name), Directory Accessed Successfully by Dial by Name (caption), Directory_Accessed_Successfully_by_Dial_by_Name (attribute name), and DRASBDBNAM (column name).

**Directory Accessed Successfully by Spoken Name**
The total number of times the caller has accessed the directory by providing the recipient name verbally since the service was started. This attribute value is incremented only when the caller connects with the recipient after accessing the directory. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_ACCESSED_SUCCESSFULLY_BY_SPOKEN_NAME or DRASBSPNAM (historical name), Directory Accessed Successfully by Spoken Name (caption), Directory_Accessed_Successfully_by_Spoken_Name (attribute name), and DRASBSPNAM (column name).

**Disconnected Without Input**
The total number of calls that have been dropped because callers did not provide inputs after being prompted by the UM auto attendant since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DISCONNECTED_WITHOUT_INPUT or DISCWINPT (historical name), Disconnected Without Input (caption), Disconnected_Without_Input (attribute name), and DISCWINPT (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Percentage of Successful Calls**
The percentage of total calls that have been answered by the UM auto attendant. The type is integer (32-bit gauge).

The following names are defined for this attribute: %_SUCCESSFUL_CALLS or PCTSUCCCLS (historical name), Percentage of Successful Calls (caption), %_Successful_Calls (attribute name), and PCTSUCCCLS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Calls**
The total number of calls that have been answered by the UM auto attendant since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_CALLS or TOTALCALS (historical name), Total Calls (caption), Total_Calls (attribute name), and TOTALCALS (column name).

**Transferred Count**
The total number of calls that have been transferred by the UM auto attendant since the service was started. This attribute value does not include calls that are transferred by the operator. The type is integer (32-bit counter).

The following names are defined for this attribute: TRANSFERRED_COUNT or TRNSFDCNT (historical name), Transferred Count (caption), Transferred_Count (attribute name), and TRNSFDCNT (column name).

## MS Exchange UM Availability data set

This data set monitors the availability of the Unified Messaging system. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Average Hub Transport Access Failures Percentage**
The percentage of attempts that have failed to access the Hub Transport server since the service was started. This attribute is available only in Exchange Server 2010 SP1. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_HUB_TRANSPORT_ACCESS_FAILURES_% or AVGHTAFPG (historical name), Average Hub Transport Access Failures Percentage (caption), Average_Hub_Transport_Access_Failures_% (attribute name), and AVGHTAFPG (column name).

**Directory Access Failures**
The total number of attempts that have failed to access the Active Directory since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_ACCESS_FAILURES or DIRAFAIRS (historical name), Directory Access Failures (caption), Directory_Access_Failures (attribute name), and DIRAFAIRS (column name).

**Failed Mailbox Connection Attempts Percentage**
The percentage of attempts that failed to connect to the Mailbox server. This attribute is not available in Exchange Server 2007. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: FAILED_MAILBOX_CONNECTION_ATTEMPTS_% or FMCAPCTG (historical name), Failed Mailbox Connection Attempts Percentage (caption), Failed_Mailbox_Connection_Attempts_% (attribute name), and FMCAPCTG (column name).

**Hub Transport Access Completed**
The total number of times the Hub Transport server has been accessed since the service was started. This attribute is available only in Exchange Server 2007. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: HUB_TRANSPORT_ACCESS_COMPLETED or HTRACCCMPT (historical name), Hub Transport Access Completed (caption), Hub_Transport_Access_Completed (attribute name), and HTRACCCMPT (column name).

**Hub Transport Access Failures**
The total number of attempts that have failed to access Hub Transport servers since the service was started. This attribute value is incremented if all the Hub Transport servers are unavailable. This attribute is available only in Exchange Server 2007. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: HUB_TRANSPORT_ACCESS_FAILURES or HTRAFLRS (historical name), Hub Transport Access Failures (caption), Hub_Transport_Access_Failures (attribute name), and HTRAFLRS (column name).

**Mailbox Server Access Failures**
The total number of attempts that have failed to access the Mailbox server since the service was started. This attribute is available only in Exchange Server 2007. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: MAILBOX_SERVER_ACCESS_FAILURES or MAILSAFAIL (historical name), Mailbox Server Access Failures (caption), Mailbox_Server_Access_Failures (attribute name), and MAILSAFAIL (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Percentage of Messages Successfully Processed Over the Last Hour**
The percentage of messages that have been processed by the Microsoft Exchange Unified Messaging service in the last hour. This attribute is not available in Exchange Server 2007. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: %_OF_MESSAGES_SUCCESSFULLY_PROCESSED_OVER_THE_LAST_HOUR or PCTMSPOTLH (historical name), Percentage of Messages Successfully Processed Over the Last Hour (caption), %_of_Messages_Successfully_Processed_Over_the_Last_Hour (attribute name), and PCTMSPOTLH (column name).

**Retrieved System Name**
The total number of times the name of a user has been retrieved since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: SPOKEN_NAME_ACCESSED or SPNAMEACCD (historical name), Retrieved System Name (caption), Spoken_Name_Accessed (attribute name), and SPNAMEACCD (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Text to Speech Performed**
The total number of times the Text-to-Speech feature has been used to generate the audio output of the subscriber name since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: NAME_TTSED or NAMETTSED (historical name), Text to Speech Performed (caption), Name_TTSed (attribute name), and NAMETTSED (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Worker Process Call Count**
The total number of calls that have been processed by the UM worker process since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_WORKER_PROCESS_CALL_COUNT or TOTWPCCNT (historical name), Total Worker Process Call Count (caption), Total_Worker_Process_Call_Count (attribute name), and TOTWPCCNT (column name).

**Worker Process Recycled**
The total number of times a new UM worker process has been recycled since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: WORKER_PROCESS_RECYCLED or WPROCRECYD (historical name), Worker Process Recycled (caption), Worker_Process_Recycled (attribute name), and WPROCRECYD (column name).

## MS Exchange UM Call Answer data set

This data set monitors the call answering activity of the Unified Messaging system. This data set is available in Exchange Server 2007, or later. This data set is a single-instance data set.

This data set contains the following attributes:

**Average Greeting Size**
The average size (in seconds) of recorded greetings that have been retrieved by the Unified Messaging Server. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_GREETING_SIZE or AVGGRTSZ (historical name), Average Greeting Size (caption), Average_Greeting_Size (attribute name), and AVGGRTSZ (column name).

**Average Recent Voice Message Size**
The average size (in seconds) of the last 50 voice messages that have been received for subscribers. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_RECENT_VOICE_MESSAGE_SIZE or ARVMSGSZ (historical name), Average Recent Voice Message Size (caption), Average_Recent_Voice_Message_Size (attribute name), and ARVMSGSZ (column name).

**Average Voice Message Size**
The average size (in seconds) of the voice messages that have been received for subscribers. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_VOICE_MESSAGE_SIZE or AVMSGSZ (historical name), Average Voice Message Size (caption), Average_Voice_Message_Size (attribute name), and AVMSGSZ (column name).

**Call Answering Calls**
The total number of diverted calls that have been answered on behalf of subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALL_ANSWERING_CALLS or CANSCALS (historical name), Call Answering Calls (caption), Call_Answering_Calls (attribute name), and CANSCALS (column name).

**Call Answering Missed Calls**
The total number of times a diverted call was dropped without leaving a message for the caller since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALL_ANSWERING_MISSED_CALLS or CANSMCALS (historical name), Call Answering Missed Calls (caption), Call_Answering_Missed_Calls (attribute name), and CANSMCALS (column name).

**Call Answering Voice Messages**
The total number of voice messages that have been submitted for delivery as a result of answering the calls on behalf of subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALL_ANSWERING_VOICE_MESSAGES or CAVMSGS (historical name), Call Answering Voice Messages (caption), Call_Answering_Voice_Messages (attribute name), and CAVMSGS (column name).

**Calls Without Personal Greetings**
The total number of diverted calls without greeting messages that have been received for subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALLS_WITHOUT_PERSONAL_GREETINGS or CWPGREET (historical name), Calls Without Personal Greetings (caption), Calls_Without_Personal_Greetings (attribute name), and CWPGREET (column name).

**Diverted Extension Not Provisioned**
The total number of received calls for which the specified extension to divert calls is not the Unified Messaging subscriber extension since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DIVERTED_EXTENSION_NOT_PROVISIONED or DENOTPRV (historical name), Diverted Extension Not Provisioned (caption), Diverted_Extension_Not_Provisioned (attribute name), and DENOTPRV (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

## MS Exchange UM Enabled User Details data set

This data set monitors details of users who are enabled for Unified Messaging. This data set is a multi-instance data set. This data set is available in Exchange Server 2007 or later.

This data set contains the following attributes:

**Dial Plan**
The name of the dial plan that is associated with the user. The type is string.

The following names are defined for this attribute: DIAL_PLAN or DIALPNAME (historical name), Dial Plan (caption), Dial_Plan (attribute name), and DIALPNAME (column name).

**Mailbox Name**
The name of the user whose mailbox is enabled for Unified Messaging. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: MAILBOX_NAME or MBXNAME (historical name), Mailbox Name (caption), Mailbox_Name (attribute name), and MBXNAME (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**UM Mailbox Policy**
The name of the Unified Messaging mailbox policy that is associated with the user. The type is string.

The following names are defined for this attribute: UM_MAILBOX_POLICY or UMMBPOLICY (historical name), UM Mailbox Policy (caption), UM_Mailbox_Policy (attribute name), and UMMBPOLICY (column name).

## MS Exchange UM General data set

This data set monitors the general performance of the Unified Messaging system. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Average Call Duration**
The average duration (in seconds) of calls since the service was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_CALL_DURATION or AVGCDUR (historical name), Average Call Duration (caption), Average_Call_Duration (attribute name), and AVGCDUR (column name).

**Average MWI Latency**
The average time (in milliseconds) from the delivery of the voice mail to the receipt of the confirmation by the Unified Messaging Server. The average is calculated for the last 50 messages. This attribute is not available in Exchange Server 2007. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_MWI_LATENCY or AVGMWIL (historical name), Average MWI Latency (caption), Average_MWI_Latency (attribute name), and AVGMWIL (column name).

**Average Recent Call Duration**
The average duration (in seconds) of the last 50 calls. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_RECENT_CALL_DURATION or AVGRCALD (historical name), Average Recent Call Duration (caption), Average_Recent_Call_Duration (attribute name), and AVGRCALD (column name).

**Call Duration Exceeded**
The total number of calls that have been disconnected because the calls exceeded the maximum call limit that is specified in the Unified Messaging Server since the service was started. This attribute value contains all types of calls including fax calls. The type is integer (32-bit counter).

The following names are defined for this attribute: CALL_DURATION_EXCEEDED or CALDEXEED (historical name), Call Duration Exceeded (caption), Call_Duration_Exceeded (attribute name), and CALDEXEED (column name).

**Calls Disconnected by User Failure**
The total number of calls that have been disconnected because the inputs provided by users were invalid since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALLS_DISCONNECTED_BY_USER_FAILURE or CDBUFAIL (historical name), Calls Disconnected by User Failure (caption), Calls_Disconnected_by_User_Failure (attribute name), and CDBUFAIL (column name).

**Current Auto Attendant Calls**
The number of UM auto attendant calls that are currently connected to the Unified Messaging Server since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CURRENT_AUTO_ATTENDANT_CALLS or CAUTATCLS (historical name), Current Auto Attendant Calls (caption), Current_Auto_Attendant_Calls (attribute name), and CAUTATCLS (column name).

**Current Calls**
The number of calls that are currently connected to the Unified Messaging Server since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CURRENT_CALLS or CURRCALLS (historical name), Current Calls (caption), Current_Calls (attribute name), and CURRCALLS (column name).

**Current Fax Calls**
The number of fax calls that are currently connected to the Unified Messaging Server since the service was started. Voice calls change to fax calls after a fax tone is detected. The type is integer (32-bit counter).

The following names are defined for this attribute: CURRENT_FAX_CALLS or CURFAXCLS (historical name), Current Fax Calls (caption), Current_Fax_Calls (attribute name), and CURFAXCLS (column name).

**Current Subscriber Access Calls**
The number of subscribers who are currently logged on and are connected to the Unified Messaging Server since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CURRENT_SUBSCRIBER_ACCESS_CALLS or CURSUACLS (historical name), Current Subscriber Access Calls (caption), Current_Subscriber_Access_Calls (attribute name), and CURSUACLS (column name).

**Current Unauthenticated Pilot Number Calls**
The number of voice calls to the pilot number that are not authenticated since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CURRENT_UNAUTHENTICATED_PILOT_NUMBER_CALLS or CUPNCALLS (historical name), Current Unauthenticated Pilot Number Calls (caption), Current_Unauthenticated_Pilot_Number_Calls (attribute name), and CUPNCALLS (column name).

**Current Voice Mail Calls**
The number of voice mail calls that are currently connected to the Unified Messaging Server since the service was started. This attribute is not available in Exchange Server 2007. The type is integer (32-bit counter).

The following names are defined for this attribute: CURRENT_VOICE_MAIL_CALLS or CVMCALLS (historical name), Current Voice Mail Calls (caption), Current_Voice_Mail_Calls (attribute name), and CVMCALLS (column name).

**Delayed Calls**
The total number of calls that have taken more than 2 seconds to connect since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DELAYED_CALLS or DELYCALLS (historical name), Delayed Calls (caption), Delayed_Calls (attribute name), and DELYCALLS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Calls**
The total number of calls that have been answered or made since the service was started. This attribute value does not include transferred calls. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_CALLS or TOTCALLS (historical name), Total Calls (caption), Total_Calls (attribute name), and TOTCALLS (column name).

**Total Calls per Second**
The number of calls that have been received in the last second. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: TOTAL_CALLS_PER_SECOND or TOTCPSEC (historical name), Total Calls per Second (caption), Total_Calls_per_Second (attribute name), and TOTCPSEC (column name).

**User Response Latency**
The average response time (in milliseconds) of the system to respond to a user request. The average is calculated for the last 25 calls. This attribute is used for calls that require significant processing. The type is integer (32-bit gauge).

The following names are defined for this attribute: USER_RESPONSE_LATENCY or URESPLAT (historical name), User Response Latency (caption), User_Response_Latency (attribute name), and URESPLAT (column name).

## MS Exchange UM Subscriber Access data set

This data set monitors the Unified Messaging-related activities of subscribers. This data set is available in Exchange Server 2007, or later. This data set is a single-instance data set.

This data set contains the following attributes:

**Average Recent Sent Voice Message Size**
The average size (in seconds) of the last 50 voice messages that have been sent. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_RECENT_SENT_VOICE_MESSAGE_SIZE or ARSVMSIZE (historical name), Average Recent Sent Voice Message Size (caption), Average_Recent_Sent_Voice_Message_Size (attribute name), and ARSVMSIZE (column name).

**Average Recent Subscriber Call Duration**
The average duration (in seconds) of the last 50 subscriber calls when subscribers were logged on to the system. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_RECENT_SUBSCRIBER_CALL_DURATION or ARSCALLD (historical name), Average Recent Subscriber Call Duration (caption), Average_Recent_Subscriber_Call_Duration (attribute name), and ARSCALLD (column name).

**Average Sent Voice Message Size**
The average size (in seconds) of the voice messages that have been sent. This attribute value does not include the size of an attachment. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_SENT_VOICE_MESSAGE_SIZE or ASVMSIZE (historical name), Average Sent Voice Message Size (caption), Average_Sent_Voice_Message_Size (attribute name), and ASVMSIZE (column name).

**Average Subscriber Call Duration**
The average duration (in seconds) for which subscribers have been logged on to the system during the call. The call duration is calculated after subscribers log off from the system. The type is integer (32-bit gauge).

The following names are defined for this attribute: AVERAGE_SUBSCRIBER_CALL_DURATION or ASCALLD (historical name), Average Subscriber Call Duration (caption), Average_Subscriber_Call_Duration (attribute name), and ASCALLD (column name).

**Calendar Accessed**
The total number of times the subscribers have accessed their calendars by using the telephone user interface since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALENDAR_ACCESSED or CALACCD (historical name), Calendar Accessed (caption), Calendar_Accessed (attribute name), and CALACCD (column name).

**Calendar Items Details Requested**
The total number of times a subscriber has requested additional details for a calendar item since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALENDAR_ITEMS_DETAILS_REQUESTED or CALIDREQ (historical name), Calendar Items Details Requested (caption), Calendar_Items_Details_Requested (attribute name), and CALIDREQ (column name).

**Calendar Items Heard**
The total number of calendar items that have been heard by subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALENDAR_ITEMS_HEARD or CALIHRD (historical name), Calendar Items Heard (caption), Calendar_Items_Heard (attribute name), and CALIHRD (column name).

**Calendar Late Attendance**
The total number of messages that have been sent to inform the meeting organizer about the late joining of the subscriber since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALENDAR_LATE_ATTENDANCE or CALLATTD (historical name), Calendar Late Attendance (caption), Calendar_Late_Attendance (attribute name), and CALLATTD (column name).

**Called Meeting Organizer**
The total number of times the subscribers have called the meeting organizer since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CALLED_MEETING_ORGANIZER or CALLEDMO (historical name), Called Meeting Organizer (caption), Called_Meeting_Organizer (attribute name), and CALLEDMO (column name).

**Contact Items Heard**
The total number of times the subscribers have listened to the directory details since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CONTACT_ITEMS_HEARD or CONTIHRD (historical name), Contact Items Heard (caption), Contact_Items_Heard (attribute name), and CONTIHRD (column name).

**Contacts Accessed**
The total number of times the subscribers have accessed the Main Menu Contacts option by using the telephone user interface since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CONTACTS_ACCESSED or CONTACCD (historical name), Contacts Accessed (caption), Contacts_Accessed (attribute name), and CONTACCD (column name).

**Directory Accessed**
The total number of times the subscribers have accessed the Main Menu Directory option by using the telephone user interface since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_ACCESSED or DIRACCD (historical name), Directory Accessed (caption), Directory_Accessed (attribute name), and DIRACCD (column name).

**Directory Accessed by Dial by Name**
The total number of times the subscribers have accessed the directory by using the Dial by Name feature since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_ACCESSED_BY_DIAL_BY_NAME or DABDBNAME (historical name), Directory Accessed by Dial by Name (caption), Directory_Accessed_by_Dial_by_Name (attribute name), and DABDBNAME (column name).

**Directory Accessed by Extension**
The total number of times the subscribers have accessed the directory by specifying the extension number since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_ACCESSED_BY_EXTENSION or DIRABEXT (historical name), Directory Accessed by Extension (caption), Directory_Accessed_by_Extension (attribute name), and DIRABEXT (column name).

**Email Message Queue Accessed**
The total number of times the subscribers have accessed their email message queue by using the telephone user interface since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: EMAIL_MESSAGE_QUEUE_ACCESSED or EMMQACCD (historical name), Email Message Queue Accessed (caption), Email_Message_Queue_Accessed (attribute name), and EMMQACCD (column name).

**Email Messages Deleted**
The total number of email messages that have been deleted by subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: EMAIL_MESSAGES_DELETED or EMMSGDEL (historical name), Email Messages Deleted (caption), Email_Messages_Deleted (attribute name), and EMMSGDEL (column name).

**Email Messages Heard**
The total number of email messages containing audio file attachments that have been heard by subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: EMAIL_MESSAGES_HEARD or EMMSGHRD (historical name), Email Messages Heard (caption), Email_Messages_Heard (attribute name), and EMMSGHRD (column name).

**Forward Messages Sent**
The total number of messages that have been forwarded by subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: FORWARD_MESSAGES_SENT or FMSGSENT (historical name), Forward Messages Sent (caption), Forward_Messages_Sent (attribute name), and FMSGSENT (column name).

**Launched Calls**
The total number of subscriber calls that result in outbound calls being placed on hold since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: LAUNCHED_CALLS or LCHDCALLS (historical name), Launched Calls (caption), Launched_Calls (attribute name), and LCHDCALLS (column name).

**Meetings Accepted**
The total number of meeting acceptance messages that have been sent by subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MEETINGS_ACCEPTED or MEETACCPT (historical name), Meetings Accepted (caption), Meetings_Accepted (attribute name), and MEETACCPT (column name).

**Meetings Declined**
The total number of meeting declined messages that have been sent by subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MEETINGS_DECLINED or MEETDECL (historical name), Meetings Declined (caption), Meetings_Declined (attribute name), and MEETDECL (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Replied to Organizer**
The total number of reply messages that have been sent by subscribers to meeting organizers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLIED_TO_ORGANIZER or REPTOORG (historical name), Replied to Organizer (caption), Replied_to_Organizer (attribute name), and REPTOORG (column name).

**Reply Messages Sent**
The total number of reply messages that have been sent by subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: REPLY_MESSAGES_SENT or REPMSGS (historical name), Reply Messages Sent (caption), Reply_Messages_Sent (attribute name), and REPMSGS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Subscriber Authentication Failures**
The total number of subscriber authentications that have failed since the service was started. The value of this attribute increments with each failed authentication. Multiple authentication failures are possible for a single phone call. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBSCRIBER_AUTHENTICATION_FAILURES or SUBAFAIL (historical name), Subscriber Authentication Failures (caption), Subscriber_Authentication_Failures (attribute name), and SUBAFAIL (column name).

**Subscriber Logon Failures**
The total number of subscriber logon attempts that have failed since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBSCRIBER_LOGON_FAILURES or SUBLOGFL (historical name), Subscriber Logon Failures (caption), Subscriber_Logon_Failures (attribute name), and SUBLOGFL (column name).

**Subscriber Logons**
The total number of subscribers that have been authenticated since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: SUBSCRIBER_LOGONS or SUBLOGONS (historical name), Subscriber Logons (caption), Subscriber_Logons (attribute name), and SUBLOGONS (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Voice Message Queue Accessed**
The total number of times the subscribers have accessed their voice message queue by using the telephone user interface since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: VOICE_MESSAGE_QUEUE_ACCESSED or VMSGQACCD (historical name), Voice Message Queue Accessed (caption), Voice_Message_Queue_Accessed (attribute name), and VMSGQACCD (column name).

**Voice Messages Deleted**
The total number of voice messages that have been deleted by subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: VOICE_MESSAGES_DELETED or VMSGDEL (historical name), Voice Messages Deleted (caption), Voice_Messages_Deleted (attribute name), and VMSGDEL (column name).

**Voice Messages Played**
The total number of voice messages that have been played for subscribers since the service was started. of this attribute increments when the voice playback starts. The subscriber might not listen to the entire message. The type is integer (32-bit counter).

The following names are defined for this attribute: VOICE_MESSAGES_HEARD or VMSGHRD (historical name), Voice Messages Played (caption), Voice_Messages_Heard (attribute name), and VMSGHRD (column name).

**Voice Messages Sent**
The total number of voice messages that have been sent by subscribers since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: VOICE_MESSAGES_SENT or VMSGSENT (historical name), Voice Messages Sent (caption), Voice_Messages_Sent (attribute name), and VMSGSENT (column name).

## MS Exchange Workload Management Policies data set

This data set monitors the workload management policies that are used for managing Exchange workloads. The workload management policies are applied to the Exchange Servers in your organization. This data set is available in Exchange Server 2013. This data set is a multi-instance data set.

This data set contains the following attributes:

**Applicable Servers**
The names of servers to which the workload management policy is applied. Server names are separated by a comma. The type is string with enumerated values. The following values are defined: N/A (N/A). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: APPLICABLE_SERVERS or APPLSRVR (historical name), Applicable Servers (caption), Applicable_Servers (attribute name), and APPLSRVR (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Policy Creation Time**
The timestamp when the workload management policy was created. The format is MM/DD/YY HH:mm:SS, where the following measures apply: The type is timestamp.

The following names are defined for this attribute: POLICY_CREATION_TIME or PLCCRTT (historical name), Policy Creation Time (caption), Policy_Creation_Time (attribute name), and PLCCRTT (column name).

**Policy Name**
The name of the workload management policy. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: POLICY_NAME or PLCNAME (historical name), Policy Name (caption), Policy_Name (attribute name), and PLCNAME (column name).

**Policy Type**
The type of policy. The type is integer (32-bit numeric property) with enumerated values. The following values are defined: Precanned (1), GlobalOverride (2), Customized (3), N/A (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: POLICY_TYPE or PLCTYPE (historical name), Policy Type (caption), Policy_Type (attribute name), and PLCTYPE (column name).

**Resource Policies**
The number of resource policies that are currently associated with the workload management policy. The type is integer (32-bit counter).

The following names are defined for this attribute: RESOURCE_POLICIES or RESPLCS (historical name), Resource Policies (caption), Resource_Policies (attribute name), and RESPLCS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Workload Policies**
The number of workload policies that are currently associated with the workload management policy. The type is integer (32-bit counter).

The following names are defined for this attribute: WORKLOAD_POLICIES or WLDPLCS (historical name), Workload Policies (caption), Workload_Policies (attribute name), and WLDPLCS (column name).

## MS Exchange Workloads data set

This data set monitors the workloads that are created in the Exchange Server. An Exchange workload is a feature or a service of Exchange Server that is used for management of Exchange system resources. The Exchange Server manages workloads to optimize resource usage. Examples of workloads include Outlook Web App, Exchange ActiveSync, mailbox migration, and mailbox assistants. This data set is available in Exchange Server 2013. This data set is a multi-instance data set.

This data set contains the following attributes:

**Active Tasks**
The number of tasks that are currently running for the workload. The type is integer (32-bit gauge).

The following names are defined for this attribute: ACTIVE_TASKS or ACTTSKS (historical name), Active Tasks (caption), Active_Tasks (attribute name), and ACTTSKS (column name).

**Average Step Execution Time**
The average time (in milliseconds) that is currently taken to process task steps. This average time does not include time that is taken for external factors, such as waiting time in a queue and any other delay times. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVERAGE_STEP_EXECUTION_TIME or AVGSTPET (historical name), Average Step Execution Time (caption), Average_Step_Execution_Time (attribute name), and AVGSTPET (column name).

**Blocked Tasks**
The total number of tasks that were deferred for the workload since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: BLOCKED_TASKS or BLOCTSKS (historical name), Blocked Tasks (caption), Blocked_Tasks (attribute name), and BLOCTSKS (column name).

**Completed Tasks**
The total number of tasks that were completed for the workload since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: COMPLETED_TASKS or CMPLTSKS (historical name), Completed Tasks (caption), Completed_Tasks (attribute name), and CMPLTSKS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Queued Tasks**
The number of tasks that are currently waiting to be processed for the workload. The type is integer (32-bit gauge).

The following names are defined for this attribute: QUEUED_TASKS or QUEDTSKS (historical name), Queued Tasks (caption), Queued_Tasks (attribute name), and QUEDTSKS (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**State**
A numeric value that indicates the current state of the workload, such as active or paused. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Active (1), Paused (0), N/A (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: STATE or WLDSTAT (historical name), State (caption), State (attribute name), and WLDSTAT (column name).

**Tasks Per Minute**
The number of tasks that are currently completed per minute for the workload. The type is integer (32-bit gauge).

The following names are defined for this attribute: TASKS_PER_MINUTE or TSKSPMIN (historical name), Tasks Per Minute (caption), Tasks_Per_Minute (attribute name), and TSKSPMIN (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Workload Name**
The name of the workload. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: WORKLOAD_NAME or WLDNAME (historical name), Workload Name (caption), Workload_Name (attribute name), and WLDNAME (column name).

**Yielded Tasks**
The total number of tasks that were added by the workload since the service was started. The type is integer (32-bit counter).

The following names are defined for this attribute: YIELDED_TASKS or YLDTSKS (historical name), Yielded Tasks (caption), Yielded_Tasks (attribute name), and YLDTSKS (column name).

## MS Exchange WS data set

This data set monitors the activities of the Exchange Web Services (EWS) on the Microsoft Exchange Server. This data set is available in Exchange Server 2007, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Average Response Time**
The average time (in milliseconds) that has elapsed between the beginning and the end of requests that are sent through the proxy Client Access server. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: AVERAGE_RESPONSE_TIME or AVGREST (historical name), Average Response Time (caption), Average_Response_Time (attribute name), and AVGREST (column name).

**Ids Converted/sec**
The number of identifiers that are currently converted per second to other identifier formats. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: IDS_CONVERTED/SEC or IDCNVPSEC (historical name), Ids Converted/sec (caption), Ids_Converted/sec (attribute name), and IDCNVPSEC (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Number of current proxy calls**
The number of requests that are currently sent through the proxy Client Access server to the other Client Access servers. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_CURRENT_PROXY_CALLS or NUMCPC (historical name), Number of current proxy calls (caption), Number_of_current_proxy_calls (attribute name), and NUMCPC (column name).

**Number of EWS Failovers**
The total number of times the EWS has failed over to an alternate proxy Client Access server while processing proxy requests since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_NUMBER_OF_PROXY_FAILOVER or TNPFOVR (historical name), Number of EWS Failovers (caption), Total_number_of_proxy_failover (attribute name), and TNPFOVR (column name).

**Number of Proxy Failovers/Sec**
The average number of proxy failovers that occurred per second. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are

defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_PROXY_FAILOVERS/SECOND or NPFOPSEC (historical name), Number of Proxy Failovers/Sec (caption), Number_of_Proxy_Failovers/Second (attribute name), and NPFOPSEC (column name).

**Number of Proxy Requests/Sec**
The number of requests that are currently sent per second through the proxy Client Access server. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_PROXIED_REQUESTS/SECOND or NPREQSEC (historical name), Number of Proxy Requests/Sec (caption), Number_of_Proxied_Requests/Second (attribute name), and NPREQSEC (column name).

**Proxy Average Response Time**
The average time (in milliseconds) that has elapsed between the beginning and the end of a request that is sent through the proxy Client Access server. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: PROXY_AVERAGE_RESPONSE_TIME or PAVGRT (historical name), Proxy Average Response Time (caption), Proxy_Average_Response_Time (attribute name), and PAVGRT (column name).

**Requests/sec**
The number of requests that are currently processed per second. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: REQUESTS/SEC or REQPSEC (historical name), Requests/sec (caption), Requests/sec (attribute name), and REQPSEC (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Client Disconnects**
The total number of times the clients have been disconnected before completion of request processing since the service was started. This attribute is not available in Exchange Server 2007. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTALCLIENTDISCONNECTS or TCDICNT (historical name), Total Client Disconnects (caption), TotalClientDisconnects (attribute name), and TCDICNT (column name).

**Total Number of Ids converted**
The total number of identifiers that have been converted to other identifier formats since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are

defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_NUMBER_OF_IDS_CONVERTED or TIDCNV (historical name), Total Number of Ids converted (caption), Total_Number_of_Ids_converted (attribute name), and TIDCNV (column name).

**Total Number of Proxy Request Bytes**
The total number of bytes in requests that have been sent through the proxy Client Access server to the other Client Access servers since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_NUMBER_OF_BYTES_PROXIED or TNUMBYT (historical name), Total Number of Proxy Request Bytes (caption), Total_number_of_bytes_proxied (attribute name), and TNUMBYT (column name).

**Total Number of Proxy Requests**
The total number of requests that have been sent through the proxy Client Access server to the other Client Access servers since the service was started. This attribute is not available in Exchange Server 2007. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_NUMBER_OF_PROXIED_REQUESTS or TNUMPR (historical name), Total Number of Proxy Requests (caption), Total_number_of_proxied_requests (attribute name), and TNUMPR (column name).

**Total Number of Proxy Response Bytes**
The total number of bytes in responses that have been generated for the requests sent through the proxy Client Access server since the service was started. The type is integer (32-bit counter) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_NUMBER_OF_PROXY_RESPONSE_BYTES or TNUMRESB (historical name), Total Number of Proxy Response Bytes (caption), Total_number_of_proxy_response_bytes (attribute name), and TNUMRESB (column name).

## RPC HTTP Proxy data set

This data set monitors the activities of the RPC/HTTP Proxy on the Microsoft Exchange Server. This data set is available in Exchange Server 2010, or later. This data set is a single instance data set.

This data set contains the following attributes:

**Back-End Connection Attempts/Sec**
The number of attempts that are made per second by the RPC proxy server to connect to the back-end server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_BACKEND_CONNECTION_ATTEMPTS/SECOND or NOBCAPS (historical name), Back-End Connection Attempts/Sec (caption), Number_of_BackEnd_Connection_Attempts/Second (attribute name), and NOBCAPS (column name).

**Current Number of Unique Users**
The number of unique users that are currently connected to the back-end server by using the RPC over HTTP protocol. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: CURRENT_NUMBER_OF_UNIQUE_USERS or CNUMSR (historical name), Current Number of Unique Users (caption), Current_Number_of_Unique_Users (attribute name), and CNUMSR (column name).

**Failed Back-End Connection Attempts/Sec**
The number of RPC proxy server attempts per second that currently failed to connect to the back-end server. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_FAILED_BACKEND_CONNECTION_ATTEMPTS/SECOND or NFBCAPS (historical name), Failed Back-End Connection Attempts/Sec (caption), Number_of_Failed_BackEnd_Connection_Attempts/Second (attribute name), and NFBCAPS (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Number of Incoming RPC over HTTP Connections**
The number of users that are currently connected to the front-end server by using the RPC/HTTP protocol. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: NUMBER_OF_INCOMING_RPC_OVER_HTTP_CONNECTIONS or NIRPHTC (historical name), Number of Incoming RPC over HTTP Connections (caption), Number_of_Incoming_RPC_over_HTTP_Connections (attribute name), and NIRPHTC (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**RPC HTTP Requests/Sec**
The number of RPC over HTTP requests that are sent per second to the back-end servers. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: RPC_HTTP_REQUESTS/SECOND or RHREQSEC (historical name), RPC HTTP Requests/Sec (caption), RPC_HTTP_Requests/Second (attribute name), and RHREQSEC (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Incoming Bandwidth from Back-End Servers**
The number of bytes that are received per second by the back-end servers from the RPC proxy server. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_INCOMING_BANDWIDTH_FROM_BACKEND_SERVERS or TOIBWBS (historical name), Total

Incoming Bandwidth from Back-End Servers (caption), Total_Incoming_Bandwidth_from_BackEnd_Servers (attribute name), and TOIBWBS (column name).

**Total Outgoing Bandwidth to BackEnd Servers**
The number of bytes that are sent per second by the back-end servers to the RPC proxy server. The type is real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: TOTAL_OUTGOING_BANDWIDTH_TO_BACKEND_SERVERS or TOBWBS (historical name), Total Outgoing Bandwidth to BackEnd Servers (caption), Total_Outgoing_Bandwidth_to_BackEnd_Servers (attribute name), and TOBWBS (column name).

## SMTP data set

This data set monitors the MS Exchange SMTP activity. Use SMTP attributes to create eventing thresholds to monitor a wide range of activities associated with the hosting of an electronic mail server. This data set is a multiple-instance data set.

This data set contains the following attributes:

**% Recipients Local**
The percentage of recipients to be delivered locally since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: %_RECIPIENTS_LOCAL or PCTRCPLOC (historical name), % Recipients Local (caption), %_Recipients_Local (attribute name), and PCTRCPLOC (column name).

**% Recipients Remote**
The percentage of recipients to be delivered remotely since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: %_RECIPIENTS_REMOTE or PCTRCPREM (historical name), % Recipients Remote (caption), %_Recipients_Remote (attribute name), and PCTRCPREM (column name).

**Avg Recipients/msg Received**
The average number of recipients per inbound message received since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVG_RECIPIENTS/MSG_RECEIVED or AVGRCPMSGR (historical name), Avg Recipients/msg Received (caption), Avg_Recipients/msg_Received (attribute name), and AVGRCPMSGR (column name).

**Avg Recipients/msg Sent**
The average number of recipients per outbound messages sent since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVG_RECIPIENTS/MSG_SENT or AVGRCPMSGS (historical name), Avg Recipients/msg Sent (caption), Avg_Recipients/msg_Sent (attribute name), and AVGRCPMSGS (column name).

**Avg Retries/msg Delivered**
The average number of retries per local delivery since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVG_RETRIES/MSG_DELIVERED or AVGRETMSGD (historical name), Avg Retries/msg Delivered (caption), Avg_Retries/msg_Delivered (attribute name), and AVGRETMSGD (column name).

**Avg Retries/msg Sent**
The average number of retries per outbound message sent since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: AVG_RETRIES/MSG_SENT or AVGRETMSGS (historical name), Avg Retries/msg Sent (caption), Avg_Retries/msg_Sent (attribute name), and AVGRETMSGS (column name).

**Badmailed Messages (Bad Pickup File)**
The number of malformed pickup messages that are sent to the badmail folder. The type is integer (32-bit gauge).

The following names are defined for this attribute: BADMAILED_MESSAGES_BAD_PICKUP_FILE or BADMMBPUPF (historical name), Badmailed Messages (Bad Pickup File) (caption), Badmailed_Messages_Bad_Pickup_File (attribute name), and BADMMBPUPF (column name).

**Badmailed Messages (General Failure)**
The number of messages that are sent to the badmail folder for reasons not associated with a specific counter. The type is integer (32-bit gauge).

The following names are defined for this attribute: BADMAILED_MESSAGES_GENERAL_FAILURE or BADMMSGGF (historical name), Badmailed Messages (General Failure) (caption), Badmailed_Messages_General_Failure (attribute name), and BADMMSGGF (column name).

**Badmailed Messages (Hop Count Exceeded)**
The number of messages that are sent to the badmail folder because it exceeds the maximum hop count. The type is integer (32-bit gauge).

The following names are defined for this attribute: BADMAILED_MESSAGES_HOP_COUNT_EXCEEDED or BADMMSGHCE (historical name), Badmailed Messages (Hop Count Exceeded) (caption), Badmailed_Messages_Hop_Count_Exceeded (attribute name), and BADMMSGHCE (column name).

**Badmailed Messages (NDR of DSN)**
The number of Delivery Status Notifications sent to the badmail folder because messages are not delivered. The type is integer (32-bit gauge).

The following names are defined for this attribute: BADMAILED_MESSAGES_NDR_OF_DSN or BADMMNODSN (historical name), Badmailed Messages (NDR of DSN) (caption), Badmailed_Messages_NDR_of_DSN (attribute name), and BADMMNODSN (column name).

**Badmailed Messages (No Recipients)**
The number of messages that are sent to the badmail folder because they had no recipients. The type is integer (32-bit gauge).

The following names are defined for this attribute: BADMAILED_MESSAGES_NO_RECIPIENTS or BADMMNOREC (historical name), Badmailed Messages (No Recipients) (caption), Badmailed_Messages_No_Recipients (attribute name), and BADMMNOREC (column name).

**Badmailed Messages (Triggered via Event)**
The number of messages that are sent to the badmail folder on the request of a server event sink. The type is integer (32-bit gauge).

The following names are defined for this attribute: BADMAILED_MESSAGES_TRIGGERED_VIA_EVENT or BADMMTVEV (historical name), Badmailed Messages (Triggered via Event) (caption), Badmailed_Messages_Triggered_via_Event (attribute name), and BADMMTVEV (column name).

**Bytes Received/sec**
The number of times that bytes are received per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: BYTES_RECEIVED/SEC or BYTERCVSEC (historical name), Bytes Received/sec (caption), Bytes_Received/sec (attribute name), and BYTERCVSEC (column name).

**Bytes Sent/sec**
The number of times that bytes are sent per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: BYTES_SENT/SEC or BYTESNTSEC (historical name), Bytes Sent/sec (caption), Bytes_Sent/sec (attribute name), and BYTESNTSEC (column name).

**Bytes Total/sec**
The number of times that bytes are sent and received per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: BYTES_TOTAL/SEC or BYTETOTSEC (historical name), Bytes Total/sec (caption), Bytes_Total/sec (attribute name), and BYTETOTSEC (column name).

**Categorizer Queue Length**
The number of messages on categorizer queue since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: CATEGORIZER_QUEUE_LENGTH or CATQUELNG (historical name), Categorizer Queue Length (caption), Categorizer_Queue_Length (attribute name), and CATQUELNG (column name).

**Connection Errors/sec**
The number of connection errors per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: CONNECTION_ERRORS/SEC or CONERRSEC (historical name), Connection Errors/sec (caption), Connection_Errors/sec (attribute name), and CONERRSEC (column name).

**Current Messages in Local Delivery**
The number of messages that are being processed by a server event sink for local delivery. The type is integer (32-bit gauge).

The following names are defined for this attribute: CURRENT_MESSAGES_IN_LOCAL_DELIVERY or CUMSGINLD (historical name), Current Messages in Local Delivery (caption), Current_Messages_in_Local_Delivery (attribute name), and CUMSGINLD (column name).

**Directory Drops Total**
The total number of messages placed in a drop directory since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DIRECTORY_DROPS_TOTAL or DIRDROPTOT (historical name), Directory Drops Total (caption), Directory_Drops_Total (attribute name), and DIRDROPTOT (column name).

**Directory Drops/sec**
The number of messages placed in a drop directory per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DIRECTORY_DROPS/SEC or DIRDROPSEC (historical name), Directory Drops/sec (caption), Directory_Drops/sec (attribute name), and DIRDROPSEC (column name).

**Directory Pickup Queue Length**
The number of messages in the directory pickup queue since the server was started. The type is integer (32-bit gauge) with enumerated values. The following values are defined: Undefined (-1). Any value that does not have a definition here is displayed in the User Interface.

The following names are defined for this attribute: DIRECTORY_PICKUP_QUEUE_LENGTH or DIRPICQLEN (historical name), Directory Pickup Queue Length (caption), Directory_Pickup_Queue_Length (attribute name), and DIRPICQLEN (column name).

**DNS Queries Total**
The total number of DNS lookups since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: DNS_QUERIES_TOTAL or DNSQUERTOT (historical name), DNS Queries Total (caption), DNS_Queries_Total (attribute name), and DNSQUERTOT (column name).

**DNS Queries/sec**
The number of DNS lookups per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: DNS_QUERIES/SEC or DNSQUERSEC (historical name), DNS Queries/sec (caption), DNS_Queries/sec (attribute name), and DNSQUERSEC (column name).

**ETRN Messages Total**
The total number of ETRN messages received by the server since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: ETRN_MESSAGES_TOTAL or ETRNMSGTOT (historical name), ETRN Messages Total (caption), ETRN_Messages_Total (attribute name), and ETRNMSGTOT (column name).

**ETRN Messages/sec**
The number of ETRN messages per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: ETRN_MESSAGES/SEC or ETRNMSGSEC (historical name), ETRN Messages/sec (caption), ETRN_Messages/sec (attribute name), and ETRNMSGSEC (column name).

**Inbound Connections Current**
The total number of connections currently inbound since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: INBOUND_CONNECTIONS_CURRENT or INBCONCUR (historical name), Inbound Connections Current (caption), Inbound_Connections_Current (attribute name), and INBCONCUR (column name).

**Inbound Connections Total**
The total number of inbound connections received since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: INBOUND_CONNECTIONS_TOTAL or INBCONTOT (historical name), Inbound Connections Total (caption), Inbound_Connections_Total (attribute name), and INBCONTOT (column name).

**kBytes Received Total**
The total number of kilobytes received since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: KBYTES_RECEIVED_TOTAL or KBYTERCVT (historical name), kBytes Received Total (caption), kBytes_Received_Total (attribute name), and KBYTERCVT (column name).

**kBytes Sent Total**
The total number of kilobytes sent since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: KBYTES_SENT_TOTAL or KBYTESNTT (historical name), kBytes Sent Total (caption), kBytes_Sent_Total (attribute name), and KBYTESNTT (column name).

**kBytes Total**
The total number of kilobytes sent and received since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: KBYTES_TOTAL or KBYTETOT (historical name), kBytes Total (caption), kBytes_Total (attribute name), and KBYTETOT (column name).

**Local Queue Length**
The number of messages in the local queue since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: LOCAL_QUEUE_LENGTH or LOCQLEN (historical name), Local Queue Length (caption), Local_Queue_Length (attribute name), and LOCQLEN (column name).

**Local Retry Queue Length**
The number of messages in the local retry queue since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: LOCAL_RETRY_QUEUE_LENGTH or LOCRETQLEN (historical name), Local Retry Queue Length (caption), Local_Retry_Queue_Length (attribute name), and LOCRETQLEN (column name).

**Message Bytes Received/sec**
The number of times that bytes are received in messages per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGE_BYTES_RECEIVED/SEC or MSGBYTRSEC (historical name), Message Bytes Received/sec (caption), Message_Bytes_Received/sec (attribute name), and MSGBYTRSEC (column name).

**Message Bytes Sent/sec**
The number of times that bytes are sent in messages per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGE_BYTES_SENT/SEC or MSGBYTSSEC (historical name), Message Bytes Sent/sec (caption), Message_Bytes_Sent/sec (attribute name), and MSGBYTSSEC (column name).

**Message Bytes Total/sec**
The number of times that bytes are sent and received in messages per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGE_BYTES_TOTAL/SEC or MSGBYTTOTS (historical name), Message Bytes Total/sec (caption), Message_Bytes_Total/sec (attribute name), and MSGBYTTOTS (column name).

**Message Delivery Retries**
The total number of local deliveries that were retried since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGE_DELIVERY_RETRIES or MSGDELRET (historical name), Message Delivery Retries (caption), Message_Delivery_Retries (attribute name), and MSGDELRET (column name).

**Message kBytes Received Total**
The total number of kilobytes received in messages since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGE_KBYTES_RECEIVED_TOTAL or MSGKBYTRT (historical name), Message kBytes Received Total (caption), Message_kBytes_Received_Total (attribute name), and MSGKBYTRT (column name).

**Message kBytes Sent Total**
The total number of kilobytes sent in messages since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGE_KBYTES_SENT_TOTAL or MSGKBYTST (historical name), Message kBytes Sent Total (caption), Message_kBytes_Sent_Total (attribute name), and MSGKBYTST (column name).

**Message kBytes Total**
The total number of kilobytes sent and received in messages since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGE_KBYTES_TOTAL or MSGKBYTTOT (historical name), Message kBytes Total (caption), Message_kBytes_Total (attribute name), and MSGKBYTTOT (column name).

**Message Send Retries**
The total number of outbound message sends that were retried since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGE_SEND_RETRIES or MSGSNDRET (historical name), Message Send Retries (caption), Message_Send_Retries (attribute name), and MSGSNDRET (column name).

**Messages Currently Undeliverable**
The number of messages that are reported as undeliverable by routing. The type is integer (32-bit gauge).

The following names are defined for this attribute: MESSAGES_CURRENTLY_UNDELIVERABLE or MSGCURUNDE (historical name), Messages Currently Undeliverable (caption), Messages_Currently_Undeliverable (attribute name), and MSGCURUNDE (column name).

**Messages Delivered Total**
The total number of messages delivered to local mailboxes since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_DELIVERED_TOTAL or MSGDELTOT (historical name), Messages Delivered Total (caption), Messages_Delivered_Total (attribute name), and MSGDELTOT (column name).

**Messages Delivered/sec**
The number of times that messages are delivered to local mailboxes per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_DELIVERED/SEC or MSGDELSEC (historical name), Messages Delivered/sec (caption), Messages_Delivered/sec (attribute name), and MSGDELSEC (column name).

**Messages Pending Routing**
The total number of messages to be routed that are pending since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_PENDING_ROUTING or MSGSPENROU (historical name), Messages Pending Routing (caption), Messages_Pending_Routing (attribute name), and MSGSPENROU (column name).

**Messages Received Total**
The total number of inbound messages accepted since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_RECEIVED_TOTAL or MSGRCVTOT (historical name), Messages Received Total (caption), Messages_Received_Total (attribute name), and MSGRCVTOT (column name).

**Messages Received/sec**
The number of times that inbound messages are received per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_RECEIVED/SEC or MSGRCVSEC (historical name), Messages Received/sec (caption), Messages_Received/sec (attribute name), and MSGRCVSEC (column name).

**Messages Refused for Address Objects**
The total number of messages refused due to lack of address objects since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_REFUSED_FOR_ADDRESS_OBJECTS or MSGRAOBJ (historical name), Messages Refused for Address Objects (caption), Messages_Refused_for_Address_Objects (attribute name), and MSGRAOBJ (column name).

**Messages Refused for Mail Objects**
The total number of messages refused due to lack of mail objects since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_REFUSED_FOR_MAIL_OBJECTS or MSGRMOBJ (historical name), Messages Refused for Mail Objects (caption), Messages_Refused_for_Mail_Objects (attribute name), and MSGRMOBJ (column name).

**Messages Refused for Size**
The total number of messages rejected because they were too big since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_REFUSED_FOR_SIZE or MSGREFSIZE (historical name), Messages Refused for Size (caption), Messages_Refused_for_Size (attribute name), and MSGREFSIZE (column name).

**Messages Sent Total**
The total number of outbound messages sent since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: MESSAGES_SENT_TOTAL or MSGSNTTOT (historical name), Messages Sent Total (caption), Messages_Sent_Total (attribute name), and MSGSNTTOT (column name).

**Messages Sent/sec**
The number of times that outbound messages are sent per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: MESSAGES_SENT/SEC or MSGSNTSEC (historical name), Messages Sent/sec (caption), Messages_Sent/sec (attribute name), and MSGSNTSEC (column name).

**NDRs Generated**
The number of non-delivery reports that were generated since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: NDRS_GENERATED or NDRSGEN (historical name), NDRs Generated (caption), NDRs_Generated (attribute name), and NDRSGEN (column name).

**Node**
The managed system name of the agent. This attribute is a key attribute. The type is string.

The following names are defined for this attribute: NODE (historical name), Node (caption), ORIGINNODE (attribute name), and ORIGINNODE (column name).

**Number of MailFiles Open**
Number of handles to open mail files since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: NUMBER_OF_MAILFILES_OPEN or NUMMFOPEN (historical name), Number of MailFiles Open (caption), Number_of_MailFiles_Open (attribute name), and NUMMFOPEN (column name).

**Number of QueueFiles Open**
Number of handles to open queue files since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: NUMBER_OF_QUEUEFILES_OPEN or NUMQFOPEN (historical name), Number of QueueFiles Open (caption), Number_of_QueueFiles_Open (attribute name), and NUMQFOPEN (column name).

**Outbound Connections Current**
The number of connections currently outbound since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: OUTBOUND_CONNECTIONS_CURRENT or OUTCONCUR (historical name), Outbound Connections Current (caption), Outbound_Connections_Current (attribute name), and OUTCONCUR (column name).

**Outbound Connections Refused**
The number of outbound connection attempts refused by remote sites since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: OUTBOUND_CONNECTIONS_REFUSED or OUTCONREF (historical name), Outbound Connections Refused (caption), Outbound_Connections_Refused (attribute name), and OUTCONREF (column name).

**Outbound Connections Total**
The total number of outbound connections attempted since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: OUTBOUND_CONNECTIONS_TOTAL or OUTCONTOT (historical name), Outbound Connections Total (caption), Outbound_Connections_Total (attribute name), and OUTCONTOT (column name).

**Pickup Directory Messages Retrieved Total**
The total number of messages that are retrieved from the mail pickup directory. The type is integer (32-bit counter).

The following names are defined for this attribute: PICKUP_DIRECTORY_MESSAGES_RETRIEVED_TOTAL or PDIRMRTO (historical name), Pickup Directory Messages Retrieved Total (caption), Pickup_Directory_Messages_Retrieved_Total (attribute name), and PDIRMRTO (column name).

**Pickup Directory Messages Retrieved/sec**
The rate at which the messages are retrieved from the mail pickup directory. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: PICKUP_DIRECTORY_MESSAGES_RETRIEVED/SEC or PDIRMRPS (historical name), Pickup Directory Messages Retrieved/sec (caption), Pickup_Directory_Messages_Retrieved/sec (attribute name), and PDIRMRPS (column name).

**Remote Queue Length**
The number of messages in the remote queue since the server was started. The type is integer (32-bit gauge).

The following names are defined for this attribute: REMOTE_QUEUE_LENGTH or REMQLEN (historical name), Remote Queue Length (caption), Remote_Queue_Length (attribute name), and REMQLEN (column name).

**Remote Retry Queue Length**
The number of messages in the retry queue for remote delivery since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: REMOTE_RETRY_QUEUE_LENGTH or REMRETQLEN (historical name), Remote Retry Queue Length (caption), Remote_Retry_Queue_Length (attribute name), and REMRETQLEN (column name).

**Routing Table Lookups Total**
The total number of routing table lookups since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: ROUTING_TABLE_LOOKUPS_TOTAL or RTGTABLTOT (historical name), Routing Table Lookups Total (caption), Routing_Table_Lookups_Total (attribute name), and RTGTABLTOT (column name).

**Routing Table Lookups/sec**
The number of routing table lookups per second since the server was started. The type is real number (32-bit gauge) with two decimal places of precision.

The following names are defined for this attribute: ROUTING_TABLE_LOOKUPS/SEC or RTGTABLSEC (historical name), Routing Table Lookups/sec (caption), Routing_Table_Lookups/sec (attribute name), and RTGTABLSEC (column name).

**ROWNO**
The row number of the sample. The type is integer (32-bit numeric property).

The following names are defined for this attribute: ROWNO (historical name), ROWNO (caption), ROWNO (attribute name), and ROWNO (column name).

**SAMPLENO**
The sample number. The type is integer (32-bit numeric property).

The following names are defined for this attribute: SAMPLENO (historical name), SAMPLENO (caption), SAMPLENO (attribute name), and SAMPLENO (column name).

**SMTP Server**
The instance name (SMTP Server). This attribute is a key attribute. The type is string.

The following names are defined for this attribute: SMTP_SERVER or INSTCNAME (historical name), SMTP Server (caption), SMTP_Server (attribute name), and INSTCNAME (column name).

**Timestamp**
The local time at the agent when the data was collected. The type is string.

The following names are defined for this attribute: TIMESTAMP (historical name), Timestamp (caption), Timestamp (attribute name), and TIMESTAMP (column name).

**Total Connection Errors**
The total number of connection errors since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_CONNECTION_ERRORS or TOTCONERR (historical name), Total Connection Errors (caption), Total_Connection_Errors (attribute name), and TOTCONERR (column name).

**Total DSN Failures**
The total number of DSN generation attempts that are failed. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_DSN_FAILURES or TOTDSNFAIL (historical name), Total DSN Failures (caption), Total_DSN_Failures (attribute name), and TOTDSNFAIL (column name).

**Total Messages Submitted**
The total number of messages submitted from SMTP Server since the server was started. The type is integer (32-bit counter).

The following names are defined for this attribute: TOTAL_MESSAGES_SUBMITTED or TOTMSGSSUB (historical name), Total Messages Submitted (caption), Total_Messages_Submitted (attribute name), and TOTMSGSSUB (column name).

# Accessibility features

Accessibility features assist users who have a disability, such as restricted mobility or limited vision, to use information technology content successfully.

### Accessibility features

The web-based interface of IBM® Cloud Application Performance Management is the Cloud APM console. The console includes the following major accessibility features:

- Enables users to use assistive technologies, such as screen-reader software and digital speech synthesizer, to hear what is displayed on the screen.[1] Consult the product documentation of the assistive technology for details on using those technologies with this product.
- Enables users to operate specific or equivalent features using only the keyboard.
- Communicates all information independently of color.[2]

The Cloud APM console uses the latest W3C Standard, WAI-ARIA 1.0, US Section 508, and Web Content Accessibility Guidelines (WCAG) 2.0. To take advantage of accessibility features, use the latest release of your screen reader in combination with the latest web browser that is supported by this product.

The Cloud APM console online product documentation in IBM Knowledge Center is enabled for accessibility. The accessibility features of IBM Knowledge Center are described at IBM Knowledge Center release notes.

### Keyboard navigation

This product uses standard navigation keys.

### Interface information

The Cloud APM console web user interface does not rely on cascading style sheets to render content properly and to provide a usable experience. However, the product documentation does rely on cascading style sheets. IBM Knowledge Center provides an equivalent way for low-vision users to use their custom display settings, including high-contrast mode. You can control font size by using the device or browser settings.

The Cloud APM console web user interface includes WAI-ARIA navigational landmarks that you can use to quickly navigate to functional areas in the application.

The Cloud APM console user interface does not have content that flashes 2 - 55 times per second.

### Related accessibility information

In addition to standard IBM help desk and support websites, IBM has established a TTY telephone service for use by deaf or hard of hearing customers to access sales and support services:

TTY service 800-IBM-3383 (800-426-3383) (within North America)

### IBM and accessibility

For more information about the commitment that IBM has to accessibility, see IBM Accessibility .

[1] Exceptions include some of the **Agent Configuration** pages and historical line charts in the Cloud APM console.

[2] Exceptions include some **Agent Configuration** pages of the Cloud APM console.

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