

IBM Tivoli Composite Application Manager Agent for
WebSphere MQ
Version 7.3

Reference



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Note:

Before using this information and the product it supports, read the information in “Notices” on page 359.

This edition applies to version 7.3 of WebSphere MQ Monitoring agent (product number 5698-B23) and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Workspaces

The predefined workspaces present information about various aspects of your WebSphere MQ environment. The table views and graphics within each workspace report the attribute information that you are monitoring. You can use them to do the following things:

- Investigate attribute information relating to a change in a state
- Monitor your system performance to identify bottlenecks and to evaluate tuning decisions
- Select the most effective threshold values for situations that you create

In addition to table views and graphics, a workspace might contain other views, such as a browser view or a take action view that you can use to send commands to the operator console. Note that the descriptions of each workspace apply to the default settings (the components of the workspace in its original configuration). Any changes or updates that you make to a workspace will not be reflected in the description of the workspace. For additional details about customizing workspaces, see the Tivoli Enterprise Portal Help and documentation.

Data collection mode

The WebSphere MQ Monitoring agent uses two types of data collection mode, which are sampling mode and on-demand mode.

In sampling mode, the agent collects data in the background on an interval basis. Each time you open a workspace with a table based on sampling data, the data displayed in the table is from the most recent interval. For example, if the sampling interval is set to 5 minutes (300 seconds), the data displayed might have been collected up to 5 minutes ago. Sampling mode has the advantage of being able to aggregate data and calculate rates because the new sample can be compared to the old sample and deltas can be taken.

In on-demand mode, the agents collect data at the exact time that a query is issued to it for the data. Each time you open a workspace with a table based on on-demand data, a query for data collection is issued to the agent and the data displayed is collected real time at the time of the query. On-demand mode has the advantage of providing the most current data possible.

For information about which workspace uses sampling mode and which uses on-demand mode, see Sampled and on-demand tables.

Application Accounting workspace

The Application Accounting workspace is the primary workspace for monitoring application connections to queue managers within the WebSphere® MQ environment. Note that the workspace might include application connections which were once active, but are not currently active. It also *might not* include application connections that are currently active, in cases where the application connection is new and data collection has not yet begun.

Predefined views

The Application Accounting workspace includes the following predefined views:

- **Application Accounting** This table contains information about the number of WebSphere MQ API (MQI) requests made by applications to a queue manager. Information about all application connections is displayed, with the name of the queue manager at the bottom of the table. For details about the individual attributes displayed in this table, see Application Accounting attribute group.
- **Normal Rate** This view contains a bar chart that shows the numbers of the following operations performed over each sampling period for which records exist. Sampling periods are identified by their end times, which are plotted along the x-axis of the chart:
 - Open rate
 - Close rate
 - Put rate
 - Put1 rate
 - Put byte rate
 - Get rate
 - Get byte rate
 - Browse rate
 - Browse byte rate
 - Commit rate
 - Backout rate
 - Inquire rate
 - Set rate
- **Fail Rate** This view contains a bar chart that shows the numbers of the following operations that failed to complete correctly over each sampling period for which records exist. Sampling periods are identified by their end times, which are plotted along the x-axis of the chart:
 - Open fail rate
 - Close fail rate
 - Put fail rate
 - Put1 fail rate
 - Get fail rate
 - Browse fail rate
 - Commit fail rate
 - Inquire fail rate
 - Set fail rate

For more information on the attributes listed in the tables of this workspace, see “Application Accounting attributes (distributed systems only)” on page 85.

Predefined links

You can link to the following workspaces from the Application Accounting workspace:

- MQI Call Statistics Details
- MQI Message Statistics Details
- Queue Accounting

- Recent Application Accounting
- Historical Application Accounting

Application Connections workspace

The Application Connections workspace is available for WebSphere MQ version 6.0 and later only.

The Application Connections workspace provides information about the state of connections and operations being performed by applications, such as the progress of outstanding units of work. This information can be particularly useful in decision making, for instance when deciding when to stop a queue manager.

Predefined views

The Application Connections workspace includes the following predefined views:

- **Application Topology** The Application Topology view provides a graphical representation of connections between the monitored queue manager, the applications that are connected to it, and the queues opened by the applications. For details of the individual attributes displayed, see “Application Topology attributes” on page 94.
- **Application Connections** This table displays the attributes of application connections that exist within your WebSphere MQ environment. There are two different ways to arrive at this workspace, which result in different data being displayed in the table:
 - When the Application Connections workspace is opened as a primary workspace, information about all application connections is displayed in this view, with the name of the queue manager at the bottom.
 - When you link to the Application Connections workspace from a row within another workspace, only a single row containing information about the selected application connection is displayed, with the name of the application at the bottom.

For more information on the attributes listed in the tables of this workspace, see “Application Connections attributes” on page 90.

Predefined links

You can link to the following workspace from the Application Connections workspace:

- Connection Objects

In addition to the above workspace, the following workspaces are available in specific circumstance:

- If you have OMEGAMON® for CICS® on z/OS® installed, you can also link to the CICS Transaction Analysis workspace. This workspace can only be link to from rows with an Appl Type value of CICS. The CICS Transaction Analysis workspace provides a comprehensive view of CICS transactions which you can use to identify problem transactions across CICS regions and z/OS images for the CICSplex. For more information about this workspace, see OMEGAMON for CICS on z/OS online help.
- If you have IBM® Tivoli® Monitoring OS agent installed on your system, you can also link to Process workspace of IBM Tivoli Monitoring OS agent. The Process

workspace provides you with the details of the specific process that is holding the connection. For more information about this workspace, see IBM Tivoli Monitoring online help.

- If you have OMEGAMON XE for z/OS installed, you can also link to the Address Space CPU Usage workspace by using ASID.

For more information about this workspace, see OMEGAMON XE on z/OS online help.

Channel Definitions for Client Connection Type workspace

The Channel Definitions for Client Connection Type workspace provides information about the characteristics, number and performance of the monitored channels of client connection type. Use it to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Channel Definitions for Client Connection Type workspace includes the following predefined views:

- **Channel Definitions for Client Connection Type** This view contains a table summarizing the characteristics of the selected queue manager's monitored channels of client connection type. Select a channel from this list to review and edit its parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.
- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see "Channel Definitions attributes" on page 104.

Predefined links

You can link to the following workspace from the Channel Definitions for Client Connection Type workspace:

- Channel Parameters
- Channel Status

Channel Definitions for Cluster Receiver Type workspace

The Channel Definitions for Cluster Receiver Type workspace provides information about the characteristics, number and performance of a queue manager's monitored channels of cluster receiver type. Use it to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Channel Definitions for Cluster Receiver Type workspace includes the following predefined views:

- **Channel Definitions for Cluster Receiver Type** This view contains a table summarizing the characteristics of the selected queue manager's monitored channels of cluster receiver type. Select a channel from this list to review and

edit its parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.

- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Channel Definitions attributes” on page 104.

Predefined links

You can link to the following workspace from the Channel Definitions for Cluster Receiver Type workspace:

- Channel Parameters
- Channel Status

Channel Definitions for Cluster Sender Type workspace

The Channel Definitions for Cluster Sender Type workspace provides information about the characteristics, number and performance of a queue manager's monitored channels of cluster sender type. Use it to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Channel Definitions for Cluster Sender Type workspace includes the following predefined views:

- **Channel Definitions for Cluster Sender Type** This view contains a table summarizing the characteristics of the selected queue manager's monitored channels of cluster sender type. Select a channel from this list to review and edit its parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.
- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Channel Definitions attributes” on page 104.

Predefined links

You can link to the following workspace from the Channel Definitions for Cluster Sender Type workspace:

- Channel Parameters
- Channel Status

Channel Definitions for Receiver Type workspace

The Channel Definitions for Receiver Type workspace provides information about the characteristics, number and performance of a queue manager's monitored channels of receiver type. Use it to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Channel Definitions for Receiver Type workspace includes the following predefined views:

- **Channel Definitions for Receiver Type** This view contains a table summarizing the characteristics of the selected queue manager's monitored channels of receiver type. Select a channel from this list to review and edit its parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.
- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Channel Definitions attributes” on page 104.

Predefined links

You can link to the following workspace from the Channel Definitions for Receiver Type workspace:

- Channel Parameters
- Channel Status

Channel Definitions for Requester Type workspace

The Channel Definitions for Requester Type workspace provides information about the characteristics, number and performance of a queue manager's monitored channels of requester type. Use it to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Channel Definitions for Requester Type workspace includes the following predefined views:

- **Channel Definitions for Requester Type** This view contains a table summarizing the characteristics of the selected queue manager's monitored channels of requester type. Select a channel from this list to review and edit its parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.
- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Channel Definitions attributes” on page 104.

Predefined links

You can link to the following workspace from the Channel Definitions for Requester Type workspace:

- Channel Parameters
- Channel Status

Channel Definitions for Sender Type workspace

The Channel Definitions for Sender Type workspace provides information about the characteristics, number and performance of a queue manager's monitored channels of sender type. Use it to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Channel Definitions for Sender Type workspace includes the following predefined views:

- **Channel Definitions for Sender Type** This view contains a table summarizing the characteristics of the selected queue manager's monitored channels of sender type. Select a channel from this list to review and edit its parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.
- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Channel Definitions attributes” on page 104.

Predefined links

You can link to the following workspace from the Channel Definitions for Sender Type workspace:

- Channel Parameters
- Channel Status

Channel Definitions for Server Connection Type workspace

The Channel Definitions for Server Connection Type workspace provides information about the characteristics, number and performance of a queue manager's monitored channels of server connection type. Use it to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Channel Definitions for Server Connection Type workspace includes the following predefined views:

- **Channel Definitions for Server Connection Type** This view contains a table summarizing the characteristics of the selected queue manager's monitored

channels of server connection type. Select a channel from this list to review and edit its parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.

- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Channel Definitions attributes” on page 104.

Predefined links

You can link to the following workspace from the Channel Definitions for Server Connection Type workspace:

- Channel Parameters
- Channel Status

Channel Definitions for Server Type workspace

The Channel Definitions for Server Type workspace provides information about the characteristics, number and performance of a queue manager's monitored channels of server type. Use it to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Channel Definitions for Server Type workspace includes the following predefined views:

- **Channel Definitions for Server Type** This view contains a table summarizing the characteristics of the selected queue manager's monitored channels of server type. Select a channel from this list to review and edit its parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.
- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Channel Definitions attributes” on page 104.

Predefined links

You can link to the following workspace from the Channel Definitions for Server Type workspace:

- Channel Parameters
- Channel Status

Channel Definitions workspace

The Channel Definitions workspace provides information about the characteristics, number and performance of a queue manager's monitored channels. Use it to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Channel Definitions workspace includes the following predefined views:

- **Channel Definitions** This view contains a table summarizing the characteristics of the selected queue manager's monitored channels. Select a channel from this list to review and edit its parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.
- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see "Channel Definitions attributes" on page 104.

Predefined links

You can link to the following workspace from the Channel Definitions workspace:

- Channel Parameters
- Channel Status

Channel Parameters Workspace

The Channel Parameters table view shows the parameters of the selected monitored channel.

Predefined views

The Channel Parameters workspace includes the following predefined views:

- **Channel Parameters** This view shows the parameters of the selected monitored channel. Data displayed in this table is collected on-demand.
- **Message Log** The message log gives you an overview of changes in situation status on your monitored network. For more information about this view, see Tivoli Enterprise Portal Help.

Predefined links

No other workspaces can be linked to from the Channel Parameters workspace.

For more information on the attributes listed in the tables of this workspace, see "Channel Definition Details attributes" on page 100.

Channel Performance by Type/Status workspace

The Channel Performance by Type/Status workspace displays a summary of channel activity information for the selected queue manager, and performance and transmission rate information in chart form. Note that client connection channel definitions do not produce statistics and therefore are not listed in any of the Channel Performance workspaces.

Predefined views

The Channel Performance by Type/Status workspace includes the following predefined views:

- **Channel Performance by Type/Status** This view provides a summary of channel activity information for the selected queue manager. Channels are grouped according to a combination of their channel type *and* channel status attributes (for example, channels of type = SVRCONN and status = inactive are grouped together). One row is displayed for every unique channel type and status combination. Select a particular channel type/channel status group from this list to view its performance statistics.
- **Channel Performance Summary** This view contains a bar chart showing, by defined type, the total number of active and inactive monitored channels running on the selected queue manager.
- **Transmission Rates** This view shows, as a bar chart, the average transmission rates of each of the selected monitored channels.

For more information on the attributes listed in the tables of this workspace, see the attributes described at the bottom of “Channel Statistics attributes” on page 129.

Predefined links

You can link to the following workspace from the Channel Performance by Type/Status workspace:

- Channel Performance

Channel Performance for Channels with XmitQ Depth workspace

Use the Channel Performance for Channels with XmitQ Depth workspace to view performance information related to the channels whose transmission queue depth is greater than 0 in the WebSphere MQ environment. Based on the information provided, you can make changes to improve performance, set up situations, and verify that changes made are improving performance.

A channel provides a communications link between two queue managers (running on the same or different platforms) and shields application programs from having to deal with the complexities of a network's underlying protocols. A channel consists of a transmission queue, a message channel agent (communications program), and a communications link.

Predefined views

The Channel Performance for Channels with XmitQ Depth workspace includes the following predefined views:

- **Channel Performance for Channels with XmitQ Depth** This view displays a list of channels whose transmission queue depth is greater than 0. Select a channel in this view to display its individual performance statistics.
- **Channel Performance Summary** This view contains a bar chart showing, by defined type, the total number of active and inactive monitored channels running on the selected queue manager.
- **Transmission Rates** This view shows, as a bar chart, the average transmission rates of each of the selected monitored channels.

For more information on the attributes listed in the tables of this workspace, see “Channel Statistics attributes” on page 129.

Predefined links

You can link to the following workspaces from the Channel Performance for Channels with XmitQ Depth workspace:

- Channel Parameters
- Recent Channel Performance
- Historical Channel Performance
- Channel Status

Channel Performance for Current Channels workspace

Use the Channel Performance for Current Channels workspace to view performance information related to the current channels in the WebSphere MQ environment. Based on the information provided, you can make changes to improve performance, set up situations, and verify that changes made are improving performance.

A channel provides a communications link between two queue managers (running on the same or different platforms) and shields application programs from having to deal with the complexities of a network's underlying protocols. A channel consists of a transmission queue, a message channel agent (communications program), and a communications link.

Predefined views

The Channel Performance for Current Channels workspace includes the following predefined views:

- **Channel Performance for Current Channels** This view displays a list of current channels. Select a channel in this view to display its individual performance statistics.
- **Channel Performance Summary** This view contains a bar chart showing, by defined type, the total number of active and inactive monitored channels running on the selected queue manager.
- **Transmission Rates** This view shows, as a bar chart, the average transmission rates of each of the selected monitored channels.

For more information on the attributes listed in the tables of this workspace, see “Channel Statistics attributes” on page 129.

Predefined links

You can link to the following workspaces from the Channel Performance for Current Channels workspace:

- Recent Channel Performance
- Channel Parameters
- Historical Channel Performance
- Channel Status
- Channel Summary
- Channel Summary by Connection Name

Channel Performance for In-Doubt Channels workspace

Use the Channel Performance for In-Doubt Channels workspace to view performance information related to the in doubt channels in the WebSphere MQ environment. Based on the information provided, you can make changes to improve performance, set up situations, and verify that changes made are improving performance.

A channel provides a communications link between two queue managers (running on the same or different platforms) and shields application programs from having to deal with the complexities of a network's underlying protocols. A channel consists of a transmission queue, a message channel agent (communications program), and a communications link.

Predefined views

The Channel Performance for In-Doubt Channels workspace includes the following predefined views:

- **Channel Performance for In-Doubt Channels** This view displays a list of in doubt channels. Select a channel in this view to display its individual performance statistics.
- **Channel Performance Summary** This view contains a bar chart showing, by defined type, the total number of active and inactive monitored channels running on the selected queue manager.
- **Transmission Rates** This view shows, as a bar chart, the average transmission rates of each of the selected monitored channels.

For more information on the attributes listed in the tables of this workspace, see “Channel Statistics attributes” on page 129.

Predefined links

You can link to the following workspaces from the Channel Performance for In-Doubt Channels workspace:

- Channel Parameters
- Recent Channel Performance
- Historical Channel Performance

Channel Performance for Transmitting Channels workspace

Use the Channel Performance for Transmitting Channels workspace to view performance information related to the transmitting channels in the WebSphere MQ environment. Based on the information provided, you can make changes to improve performance, set up situations, and verify that changes made are improving performance.

A channel provides a communications link between two queue managers (running on the same or different platforms) and shields application programs from having to deal with the complexities of a network's underlying protocols. A channel consists of a transmission queue, a message channel agent (communications program), and a communications link.

Predefined views

The Channel Performance for Transmitting Channels workspace includes the following predefined views:

- **Channel Performance for Transmitting Channels** This view displays a list of transmitting channels. Select a channel in this view to display its individual performance statistics.
- **Channel Performance Summary** This view contains a bar chart showing, by defined type, the total number of active and inactive monitored channels running on the selected queue manager.
- **Transmission Rates** This view shows, as a bar chart, the average transmission rates of each of the selected monitored channels.

For more information on the attributes listed in the tables of this workspace, see “Channel Statistics attributes” on page 129.

Predefined links

You can link to the following workspaces from the Channel Performance for Transmitting Channels workspace:

- Channel Parameters
- Recent Channel Performance
- Historical Channel Performance
- Channel Summary
- Channel Summary by Connection Name

Channel Performance Workspace

Use the Channel Performance workspace to view performance information related to the monitored channels in the WebSphere MQ environment. Based on the information provided, you can make changes to improve performance, set up situations, and verify that changes made are improving performance.

A channel provides a communications link between two queue managers (running on the same or different systems) and shields application programs from having to deal with the complexities of a network's underlying protocols. A channel consists of a transmission queue, a message channel agent (communications program), and a communications link.

Note that statistics are not collected from client connection channel definitions and therefore these are not listed in any of the Channel Performance workspaces.

The WebSphere MQ Monitoring agent also provides recent and historical versions of this workspace. You can view a recent snapshot of report data or up to 24 hours of historical data for each component of the workspace.

Predefined views

The Channel Performance workspace includes the following predefined views:

- **Channel Performance** This view displays a list of monitored channels. Select a channel in this view to display its individual performance statistics.

To view the activity of all monitored channels on a selected queue manager right-click the Channel Performance item under the selected queue manager in the Navigator Physical view and select **Workspace > Channel performance**. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this.

Use this view to monitor the depth of the transmission queue. If this becomes very deep and remains so for a long time, consider assigning more channels to the queue to improve performance. Use the information related to sequence numbers and logical units-of-work when performing channel recovery or restart operations.

- **Channel Performance Summary** This view contains a bar chart showing, by defined type, the total number of active and inactive monitored channels running on the selected queue manager.
- **Transmission Rates** This view shows, as a bar chart, the average transmission rates of each of the selected monitored channels.

For more information on the attributes listed in the table of this workspace, see “Channel Statistics attributes” on page 129.

Predefined links

You can link to the following workspaces from the Channel Performance workspace:

- Recent Channel Performance
- Channel Parameters
- Historical Channel Performance
- Channel Status
- Channel Summary
- Channel Summary by Connection Name

Channel Status workspace

The Channel Status workspace provides on-demand information about the status of a queue manager's monitored channels. You can use it to review channel status. It is an alternative workspace of the Channel Performance navigator item, you can access it by clicking Channel Performance in the navigator view and selecting Workspace from the View menu.

Predefined views

The Channel Status workspace includes the following predefined views:

- **Channel Status** This view contains a table summarizing the status of a selected queue manager's monitored channels. Data displayed in this table is collected on-demand.
- **Channel Status (chart)** This view shows a chart representation of a subsection of the information from the Channel Status table view.

For more information on the attributes listed in the tables of this workspace, see “Channel Status attributes” on page 122.

Predefined links

You can link to the following workspaces from the Channel Status workspace:

- Queue Status workspace (This link is visible only if the value of DESTQMGR is equal to "" or the value of QMNAME.)
- Recent Channel Performance Workspace
- Channel Parameters
- Channel Summary
- Channel Summary by Connection Name

Channel Summary by Connection Name workspace

Use the Channel Summary by Connection Name workspace to get the summarized information at a connection level about all the channel instances for a specified multi-instance channel. You can also use the predefined situations to detect problems of application client connections and channels. The Channel Summary by Connection Name table in this workspace is a sampled table, and is not eligible for historical data collection.

You can link to this workspace from one of the workspaces for the specified channel name and channel type:

- Channel Performance
- Channel Performance for Current Channels
- Channel Performance for Transmitting Channels
- Channel Status
- Channel Summary

For more information on the attributes that are listed in the table of this workspace, see “Channel Summary attributes” on page 137.

Predefined views

The Channel Summary by Connection Name workspace includes the following predefined views:

- **Channel Summary by Connection Name** This table view presents the channel summary data for each connection of the specified multi-instance channel. After the historical data collection is enabled for this table, you can set a time span for retrieving historical data and gathering useful metrics about the monitored channel.

- **Server-connection Channel Resource Usage Rates** This bar chart presents the information about the usage of the channel instances from each connection of the specified server-connection channel.
- **Server-connection Channel Transmission Rates** This bar chart presents the information about the highest and average transmission rates among all channel instances from each connection of the specified server-connection channel.

Channel Summary workspace

Use the Channel Summary workspace to get the summarized information about all the channel instances for a specified channel. You can also use the predefined situations to detect problems of application client connections and channels. The Channel Summary table in this workspace is a sampled table, and is eligible for historical data collection. To enable the historical data collection, use the History Collection Configuration window on Tivoli Enterprise Portal.

You can link to this workspace from one of the workspaces for the specified channel name and channel type:

- Channel Performance
- Channel Performance for Current Channels
- Channel Performance for Transmitting Channels
- Channel Status

For more information on the attributes that are listed in the table of this workspace, see “Channel Summary attributes” on page 137.

Predefined views

The Channel Summary workspace includes the following predefined views:

- **Channel Summary** This table view presents the summarized data for the specified channel name and channel type. After the historical data collection is enabled for this table, you can set a time span for retrieving historical data and gathering useful metrics about the monitored channel.
- **Server-connection Channel Resource Usage Rates** This bar chart presents the information about the usage of the channel instances for the specified server-connection channel.
- **Server-connection Channel Transmission Rates** This bar chart presents the information about the highest and average transmission rates among all the instances of the specified server-connection channel.

Predefined links

You can link to the following workspaces from the Channel Summary workspace:

- Channel Performance for Instances
- Channel Status for Instances
- Channel Summary by Connection Name

Cluster Queue Manager workspace

The Cluster Queue Manager workspace provides information about cluster queue managers associated with the selected queue manager and the channels used by them. Information about both explicit and automatically defined cluster sender channels is included.

Predefined views

The Cluster Queue Manager workspace includes the following predefined views:

- **Cluster Queue Manager** This view provides information about cluster queue managers associated with the selected queue manager and the channels used by them. Information about both explicitly defined and automatically defined cluster sender channels is included. You can select a queue manager/channel from this table to view and edit its definition.
- **Cluster Queue Manager Summary** This view shows, as a bar chart, the number of the following types of cluster channels used by the selected queue manager:
 - Auto-defined cluster channels
 - Cluster queue manager automatic cluster sender channels
 - Cluster queue manager explicit cluster sender channels
 - Cluster queue manager cluster receiver channels

For more information on the attributes listed in the tables of this workspace, see “Channel Definitions attributes” on page 104.

Predefined links

You can link to the following workspace from the Cluster Queue Manager workspace:

- Channel Parameters

Connection Objects workspace

The Connection Objects workspace contains information about the objects that exist inside a single connection, and is useful for identifying which objects are related to which connection within the WebSphere MQ environment. Select the connection for which you want to view objects in the Application Connections workspace and link to this workspace to display its objects.

Predefined views

The Connection Objects workspace includes the following predefined views:

- **Connection Objects** This view contains information about the objects that exist inside a single connection, and is useful for identifying which objects are related to which connection within the WebSphere MQ environment.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Connection Objects attributes” on page 143.

Predefined links

No other workspaces can be linked to from the Connection Objects workspace.

Current Message Statistics by Application Name workspace

The Current Message Statistic by Application Name displays message statistics, such as message wait times, related to the selected queue. Statistics are grouped by application name.

Important: The data contained within this workspace is collected *on-request-only*, not during the standard sampling interval. *Each time you open, link to, or refresh this workspace*, the monitoring agent queries WebSphere MQ and collects the requested data. Therefore, for performance reasons, this workspace must *not* be placed in a short interval automatic refresh mode.

To view this workspace, your Tivoli Enterprise Portal Logon user ID's WebSphere MQ Security Access for the selected queue must be set to MQGET (with the browse option enabled). Additionally, user access to messages stored on the queue must be enabled. This can be adjusted using the **MSGACCESS** parameter in the SET GROUP and SET MANAGER monitoring options. Any value other than MSGACCESS(NONE) enables collection of message statistics. The default setting of MSGACCESS(DESC) enables all users to browse message statistics using this workspace. If you attempt to view the current message statistics workspace without the required access permission, no data is displayed.

Many of the message statistics are based on the put date and time of the message stored in the queue. If the queue contains messages with put dates and times that do not accurately reflect when they were put into the input queue, then the statistics calculated will be correspondingly inaccurate. Put dates and times might be inaccurate if the origin context of a message is preserved or set when the message is put into the queue by an application. This commonly occurs when an application is a message mover that moves messages from one queue to another, or when any application passes or sets the origin context of a message.

Predefined views

The Current Message Statistics by Application Name workspace includes the following predefined views:

- **Current Message Statistics by Application Name** This view displays message statistics for the selected queue, grouped by application name. If you attempt to display the statistics of a queue with no messages, a single row is displayed containing 0 values for all message counts and times. If no rows are displayed in this workspace, this might indicate that an error occurred during message statistics collection. Refer to the agent log and look for message code KMQMI210E. This message provides additional information about the cause of the problem. In this view the Message Group Identifier column contains the application name by which messages have been grouped.
- **Message Count by Application Name** This view shows, as a bar chart, the percentage of messages delayed for each application.
- **Message Duration by Application Name** This view shows, as a bar chart, the length of time in seconds that messages from a particular application have been waiting in the queue in terms of oldest message, average message, newest message and highest priority message wait times. The data is repeated for each application using the queue.

For more information on the attributes listed in the tables of this workspace, see "Message Statistics attributes" on page 232.

Predefined links

No other workspaces can be linked to from the Current Message Statistics by Application Name workspace.

Current Message Statistics by Correlation ID workspace

The Current Message Statistics by Correlation ID displays message statistics, such as message wait times, related to the selected queue. Statistics are grouped by correlation ID.

Important: The data contained within this workspace is collected *on-request-only*, not during the standard sampling interval. *Each time you open, link to, or refresh this workspace*, the monitoring agent queries WebSphere MQ and collects the requested data. Therefore, for performance reasons, this workspace must *not* be placed in a short interval automatic refresh mode.

To view this workspace, your Tivoli Enterprise Portal Logon user ID's WebSphere MQ Security Access for the selected queue must be set to MQGET (with the browse option enabled). Additionally, user access to messages stored on the queue must be enabled. This can be adjusted using the **MSGACCESS** parameter in the SET GROUP and SET MANAGER monitoring options. Any value other than MSGACCESS(NONE) enables collection of message statistics. The default setting of MSGACCESS(DESC) enables all users to browse message statistics using this workspace. If you attempt to view the current message statistics workspace without the required access permission, no data is displayed.

Many of the message statistics are based on the put date and time of the message stored in the queue. If the queue contains messages with put dates and times that do not accurately reflect when they were put into the input queue, then the statistics calculated will be correspondingly inaccurate. Put dates and times might be inaccurate if the origin context of a message is preserved or set when the message is put into the queue by an application. This commonly occurs when an application is a message mover that moves messages from one queue to another, or when any application passes or sets the origin context of a message.

Predefined views

The Current Message Statistics by Correlation ID workspace includes the following predefined views:

- **Current Message Statistics by Correlation ID** This view displays message statistics for the selected queue, grouped by correlation ID. If you attempt to display the statistics of a queue with no messages, a single row is displayed containing 0 values for all message counts and times. If no rows are displayed in this workspace, this might indicate that an error occurred during message statistics collection. Refer to the agent log and look for message code KMQMI210E. This message provides additional information about the cause of the problem. In this view the Message Group Identifier column contains the correlation ID by which messages have been grouped.
- **Message Count by Correlation ID** This view shows, as a bar chart, the percentage of messages delayed for each correlation ID.
- **Message Duration by Correlation ID** This view shows, as a bar chart, the length of time in seconds that messages have been waiting in the queue in terms of oldest message, average message, newest message and highest priority message wait times. The chart is organized by correlation ID.

For more information on the attributes listed in the tables of this workspace, see “Message Statistics attributes” on page 232.

Predefined links

No other workspaces can be linked to from the Current Message Statistics by Correlation ID workspace.

Current Message Statistics by Group ID workspace

The Current Message Statistics by Group ID displays message statistics, such as message wait times, related to the selected queue. Statistics are grouped by group ID.

Important: The data contained within this workspace is collected *on-request-only*, not during the standard sampling interval. *Each time you open, link to, or refresh this workspace*, the monitoring agent queries WebSphere MQ and collects the requested data. Therefore, for performance reasons, this workspace must *not* be placed in a short interval automatic refresh mode.

To view this workspace, your Tivoli Enterprise Portal Logon user ID's WebSphere MQ Security Access for the selected queue must be set to MQGET (with the browse option enabled). Additionally, user access to messages stored on the queue must be enabled. This can be adjusted using the **MSGACCESS** parameter in the SET GROUP and SET MANAGER monitoring options. Any value other than MSGACCESS(NONE) enables collection of message statistics. The default setting of MSGACCESS(DESC) enables all users to browse message statistics using this workspace. If you attempt to view the current message statistics workspace without the required access permission, no data is displayed.

Many of the message statistics are based on the put date and time of the message stored in the queue. If the queue contains messages with put dates and times that do not accurately reflect when they were put into the input queue, then the statistics calculated will be correspondingly inaccurate. Put dates and times might be inaccurate if the origin context of a message is preserved or set when the message is put into the queue by an application. This commonly occurs when an application is a message mover that moves messages from one queue to another, or when any application passes or sets the origin context of a message.

Predefined views

The Current Message Statistics by Group ID workspace includes the following predefined views:

- **Message Count by Group ID** This view displays message statistics for the selected queue, grouped by Group ID. If you attempt to display the statistics of a queue with no messages, a single row is displayed containing 0 values for all message counts and times. If no rows are displayed in this workspace, this might indicate that an error occurred during message statistics collection. Refer to the agent log and look for message code KMQMI210E. This message provides additional information about the cause of the problem. In this view the Message Group Identifier column contains the group ID by which messages have been grouped.
- **Message Count by Group ID** This view shows, as a bar chart, the percentage of messages delayed for each Group ID.

- **Message Duration by Group ID** This view shows, as a bar chart, the length of time in seconds that messages with a particular Group ID have been waiting in the queue in term of oldest message, average message, newest message and highest priority message wait times. This data is repeated for each Group ID.

For more information on the attributes listed in the tables of this workspace, see “Message Statistics attributes” on page 232.

Predefined links

No other workspaces can be linked to from the Current Message Statistics by Group ID workspace.

Current Message Statistics workspace

The Current Message Statistics displays message statistics, such as message wait times, related to the selected queue.

Important: The data contained within this workspace is collected *on-request-only*, not during the standard sampling interval. *Each time you open, link to, or refresh this workspace*, the monitoring agent queries WebSphere MQ and collects the requested data. Therefore, for performance reasons, this workspace must *not* be placed in a short interval automatic refresh cycle.

To view this workspace, your Tivoli Enterprise Portal Logon user ID's WebSphere MQ Security Access for the selected queue must be set to MQGET (with the browse option enabled). Additionally, user access to messages stored on the queue must be enabled. This can be adjusted using the **MSGACCESS** parameter in the SET GROUP and SET MANAGER monitoring options. Any value other than MSGACCESS(NONE) enables collection of message statistics. The default setting of MSGACCESS(DESC) enables all users to browse message statistics using this workspace. If you attempt to view the current message statistics workspace without the required access permission, no data is displayed.

Many of the message statistics are based on the put date and time of the message stored in the queue. If the queue contains messages with put dates and times that do not accurately reflect when they were put into the input queue, then the statistics calculated will be correspondingly inaccurate. Put dates and times might be inaccurate if the origin context of a message is preserved or set when the message is put into the queue by an application. This commonly occurs when an application is a message mover that moves messages from one queue to another, or when any application passes or sets the origin context of a message.

Predefined views

The Current Message Statistics workspace includes the following predefined views:

- **Current Message Statistics** This view displays message statistics for the selected queue. If you attempt to display message the statistics of a queue with no messages, a single row is displayed containing 0 values for all message counts and times. If no rows are displayed in this view, this might indicate that an error occurred during message statistics collection. Refer to the agent log and look for KMQMI210E message code. This message provides additional information about the cause of the problem.
- **Message Count** This view shows, as a bar chart, the number of delayed messages in the selected queue in comparison to the total number of messages.

- **Message Duration** This view shows, as a bar chart, the length of time in seconds that messages from all applications combined have been waiting in the queue, in terms of oldest message, average message, newest message and highest priority message wait times.

For more information on the attributes listed in the tables of this workspace, see “Message Statistics attributes” on page 232.

Predefined links

No other workspaces can be linked to from the Current Message Statistics workspace:

Current Queue Manager Status workspace

This workspace is similar to the Queue Manager Status workspace, but displays information about the *current* state of queue managers, in contrast to the Queue Manager Status view, which is based on historical data.

Predefined views

The Current Queue Manager Status workspace includes the following predefined views:

- **Current Queue Manager Status** This view provides the following information, among other statistics, about each monitored queue manager:
 - Its name and the host that owns the queue manager
 - Its status
 - The maximum number of messages that can be stored on the dead-letter queue
 - The current number of messages currently stored on the dead-letter queue
 - Its availability

From this table you can select a queue manager whose parameters you want to review. If a queue manager's status is "Running" but no statistics are displayed, check that the command server for the queue manager has been started.

Limitation: Due to the IBM Tivoli Monitoring limitation, the collected records can not be sorted by the Recording Time when you check the historical data.

- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Current Queue Manager Status attributes” on page 147.

Predefined links

No other workspaces can be linked to from the Current Queue Manager Status workspace.

Dead-Letter Queue Messages workspace

WebSphere MQ puts a message on the Dead-Letter Queue when it cannot be delivered to the requested destination queue. This can occur for various reasons, such as the message being too long, the destination specified in its queue name field being invalid, or the queue being full. Use the Dead-Letter Queue Messages workspace to view the status of dead messages and forward them to the desired location.

Predefined views

The Dead-Letter Queue Messages workspace includes the following predefined views:

- **Dead-Letter Queue Messages** This view supplies the following information about undeliverable messages:
 - the name of the application that created the message, the message itself, and the message's original time stamp and intended destination.
 - a reason code, which indicates why the message was not delivered.
 - the time that the message was put onto the DLQ.
 - whether the message has been segmented, is part of a group or both, and, if it is part of a group, the GroupID.

From this view, you can delete or resend dead messages, forward them to different destinations, or link to other workspaces to view message header information or message application data.

Note that if you delete or forward a group or segmented message, all messages belonging to the group or logical message will be deleted or forwarded.

Note that when using WebSphere MQ for Windows, the DLQ Appl Type attribute, which indicates the processing platform on which the queue manager is running, always has a value of MQPL_WINDOWS_NT.

- **Dead Letter Queue Messages Summary** This view shows, as a bar chart, the current depth of the dead-letter queue running on the selected queue manager, in comparison to its maximum depth.

For more information on the attributes listed in the tables of this workspace, see “Message Summary attributes” on page 235.

Predefined links

You can link to the following workspaces from the Dead-Letter Queue Messages workspace:

- Message Descriptor
- Message Contents

Enterprise Wide Subscription Definitions workspace

The Enterprise Wide Subscription Definitions workspace contains information about all system defined remote and local subscriptions. A remote subscription is a subscription that stores published messages in a queue that belongs to a queue manager other than the queue manager that hosts the subscription. You can also use the MQ Search function to search for specific remote subscription information in this workspace.

Predefined views

The Enterprise Wide Subscription Definitions workspace includes the following predefined views:

- **Enterprise Wide Subscription Definitions** This view contains information about all system defined remote subscriptions. A remote subscription is a subscription that stores published messages in a queue that belongs to a queue manager other than the queue manager that hosts the subscription.
- **Message Log** This view contains IBM Tivoli Monitoring system level information, such as agent status information.

For more information on the attributes listed in the tables of this workspace, see “Subscription Definitions attributes” on page 325.

Predefined links

You can link to the following workspaces from the Enterprise Wide Subscription Definitions workspace:

- Subscription Status

Error Log workspace (distributed systems only)

The Error Log workspace is available on distributed systems only.

The Error Log table workspace provides you with the latest WebSphere MQ error log data from the selected monitored queue manager. Use the information in this workspace to resolve queue manager problems.

Error log information is only available if it is being collected from the queue manager. Error log monitoring is enabled by default but can be disabled using the **ERRLOGCYCLE** parameter of the SET MANAGER monitoring option.

Remember: Make sure that the user ID that is used to start the WebSphere MQ Monitoring agent has appropriate authorities for error logs and has access to the directories where the error logs are stored. Otherwise, the Error Log workspace displays no data.

Predefined views

The Error Log workspace includes the following predefined views:

- **Error Log** This view displays the latest WebSphere MQ error log data from the selected monitored queue manager. Only error log entries recorded after the monitoring agent has started are displayed.
- **Take Action** Use the Take Action view to issue commands to the monitored queue manager.

For more information on the attributes listed in the tables of this workspace, see “Error Log attributes (distributed systems only)” on page 154.

Predefined links

No other workspaces can be linked to from the Error Log workspace.

Event Archive workspace

Use the Event Archive workspace to view archived WebSphere MQ events that are reported to a queue manager over the selected time period for which historical records are available. The details that are associated with an event are recorded with the event in a readable XML format attribute. You can see this XML format attribute in this workspace without having to link elsewhere.

To store the data, historical data collection must be enabled for the Event Archive attribute group in the History Collection Configuration window. The Event Archive attribute group is eligible for use with Tivoli Data Warehouse. If you enable historical data collection for this attribute group, use Tivoli Data Warehouse to store historical data if possible, because the amount of event data might be large.

In this workspace, you can search for some specific archived WebSphere MQ events by right-clicking any row in the table and clicking **MQ Event Search**.

Remember:

- All data pages in the Event Archive table cannot be sorted by the **Event Date & Time** attribute in descending order. You can sort only the current page of this table in descending order.
- When you perform a search operation, WebSphere MQ events are searched within the time span that is set for the query in this workspace. If you want to change this time span, do it before you start the search function.

Predefined views

The Event Archive workspace includes the following predefined views:

- **Event Archive** The Event Archive view provides you with a list of WebSphere MQ events that are reported to the selected queue manager.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information about this view, see Tivoli Enterprise Portal help.

For more information about the attributes listed in the table of this workspace, see “Event Archive attributes” on page 155.

Event Log workspace

Use the Event Log workspace to monitor and analyze events occurring on a queue manager to identify trends and discover the root cause of problems resulting in event generation. This workspace displays both events that occurred locally and those that occurred on a remote queue manager reporting to the selected queue manager.

Predefined views

The Event Log workspace includes the following predefined views:

- **Event Log** The Event Log view shows you a list of events that were reported to the selected queue manager. Because it is possible to monitor events occurring on one queue manager from another queue manager, the Event QMgr Name and Event Host Name fields indicate where the event actually occurred. This view displays both events that occurred locally and those that occurred on a remote

queue manager reporting to the selected queue manager. Select an event in this view to display more detailed information about it.

Use the information in this view to determine what events occurred on the queue manager over a period of time. This view can be used to search for patterns within the data, such as events that occur at certain times or on certain days, or that are generated for particular resources. To display descriptive and environmental information about an event, select the event from in the table.

Remember: If the value of the topic string attribute is longer than 256 bytes, only the leftmost 256 bytes are displayed in this workspace.

- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Event History attributes” on page 187.

Predefined links

You can link to the following workspace from the Event Log workspace:

- Event Parameters

Event Parameters workspace

The Event Parameters workspace displays the parameters of a selected event.

- **Event Parameters** This view displays the parameters of a selected event. You can see when, where, and on what resource the event occurred. The other parameters displayed vary depending on the type of event.

Remember:

- If the value of the topic string attribute is longer than 264 bytes, only the leftmost 264 bytes are displayed in this workspace.
- The DestQName of the subscriber is displayed as the QName for the Authority Event (Type 6).
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Event Details attributes” on page 163.

Predefined links

No other workspaces can be linked to from the Event Parameters workspace.

Historical Application Accounting workspace

The Historical Application Accounting workspace is the historical version of the Application Accounting workspace and displays statistics for the past 2 hours (the default setting is 2 hours). You can link to this workspace from the Application Accounting workspace.

Predefined views

The Historical Application Accounting workspace includes the following predefined views:

- **Historical Application Accounting** This table contains information about the number of MQI requests made by applications to a queue manager over the past 2 hours.

There are two different ways to arrive at this workspace, which affect the amount of data presented in the table:

- As a primary workspace, information about all application connections is displayed in the table view with the name of the queue manager at the bottom.
 - When you link to this workspace from a row within the Application Connections workspace, only a single row containing information about the selected application connection is displayed with the name of the application at the bottom.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Application Accounting attributes (distributed systems only)” on page 85.

Predefined links

You can link to the following workspaces from the Historical Application Accounting workspace:

- Historical MQI Call Statistics Details
- Historical MQI Message Statistics Details

Historical Channel Performance workspace

The Historical Channel Performance workspace is the historical version of the Channel Performance workspace for the monitored channel selected, displaying channel performance information for up to the past 24 hours. Use this workspace to view performance information from monitored channels in the WebSphere MQ environment. Based on the information provided, you can make changes to improve performance, set up situations, and verify that changes made are improving performance.

If more than one active channel with the same name and connection name exist within the system and you try to view one of the channel's historical performance data, multiple sets of the data will be displayed, one for each active connection. This situation can occur when viewing data for receiver, cluster receiver, or server connection channels.

A channel provides a communications link between two queue managers (running on the same or different platforms) and shields application programs from having to deal with the complexities of a network's underlying protocols. A channel consists of a transmission queue, a message channel agent (communications program), and a communications link.

Note that statistics are not collected from client connection channel definitions and therefore these are not listed in any of the Channel Performance workspaces.

WebSphere MQ Monitoring agent also provides current and recent versions of this workspace, which you can use to view the latest available report data or a recent snapshot of data taken at a particular point in time.

Predefined views

The Historical Channel Performance workspace includes the following predefined views:

- **Channel Performance** This view displays a list of monitored channels over a specified period of time. Select a channel in this view to display its individual performance statistics.

To view the activity of all monitored channels on a selected queue manager right-click the Channel Performance item under the selected queue manager in the physical view and select **Workspace > Channel performance**. If your system has a high volume of traffic, different message priorities or uses different types of queues, you might need to define multiple channels to handle this.

You can use this view to monitor the depth of the transmission queue. If this becomes very deep and remains so for a long time, consider assigning more channels to the queue to improve performance. This type of problem is especially common if your system has a high volume of traffic, different message priorities or uses different types of queues. You can use the sequence number and logical unit of work information when performing channel recovery and restart operations.

- **Transmission Rates** This view shows, as a bar chart, the average transmission rates of each of the selected monitored channels over the specified time period.

For more information on the attributes listed in the tables of this workspace, see “Channel Long-Term History attributes” on page 107.

Predefined links

No other workspaces can be linked to from the Historical Channel Performance workspace.

Historical Message Statistics workspace

The Historical Message Statistics workspace displays message statistics, such as message wait times, related to the selected queue over the specified period of time for which historical records are available.

To view this workspace, your Tivoli Enterprise Portal Logon user ID's WebSphere MQ Security Access for the selected queue must be set to MQGET (with the browse option enabled). Additionally, user access to messages on the queue must be enabled. This can be adjusted using the **MSGACCESS** parameter of the SET GROUP and SET MANAGER monitoring options. Any value other than MSGACCESS(NONE) allows collection of message statistics. The default setting of MSGACCESS(DESC) enables all users to browse message statistics using this workspace. If you attempt to view the current message statistics workspace without the proper access, no data is returned.

Many of the message statistics are using the put date and time of the message in the queue. If the queue contains messages with put dates and times that do not

accurately reflect when they were put into the input queue, then the statistics calculated will be correspondingly inaccurate. Put dates and times are inaccurate if the origin context is preserved or set for a message when it is put into the queue by an application. This commonly occurs when the application putting the message into the queue is a message mover that moves messages from one queue to another, or when any application passes or sets the origin context of a message.

The WebSphere MQ Monitoring agent also provides current and recent versions of this workspace, which you can use to view the latest available report data or a recent snapshot of data taken at a particular point in time.

Predefined views

The Historical Message Statistics workspace includes the following predefined views:

- **Historical Message Statistics** This view displays message statistics for the selected queue. If you attempt to display message statistics for a queue with no messages, a single row is displayed containing 0 values for all message counts and times. If no rows are displayed in this workspace, this might indicate that an error occurred during message statistics collection. Refer to the agent log and look for KMQMI210E message code. This message provides additional information about the cause of the problem.
- **Historical Message Count** This view shows, as a bar chart, the number of delayed messages in comparison to the total number of messages, over the selected period of time for which historical records are available.
- **Historical Message Duration** This view shows, as a bar chart, the length of time in seconds that messages have been waiting in the queue in term of oldest message, average message, newest message and highest priority message wait times, over the selected period of time for which historical records are available.

For more information on the attributes listed in the tables of this workspace, see “Message Statistics attributes” on page 232.

Predefined links

No other workspaces can be linked to from the Historical Message Statistics workspace.

Historical MQ Channel Statistics workspace

The Historical MQ Channel Statistics workspace displays channel statistics for monitored channels within a queue manager, over the selected period of time for which historical records are available (the default setting is 2 hours).

WebSphere MQ Monitoring agent also provides current and recent versions of this workspace, which you can use to view the latest available report data or a recent snapshot of data taken at a particular point in time.

Predefined views

The Historical MQ Channel Statistics workspace includes the following predefined views:

- **Historical MQ Channel Statistics** This view displays channel statistics for monitored channels within a queue manager, including what data was

transmitted by the queue manager using the channel,, over the selected period of time for which historical records are available (the default setting is 2 hours).

- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “MQ Channel Statistics attributes (distributed systems only)” on page 262.

Predefined links

No other workspaces can be linked to from the Historical MQ Channel Statistics workspace.

Historical MQ Queue Statistics workspace

The Historical MQ Queue Statistics workspace displays statistics related to individual queues within a queue manager, over the selected period of time for which historical records are available (the default setting is 2 hours). It is a secondary workspace for the MQI Statistics navigation item.

The WebSphere MQ Monitoring agent also provides current and recent versions of this workspace, which you can use to view the latest available report data or a recent snapshot of data taken at a particular point in time.

Predefined views

The Historical MQ Queue Statistics workspace includes the following predefined views:

- **Historical MQ Queue Statistics** This view displays statistics related to individual queues within a queue manager, over the selected period of time for which historical records are available (the default setting is 2 hours).
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “MQ Queue Statistics attributes (distributed systems only)” on page 265.

Predefined links

You can link to the following workspaces from the Historical MQ Queue Statistics workspace:

- Historical MQI Message Statistics Details

Historical MQI Call Statistics Details workspace

The Historical MQI Call Statistics Details workspace displays statistical information relating to WebSphere MQAPI calls made by applications, over the selected period of time for which historical records are available (the default setting is 2 hours).

WebSphere MQ Monitoring agent also provides a current version of this workspace, which you can use to view the latest available report data.

Predefined views

The Historical MQI Call Statistics Details workspace includes the following predefined views:

- **Historical MQI Call Statistics Details** This view displays statistical information relating to WebSphere MQ API calls made by applications, over the selected period of time for which historical records are available (the default setting is 2 hours).
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “MQI Call Statistics Details attributes (distributed systems only)” on page 269.

Predefined links

No other workspaces can be linked to from the Historical MQI Call Statistics Details workspace.

Historical MQI Message Statistics Details workspace

The Historical MQI Message Statistics Details workspace displays statistical information relating to the messages passed between applications and WebSphere MQ via WebSphere MQ API calls, over the selected period of time for which historical records are available (the default setting is 2 hours).

The WebSphere MQ Monitoring agent also provides a current version of this workspace, which you can use to view the latest available report data.

Predefined Views

The MQI Historical Message Statistics Details workspace includes the following predefined views:

- **Historical MQI Message Statistics Details** This view displays statistical information relating to the messages passed between an application and WebSphere MQ via WebSphere MQ API calls, over the selected period of time for which historical records are available (maximum 24 hours if you don't customize the warehouse proxy).
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “MQI Message Statistics Details attributes (distributed systems only)” on page 272.

Predefined Links

No other workspaces can be linked to from the Historical MQI Message Statistics Details workspace.

Historical MQI Statistics workspace

The Historical MQI Statistics workspace displays statistical data related to the use of the WebSphere MQAPI by all queues within a queue manager, over the selected period of time for which historical records are available (the default setting is 2 hours).

WebSphere MQ Monitoring agent also provides current and recent versions of this workspace, which you can use to view the latest available report data or a recent snapshot of data taken at a particular point in time.

Predefined views

The Historical MQI Statistics workspace includes the following predefined views:

- **Historical MQI Statistics** This view displays statistical data related to the use of the WebSphere MQ API by all queues within a queue manager, over the selected period of time for which historical records are available (the default setting is 2 hours).
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “MQI Statistics attributes (distributed systems only)” on page 273.

Predefined links

You can link to the following workspaces from the Historical MQI Statistics workspace:

- Historical MQI Call Statistics Details
- Historical MQI Message Statistics Details

Historical Queue Accounting workspace

The Historical Queue Accounting workspace displays information about the queues used by application connections, over the selected period of time for which historical records are available (maximum 24 hours if you do not customize the warehouse proxy). It might include queues used by application connections which were once active, but are not currently active. However, it *does not* include queues used by application connections that are currently active, in cases where the application connection is new and for which accounting data has not yet been published by the queue manager.

WebSphere MQ Monitoring agent also provides current and recent versions of this workspace, which you can use to view the latest available report data or a recent snapshot of data taken at a particular point in time.

Predefined views

The Historical Queue Accounting workspace includes the following predefined views:

- **Historical Queue Accounting** This view displays information about the queues used by application connections, including data published by the queue

manager, over the selected period of time for which historical records are available (maximum 24 hours if you do not customize the warehouse proxy).

- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Queue Accounting attributes (distributed systems only)” on page 287.

Predefined links

You can link to the following workspace from the Historical Queue Accounting workspace:

- Historical MQI Message Statistics Details

Historical Queue Statistics workspace

The Historical Queue Statistics workspace displays queue usage statistics for monitored queues running on the selected queue manager, over the selected period of time for which historical records are available (maximum 24 hours if you do not customize the warehouse proxy). Use the statistics to compare the activity and parameters of different queues in order to resolve performance problems.

The WebSphere MQ Monitoring agent also provides current and recent versions of this workspace, which you can use to view the latest available report data or a recent snapshot of data taken at a particular point in time.

Historical data is not collected for alias queues. This workspace contains historical data for local queues only.

Predefined views

The Historical Queue Statistics workspace includes the following predefined views:

- **Historical Queue Statistics** This view displays queue usage statistics for monitored queues running on the selected queue manager, over the selected period of time for which historical records are available (maximum 24 hours if you do not customize the warehouse proxy). Each local queue is only listed once, even if there are several alias queues mapped to it. Select a queue from this list to view more information about it. Use the statistics provided to compare the activity and parameters of different queues. The following factors can adversely affect performance:
 - Lengthy logical units of work
 - A resource intensive CICS transaction or program
- **Queue Utilization** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each queue managed by the selected queue manager's, over the selected period of time for which historical records are available (maximum 24 hours if you do not customize the warehouse proxy).

For more information on the attributes listed in the tables of this workspace, see “Queue Long Term History attributes” on page 306.

Predefined links

No other workspaces can be linked to from the Historical Queue Statistics workspace.

Listener Status workspace

The Listener Status workspace provides views to monitor the status of listeners. The workspace also displays definition of listeners, links channel status to listener status and provides take action commands to start or stop a listener.

This workspace does not have any chart views.

The workspace is positioned within the **Queue Manager Status** navigator item as an alternate workspace. You can access the Listener Status Workspace by clicking Workspace from the View menu.

The data will be collected on-demand when the workspace is entered or refreshed. Therefore it is not recommended that the workspace be refreshed continually, or that auto-refresh be placed on a low interval.

The workspace table display will be empty (no rows of data) when the queue manager version is before version 6.0. It will also be empty if selected for a z/OS queue manager.

Predefined views

The Listener Status workspace includes the following predefined views:

- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Listener Status attributes (distributed systems only)” on page 195.

Predefined links

No other workspaces can be linked to from the Listener Status workspace.

Message Contents workspace

Use the Message Contents workspace to view the application section of messages and review their contents.

There are currently two versions of this workspace. The version that is displayed when you open the workspace depends on what version of the WebSphere MQ Monitoring agent you are using. If you are using version 6.0.1 or later, the workspace includes additional columns containing information not available using previous versions of the agent. If you are using version 6.0 or earlier, another version of the workspace containing less information is displayed. See the following information about the Message Contents view for further details.

Predefined views

The Message Contents workspace includes the following predefined views:

- **Message Contents** This view shows the application section of the selected message, which contains the message contents, including the first four kilobytes of message data in character form. If you are using version 6.0.1 of the WebSphere MQ Monitoring agent or later, you can also view the information about the CCSIDs that are used to convert the message data to different forms, and whether conversion was successful. If the contents of one of the cells containing message data is too long to be contained within a single cell, the contents of a single message are displayed on multiples rows. This is indicated by an asterisk (*) displayed at either end of cells containing character or converted data.

The message content might contain one or more WebSphere MQ headers. The WebSphere MQ Monitoring agent processes these headers before it displays the message data in this workspace. For those WebSphere MQ headers that are supported by the WebSphere MQ Monitoring agent and are documented in the Message Descriptor workspace of this guide, the headers themselves will be stripped out from the message content. The attributes of the headers are displayed in the Message Descriptor workspace. For the WebSphere MQ headers that are not supported by the agent, the agent treats these headers as normal data and display these unsupported headers and the data following them in this workspace. In this situation, garbage data might be displayed in both the Character Data and Converted Data columns, because the agent cannot recognize the correct CCSID of the data following the unsupported headers.

- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Message Data attributes” on page 215.

Predefined links

No other workspaces can be linked to from the Message Contents workspace.

Message Descriptor workspace

Use the Message Descriptor workspace to view the contents of message header fields.

If multiple headers are generated, subsequent headers are prefixed with the WebSphere MQ ID of the associated header. For example, subsequent dead letter queue headers are prefixed with DLH and subsequent transmit queue headers are prefixed with XQH.

Predefined views

The Message Descriptor workspace includes the following predefined views:

- **Message Descriptor** This view lists the parameters in the message descriptor (MQMD) header of the WebSphere MQ message and additional WebSphere MQ headers that are available in the message. Not all WebSphere MQ headers are supported; the WebSphere MQ Monitoring agent currently supports the following WebSphere MQ headers:
 - MQMD (message descriptor)
 - MQMDE (message descriptor extension)

- MQDLH (dead-letter header)
- MQXQH (transmission-queue header)
- MQRMH (reference message header)
- MQDH (distribution header)

Note: The distribution header (MQDH) is supported only on distributed systems.

The message descriptor (MQMD) is always present in a WebSphere MQ message. A WebSphere MQ message might contain zero, one, or more of the other headers. Therefore, you might not see all of the above headers for a given message.

The following fields are displayed for the message descriptor (MQMD) of the WebSphere MQ message:

- The name and type of the application that created the message
- The backout count. If this is high it might indicate a problem.
- The correlation and message IDs
- The message expiration time
- The message length
- The message type. Possible message types are request, reply, report and datagram
- The message persistence, which indicates whether or not the message is recoverable
- The message priority, which can be used for selective retrieval of messages from queues
- The date and time at which the message was created (relative to GMT). This is also known as the put data and time.
- The reply-to queue and queue manager names

The following fields are displayed for the message descriptor extension (MQMDE) if it exists in the WebSphere MQ message:

- The numeric encoding, character set identifier, and format name of the data that follows the MQMDE
- The group ID and the sequence number of logical message within the group

The following fields are displayed for the dead letter header (MQDLH) if it exists in the WebSphere MQ message:

- The original destination queue and queue manager names
- The name and type of the application that created the message
- The date and time when the message was put on dead-letter queue (relative to GMT).
- The numeric encoding, character set identifier, and format name of the data that follows the MQDLH

The following fields are displayed for the transmission-queue header (MQXQH) if it exists in the WebSphere MQ message:

- The destination queue and queue manager names
- Information of the original message descriptor (MQMD)

The following fields are displayed for the message reference header (MQRMH) if it exists in the WebSphere MQ message:

- The object type and object instance identifier
- The length and offset of source environment data

- The length and offset of source object name
- The length and offset of destination environment data
- The length and offset of destination object name
- The numeric encoding, character set identifier, and format name of the bulk data
- The length, low and high offset of the bulk data

The following fields are displayed for the distribution header (MQDH) if it exists in the WebSphere MQ message:

- The numeric encoding, character set identifier, and format name of the data that follows the array of put-message record (MQPMR) records
- The object name and object queue manager name if present
- The attributes of the MQPMR if present

Remember: The put date and time value in this table is relative to GMT. It is different from the Queue Messages table view, which displays the put date and time in local time relative to the location of your monitored system.

- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Message Details attributes” on page 227.

Predefined links

No other workspaces can be linked to from the Message Descriptor workspace.

MQ Action Log workspace

The MQ Action Log workspace provides you with information about actions performed by end users. The actions here include those performed by issuing Take Action commands and message manipulation actions.

This workspace will only contain information if Take Action commands have been issued since WebSphere MQ Monitoring agent was installed. If no Take Action commands have been issued, the Take Action view is empty, and the KFWITM217E error message is displayed at the bottom. However, once the first take action command has been issued, this message will disappear and the contents of the Take Action log is displayed correctly.

This workspace only contains information if the date, time and time zone settings of the systems on which the Tivoli Enterprise Portal Server and Tivoli Enterprise Monitoring Server run are the same.

Remember: The Message ID, Correlation ID, Message Tag, Source Queue Name, Target QMgr Name, and Target Queue Name columns apply only to message manipulation actions. For this reason, these columns are blank if the **Action Type** value is MQ_Command.

Predefined views

The MQ Action Log workspace includes the following predefined views:

- **MQ Action Log** This view provides information about actions performed by end users. The actions described here refer to message manipulation actions and actions performed by issuing Take Action commands.
- **Message Log** This view provides IBM Tivoli Monitoring system level information, such as agent status information.

For more information on the attributes listed in the tables of this workspace, see “MQ Action Log attributes” on page 252.

Predefined links

No other workspaces can be linked to from the MQ Action Log workspace.

MQ Channel Statistics workspace

The MQ Channel Statistics workspace displays channel statistics for monitored channels within a queue manager.

WebSphere MQ Monitoring agent also provides recent and historical versions of this workspace. You can view a recent snapshot of the report data or up to 24 hours of historical data for each workspace component.

Predefined views

The MQ Channel Statistics workspace includes the following predefined views:

- **MQ Channel Statistics** This view displays channel statistics for monitored channels within a queue manager, including what data was transmitted by the queue manager using the channel, for the most recent sampling interval.
- **Average Net/Exit Time** shows, as a bar chart, the end date and time of the average recorded time spent executing a user exit in recording interval and the average latency of messages retrieved from the queue.
- **Message Rate** shows, as a bar chart, the end date and time of the rate per second of (non)persistent messages sent or received.
- **Total Byte Rate** shows, as a bar chart, the end date and time of Displays the rate per second of bytes sent or received for (non)persistent message.

For more information on the attributes listed in the tables of this workspace, see “MQ Channel Statistics attributes (distributed systems only)” on page 262.

Predefined links

You can link to the following workspaces from the MQ Channel Statistics workspace:

- Recent MQ Channel Statistics
- Historical MQ Channel Statistics

MQ Queue Statistics workspace

The MQ Queue Statistics workspace displays statistics related to individual queues within a queue manager. It is a secondary workspace for the MQI Statistics navigation item.

The MQ queue statistics include the data collected from the queue manager, about operations performed on that queue and the rates with which they occur. Entries

are listed one line per queue for all queues in the system for which statistics were published by the queue manager during the most recent interval.

The WebSphere MQ Monitoring agent also provides recent and historical versions of this workspace. You can view a recent snapshot of the report data or up to 24 hours of historical data for each workspace component.

Predefined views

The MQ Queue Statistics workspace includes the following predefined views:

- **MQ Queue Statistics** This view displays statistics related to individual queues within a queue manager, including the data collected by the queue manager over the most recent sampling interval.
- **Normal Rate** This view shows, as a bar chart, the rate at which the following MQ API commands are successfully performed per second:
 - Put
 - Put1
 - Put byte
 - Get
 - Get byte
 - Browse
 - Browse byte
 - Expired msg
 - Non-queue msg
 - Purge
- **Fail Rate** This view shows, as a bar chart, the number of times that each of the following API commands fails each second:
 - Put
 - Put1
 - Get
 - Browse

For more information on the attributes listed in the tables of this workspace, see “MQ Queue Statistics attributes (distributed systems only)” on page 265.

Predefined links

You can link to the following workspaces from the MQ Queue Statistics workspace:

- MQI Message Statistics Details
- Queue Accounting
- Queue Status (This link is visible only if the **DESTQMGR** value is equal to "" or to the **QMNAME** value.)
- Recent MQ Queue Statistics
- Historical MQ Queue Statistics

MQI Call Statistics Details Workspace

The MQI Call Statistics Details workspace displays statistical information about WebSphere MQ API calls that are made by an application.

The WebSphere MQ Monitoring agent also provides a historical version of this workspace containing up to 24 hours of statistical data for each workspace component.

Predefined views

The MQI Call Statistics Details workspace includes the following predefined views:

- **MQI Call Statistics Details** This view displays statistical information relating to WebSphere MQ API calls made by applications. It also provides details of the rates at which different operations are performed on different objects within the environment, in terms of per second and in total over the sampling period.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “MQI Call Statistics Details attributes (distributed systems only)” on page 269.

Predefined links

No other workspaces can be linked to from the MQI Call Statistics Details workspace.

MQI Message Statistics Details Workspace

The MQI Message Statistics Details workspace displays statistical information relating to the messages passed between applications and WebSphere MQ through WebSphere MQ API calls.

WebSphere MQ Monitoring agent also provides a historical version of this workspace containing up to 24 hours of statistical data for each workspace component.

Predefined views

The MQI Message Statistics Details workspace includes the following predefined views:

- **MQI Message Statistics Details** This view displays statistical information relating to the messages passed between an application and WebSphere MQ through WebSphere MQ API calls. Statistics are organized by message.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “MQI Message Statistics Details attributes (distributed systems only)” on page 272.

Predefined links

No other workspaces can be linked to from the MQI Message Statistics Details workspace.

MQI Statistics workspace

The MQI Statistics workspace displays statistical data related to the use of the WebSphere MQ API by all queues within a queue manager.

The WebSphere MQ Monitoring agent also provides recent and historical versions of this workspace. You can view a recent snapshot of the report data or up to 24 hours of historical data for each workspace component.

Predefined views

The MQI Statistics workspace includes the following predefined views:

- **MQI Statistics** This view displays statistical data related to the use of the WebSphere MQ API by all queues within a queue manager.
- **Normal Rate** This view shows, as a bar chart, the rate at which the following API commands are successfully performed per second:
 - Connection
 - Implicit disconn
 - Qmgr disconn
 - Normal disconn
 - Open
 - Close
 - Inquire
 - Set
 - Put
 - Put1
 - Put byte
 - Get
 - Get byte
 - Browse
 - Browse byte
 - Commit
 - Backout
 - Expired msg
 - Purge
- **Fail Rate** This view shows, as a bar chart, the number of times that each of the following API commands fails each second:
 - Connection
 - Open
 - Close
 - Inquire
 - Set
 - Put
 - Put1
 - Get
 - Browse
 - Commit

For more information on the attributes listed in the tables of this workspace, see “MQI Statistics attributes (distributed systems only)” on page 273.

Predefined links

You can link to the following workspaces from the MQI Statistics workspace:

- MQI Call Statistics Details
- MQI Message Statistics Details
- Recent MQI Statistics
- Historical MQI Statistics

MQSeries Events workspace

The MQSeries® Events workspace provides you with a list the conditions that trigger an event on the event queue.

Predefined views

The MQSeries Events workspace includes the following predefined views:

- **MQSeries Events** This view provides you with a list the conditions that will trigger an event on the event queue. You can select an event from this list to display further information about it.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Current Events attributes” on page 145.

Predefined links

You can link to the following workspaces from the MQSeries Events workspace:

- Event Parameters
- Event Log

Namelist Detail workspace

Use this workspace to view the attributes of the selected namelist, including its contents.

Predefined views

The Namelist Detail workspace includes the following predefined views:

- **Namelist Detail** Use this view to view the attributes of the selected namelist, including its contents. Data displayed in this view is collected on demand. It provides you with the following information:
 - The date and time at which the namelist was last modified.
 - A description of the namelist (if given when the namelist was configured).
 - The number of names in the namelist.
 - A list of the actual names.

Remember: Some names that are included in a namelist might be longer than the table column width. A single entry might be displayed over multiple rows.

- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Namelist attributes” on page 285.

Predefined links

No other workspaces can be linked to from the Namelist Detail workspace.

Open Queue Handles workspace

Use the Open Queue Handles workspace to help you determine which applications or users opened which queues, and for what purpose.

Important: The data contained within this workspace is collected *on-request-only*, not during the standard sampling interval. *Each time you open, link to, or refresh this workspace*, the monitoring agent queries WebSphere MQ and collects the requested data. Therefore, for performance reasons, this workspace should *not* be placed in a short interval automatic refresh mode.

To access this workspace, select the Queue Statistics item for the selected queue manager within the Navigator physical view and right-click, and click **Workspace > Open Queue Handles** from the menu.

Predefined views

The Open Queue Handles workspace includes the following predefined views:

- **Open Queue Handles** Use this view to help you determine which applications or users opened which queues, and for what purpose.
The Open Queue Handles view contains detailed application-related information, including the reasons why queues were opened, for a selected queue manager. This table contains one row for each open queue handle, so if a queue has no open handles, the table will be empty. You can also use this table to view status information for a particular queue.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Queue Handle Status attributes” on page 302.

Predefined links

You can link to the following workspace from the Open Queue Handles workspace:

- Queue Status (This link is visible only if the **DESTQMGR** value is equal to "" or to the **QMNAME** value.)

In addition to the above workspace, the following workspaces are available in specific circumstance:

- If you have OMEGAMON for CICS on z/OS system installed, you can also link to the CICS Transaction Analysis workspace. This workspace can only be link to from rows with an Appl Type value of CICS. The CICS Transaction Analysis workspace provides a comprehensive view of CICS transactions which you can use to identify problem transactions across CICS regions and z/OS images for the CICSplex. For more information about this workspace see OMEGAMON for CICS on z/OS online help.
- If you have IBM Tivoli Monitoring OS agent installed on your system, you can also link to Process Information workspace of IBM Tivoli Monitoring OS agent. The Process workspace provides you with the details of the process that opened the queue. For more information about this workspace, see IBM Tivoli Monitoring online help.
- If you have OMEGAMON XE for z/OS installed, you can also link to Sysplex workspace. The Sysplex workspace provides you with the information about the specific component of the sysplex. For more information about this workspace, see OMEGAMON XE on z/OS online help.
- If you have OMEGAMON XE for z/OS installed, you can also link to the following workspaces by using ASID:
 - Address Space Bottleneck Detail workspace
 - Address Space Bottleneck and Impact Analysis workspace
 - Address Space CPU Usage workspace
 - Address Space CPU Usage Details workspace
 - Address Space Storage for Job workspace

Theses workspaces provide you with the information about address space bottleneck, CPU and storage. For more information about these workspaces, see OMEGAMON XE for z/OS online help.

Publish Subscribe Status workspace

The Publish Subscribe Status workspace contains status information about the publish-subscribe engine. For example, whether the publish-subscribe engine is running.

Predefined views

The Publish Subscribe Status workspace includes the following predefined views:

- **Publish Subscribe status** This view contains information about the status of the publish-subscribe engine.
- **Message Log** This view contains IBM Tivoli Monitoring system level information, such as agent status information.

For more information on the attributes listed in the tables of this workspace, see “Publish Subscribe Status attributes” on page 287.

Predefined links

No other workspaces can be linked to from the Publish Subscribe Status workspace.

Queue Accounting workspace

The Queue Accounting workspace displays information about the queues used by application connections. It might include queues used by application connections which were once active, but are not currently active. However, it does not include queues used by application connections that are currently active, in cases where the application connection is new and for which accounting data has not yet been published by the queue manager.

The WebSphere MQ Monitoring agent also provides recent and historical versions of this workspace. You can view a recent snapshot of the report data or up to 24 hours of historical data for each workspace component.

Predefined views

The Queue Accounting workspace includes the following predefined views:

- **Queue Accounting** This view displays information about the queues used by application connections, including data collected from the queue manager over the most recent sampling interval.
- **Normal Rate** This view shows, as a bar chart, the rate at which the following operations are successfully performed per second:
 - Open
 - Close
 - Put
 - Put1
 - Put byte
 - Get
 - Get byte
 - Browse
 - Browse byte
 - Generated msg
- **Fail Rate** This view shows, as a bar chart, the number of each of the following operations that fail each second:
 - Put
 - Put1
 - Get
 - Browse

For more information on the attributes listed in the tables of this workspace, see “Queue Accounting attributes (distributed systems only)” on page 287.

Predefined links

You can link to the following workspaces from the Queue Accounting workspace:

- MQI Message Statistics Details
- MQ Queue Statistics
- Recent Queue Accounting
- Historical Queue Accounting

Queue Definitions for Alias Queues workspace

The Queue Definitions for Alias Queues workspace summarizes the definitions of the alias queues managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

- **Queue Definitions for Alias Queues** This view summarizes the definitions of the alias queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** This view shows, as a bar chart, the number of queues by queue type for the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Queue Definitions for Alias Queues workspace:

- Queue Parameters
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Messages with DLQ Header

Queue Definitions for Cluster Queues workspace

The Queue Definitions for Cluster Queues workspace summarizes the definitions of the cluster queues managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Queue Definitions for Cluster Queues workspace includes the following predefined views:

- **Queue Definitions for Cluster Queues** This view summarizes the definitions of the cluster queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** This view shows, as a bar chart, the number of queues by queue type for the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Queue Definitions for Cluster Queues workspace:

- Queue Parameters
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Messages with DLQ Header

Queue Definitions for Local Queues workspace

The Queue Definitions for Local Queues workspace summarizes the definitions of the local queues managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Queue Definitions for Local Queues workspace includes the following predefined views:

- **Queue Definitions for Local Queues** This view summarizes the definitions of the local queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** This view shows, as a bar chart, the number of queues by queue type for the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Queue Definitions for Local Queues workspace:

- Queue Parameters
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Messages with DLQ Header

Queue Definitions for Model Queues workspace

The Queue Definitions for Model Queues workspace summarizes the definitions of the model queues managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Queue Definitions for Model Queues workspace includes the following predefined views:

- **Queue Definitions for Model Queues** This view summarizes the definitions of the model queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. **Purge Queue** deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** This view shows, as a bar chart, the number of queues by queue type for the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Queue Definitions for Model Queues workspace:

- Queue Parameters
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Messages with DLQ Header

Queue Definitions for Permanent Dynamic Queues workspace

The Queue Definitions for Permanent Dynamic Queues workspace summarizes the definitions of the permanent dynamic queues managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Queue Definitions for Permanent Dynamic Queues workspace includes the following predefined views:

- **Queue Definitions for Permanent Dynamic Queues** This view summarizes the definitions of the permanent dynamic queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** This view shows, as a bar chart, the number of queues by queue type for the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Queue Definitions for Permanent Dynamic Queues workspace:

- Queue Parameters

- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Messages with DLQ Header

Queue Definitions for Predefined Queues workspace

The Queue Definitions for Predefined Queues workspace summarizes the definitions of the predefined queues managed by the selected queue manager. It is the default workspace at the Queue Definitions level. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Queue Definitions for Predefined Queues workspace includes the following predefined views:

- **Queue Definitions for Predefined Queues** This view summarizes the definitions of the predefined queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** This view shows, as a bar chart, the number of queues by queue type for the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Queue Definitions for Predefined Queues workspace:

- Queue Parameters
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics

- Queue Messages with DLQ Header

Queue Definitions for Remote Queues workspace

The Queue Definitions for Remote Queues workspace summarizes the definitions of the remote queues managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Queue Definitions for Remote Queues workspace includes the following predefined views:

- **Queue Definitions for Remote Queues** This view summarizes the definitions of the remote queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** This view shows, as a bar chart, the number of queues by queue type for the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Queue Definitions for Remote Queues workspace:

- Queue Parameters
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Messages with DLQ Header

Queue Definitions for Temporary Dynamic Queues workspace

The Queue Definitions for Temporary Dynamic Queues workspace summarizes the definitions of the temporary dynamic queues managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Queue Definitions for Temporary Dynamic Queues workspace includes the following predefined views:

- **Queue Definitions for Temporary Dynamic Queues** This view summarizes the definitions of the temporary dynamic queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** This view shows, as a bar chart, the number of queues by queue type for the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Queue Definitions for Temporary Dynamic Queues workspace:

- Queue Parameters
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Messages with DLQ Header

Queue Definitions workspace

The Queue Definitions workspace summarizes the definitions of the monitored queues managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Queue Definitions workspace includes the following predefined views:

- **Queue Definitions** This view summarizes the definitions of the monitored queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue**

in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET. Data displayed in this table is collected on-demand.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** shows, as a bar chart, the number of queues by queue type for the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Queue Definitions workspace:

- Queue Parameters
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Messages with DLQ Header

Queue Manager Parameters workspace

Use the Queue Manager Parameters workspace to view the defined parameters of the selected queue manager.

Predefined views

The Queue Manager Parameters workspace includes the following predefined views:

- **Queue Manager Parameters** This view displays the defined parameters of the selected queue manager. It is often possible to solve a problem by correcting errors in a queue manager's definition. Data displayed in this view is collected on demand.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Manager Definition Details attributes” on page 197.

Predefined links

No other workspaces can be linked to from the Queue Manager Parameters workspace.

Queue Manager Status workspace

Use the Queue Manager Status workspace to view statistical information about monitored queue managers within the WebSphere MQ environment.

Predefined views

The Queue Manager Status workspace includes the following predefined views:

- **Queue Manager Status** This view provides the following information, among other statistics, about each monitored queue manager:
 - Its name and the name of the host on which it runs
 - Its status, which might be active or inactive. If the queue manager is active, then the time and date that it was started is also displayed.
 - Its subsystem ID (z/OS queue managers only)
 - The maximum capacity, in terms of number of messages, of the dead-letter queue
 - The current number of messages on the dead-letter queue
 - The name of the batch job running the queue manager (z/OS queue managers only)
 - The WebSphere MQ release level
 - The operating system on which the queue manager is running.
 - The number of WebSphere MQ system commands issued to the queue manager that did not return a response within a reasonable period of time issued by the application. See your WebSphere MQ documentation for further details

From this table view you can select a queue manager whose definition parameters you want to review. If a queue manager status is "Active" but no statistics are being generated, check that the command server for the queue manager has been started.

- **Queue Summary** This view shows, as a bar chart, a summary of status information for each queue running on the selected queue manager.
- **Channel Summary** This view shows, as a bar chart, the number of each different type of channel associated with the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see "Managers attributes" on page 205.

Predefined links

You can link to the following workspace from the Queue Manager Status workspace:

- Queue Manager Parameters

Queue Messages with DLQ Header workspace

The Queue Messages with DLQ Header workspace enables you to browse messages with DLQ headers located in the selected queue that are not in the dead letter queue for a queue manager and delete or forward them to another destination. To access this workspace, do the following steps:

1. Open the Queue Definitions workspace (or Queue Statistics workspace)
2. Right-click a row in the Queue Definitions table (or Queue Statistics table) and select **Link To > Queue Messages with DLQ Header** from the menu.

After you confirm that you want to delete or forward a message, a return code and message display. Zero indicates successful completion. Non zeros indicate a problem. For an explanation of non-zero return codes, refer to the *IBM WebSphere MQ Application Programming Reference* manual.

Deleting a message with DLQ Header

Use this procedure to delete a message with DLQ header from the selected queue:

1. Within the Queue Messages with DLQ Header workspace, right-click the message that you want to delete.
2. Select **MQ Commands > Delete** from the menu.
3. A confirmation window appears, asking if you want to delete the message. Click **Yes** to delete the message.
4. The status of your delete request appears. The return code zero indicates successful completion. Non zeros indicate a problem.
5. Click **OK** to close the status window.

Forwarding a message with DLQ header to another destination

Use this procedure to forward a message with DLQ header to another destination:

1. In the Queue Messages with DLQ Header workspace, right-click the message that you want to forward.
2. Select **MQ Commands > Forward** from the menu.
3. Enter the name of the destination queue and that of its queue manager in the window and click **Yes**.
4. The status of your forwarding request appears. The return code zero indicates successful completion. Non zeros indicate a problem.
5. Click **OK** to close the status window.

Predefined views

The Queue Messages with DLQ Header workspace includes the following predefined view:

- **Messages with DLQ Header** This view gives you an overview of messages with DLQ Header.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information about this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Message Summary attributes” on page 235.

Predefined links

You can link to the following workspaces from the Queue Messages with DLQ Header workspace:

- Message Descriptor
- Message Contents

Queue Messages workspace

Use the Queue Messages workspace to view descriptive information about messages located on the selected queue, and delete selective messages if required.

Predefined views

The Queue Messages workspace includes the following predefined views:

- **Queue Messages** This view lists the messages located on the selected queue and provides the following descriptive information about each one:
 - Message type, length, priority, persistence, and expiration time
 - The application that created the message and the time at which it was created
 - The number of times the message was backed out because of an incomplete logical unit of work
 - Whether the message is segmented, part of a group or both, and, if it is part of a group, the GroupID

Use this view to delete messages or view message headers and the first 4 kilobytes of a message application data.

Note that if you delete a group or segmented message, all messages that belong to that group or logical message are deleted.

Note that on WebSphere MQ for Windows, the processing platform on which the queue manager is running always has a value of MQPL_WINDOWS_NT.

- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Message Summary attributes” on page 235.

Predefined links

You can link to the following workspaces from the Queue Messages workspace:

- Message Descriptor
- Message Contents

Queue Parameters workspace

The Queue Parameters workspace displays the queue parameters and is used to verify the parameters of the selected queue.

Predefined views

The Queue Parameters workspace includes the following predefined views:

- **Queue Parameters** This view displays the name, description, type, and value of each of a queue's parameters. Use this information to verify the parameters of the selected queue. It is often possible to solve a problem by correcting errors in a queue's definition. Data displayed in this table is collected on-demand.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see "Queue Definition Details attributes" on page 298.

Predefined links

No other workspaces can be linked to from the Queue Parameters workspace.

Queue Statistics for Monitored Open Queues workspace

The Queue Statistics for Monitored Open Queues workspace displays queue usage statistics for open queues running on the selected queue manager. Use the statistics to compare the activity and parameters of different queues in order to resolve performance problems.

Predefined views

The Queue Statistics for Monitored Open Queues workspace includes the following predefined views:

- **Queue Statistics for Monitored Open Queues** This view displays queue usage statistics for open queues running on the selected queue manager. Each local queue is only listed once, even if there are several alias queues mapped to it. Select a queue from this list to view more information about it. Use the statistics provided to compare the activity and parameters of different queues. The following factors can adversely affect performance:
 - Lengthy logical units of work.
 - A resource intensive CICS transaction or program.

You can also delete messages from a queue by clicking **Clear Queue** or The **Purge Queue** option in the menu when you right-click on the selected queue. **Clear Queue** deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, that means the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, that means the values of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Utilization for Monitored Open Queues** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each monitored open queue managed by the selected queue manager.
- **Queue Statistics Summary** This view shows, as a bar chart, the following statistics about the selected queue manager:
 - Number of monitored queues
 - Number of open queues

- Number of queues with high depth
- Number of queues get-inhibited
- Number of queues put-inhibited

For more information on the attributes listed in the tables of this workspace, see “Queue Statistics attributes” on page 317.

Predefined links

You can link to the following workspaces from the Queue Statistics for Monitored Open Queues workspace:

- QSG CF Structure Statistics
- Queue Parameters
- Tran/Pgm Statistics by Queue
- Historical Queue Statistics
- Recent Queue Statistics
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Status (This link is visible only if the **DESTQMGR** value is equal to "" or the value of **QMNAME**.)
- Queue Messages with DLQ Header

Queue Statistics for Monitored Permanent Dynamic Queues workspace

The Queue Statistics for Monitored Permanent Dynamic Queues workspace displays queue usage statistics for permanent dynamic queues running on the selected queue manager. Use the statistics to compare the activity and parameters of different queues in order to resolve performance problems.

Predefined views

The Queue Statistics for Monitored Permanent Dynamic Queues workspace includes the following predefined views:

- **Queue Statistics for Monitored Permanent Dynamic Queues** This view displays queue usage statistics for permanent dynamic queues running on the selected queue manager. Each local queue is only listed once, even if there are several alias queues mapped to it. Select a queue from this list to view more information about it. Use the statistics provided to compare the activity and parameters of different queues. The following factors can adversely affect performance:
 - Lengthy logical units of work
 - A resource intensive CICS transaction or program

You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, that means the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, that means the values of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Utilization for Monitored Permanent Dynamic Queues** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each monitored permanent queue managed by the selected queue manager.
- **Queue Statistics Summary** This view shows, as a bar chart, the following statistics about the selected queue manager:
 - Number of monitored queues
 - Number of open queues
 - Number of queues with high depth
 - Number of queues get-inhibited
 - Number of queues put-inhibited

For more information on the attributes listed in the tables of this workspace, see “Queue Statistics attributes” on page 317.

Predefined links

You can link to the following workspaces from the Queue Statistics for Monitored Permanent Dynamic Queues workspace:

- QSG CF Structure Statistics
- Queue Parameters
- Tran/Pgm Statistics by Queue
- Historical Queue Statistics
- Recent Queue Statistics
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Status (This link is visible only if the **DESTQMGR** value is equal to "" or the value of **QMNAME**.)
- Queue Messages with DLQ Header

Queue Statistics for Monitored Predefined Queues workspace

The Queue Statistics for Monitored Predefined Queues workspace displays queue usage statistics for predefined queues running on the selected queue manager. Use the statistics to compare the activity and parameters of different queues in order to resolve performance problems.

Predefined views

The Queue Statistics for Monitored Predefined Queues workspace includes the following predefined views:

- **Queue Statistics for Monitored Predefined Queues** This view displays queue usage statistics for predefined queues running on the selected queue manager. Each local queue is only listed once, even if there are several alias queues mapped to it. Select a queue from this list to view more information about it. Use the statistics provided to compare the activity and parameters of different queues. The following factors can adversely affect performance:
 - lengthy logical units of work.
 - a resource intensive CICS transaction or program.

You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. **Clear Queue** deletes messages from a queue all together using MQSC command. **Purge Queue** deletes messages from a queue using MQGET.

Note:

1. If a row in this table is highlighted in yellow, that means the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
 2. If a row in this table is highlighted in red, that means the values of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Utilization for Monitored Predefined Queues** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each monitored predefined queue managed by the selected queue manager.
 - **Queue Statistics Summary** shows, as a bar chart, the following statistics about the selected queue manager:
 - Number of monitored queues
 - Number of open queues
 - Number of queues with high depth
 - Number of queues get-inhibited
 - Number of queues put-inhibited

For more information on the attributes listed in the tables of this workspace, see “Queue Statistics attributes” on page 317.

Predefined links

You can link to the following workspaces from the Queue Statistics for Monitored Predefined Queues workspace:

- QSG CF Structure Statistics
- Queue Parameters
- Tran/Pgm Statistics by Queue
- Historical Queue Statistics
- Recent Queue Statistics
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name

- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Status This link is visible only if the value of DESTQMGR is equal to "" or the value of QMNAME.
- Queue Messages with DLQ Header

Queue Statistics for Monitored Queues with Messages workspace

The Queue Statistics for Monitored Queues with Messages workspace displays queue usage statistics for monitored queues with messages running on the selected queue manager. Use the statistics to compare the activity and parameters of different queues in order to resolve performance problems.

Predefined views

The Queue Statistics for Monitored Queues with Messages workspace includes the following predefined views:

- **Queue Statistics for Monitored Queues with Messages** This view displays queue usage statistics for monitored queues with messages running on the selected queue manager. Each local queue is only listed once, even if there are several alias queues mapped to it. Select a queue from this list to view more information about it. Use the statistics provided to compare the activity and parameters of different queues. The following factors can adversely affect performance:

- Lengthy logical units of work
- A resource intensive CICS transaction or program

You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, that means the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, that means the values of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Utilization for Monitored Queues with Messages** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each monitored queue with messages managed by the selected queue manager.
- **Queue Statistics Summary** This view shows, as a bar chart, the following statistics about the selected queue manager:
 - Number of monitored queues
 - Number of open queues
 - Number of queues with high depth
 - Number of queues get-inhibited
 - Number of queues put-inhibited

For more information on the attributes listed in the tables of this workspace, see “Queue Statistics attributes” on page 317.

Predefined links

You can link to the following workspaces from the Queue Statistics for Monitored Queues with Messages workspace:

- QSG CF Structure Statistics
- Queue Parameters
- Tran/Pgm Statistics by Queue
- Historical Queue Statistics
- Recent Queue Statistics
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Status (This link is visible only if the **DESTQMGR** value is equal to "" or the value of **QMNAME**.)
- Queue Messages with DLQ Header

Queue Statistics for Monitored Temporary Dynamic Queues workspace

The Queue Statistics for Monitored Temporary Dynamic Queues workspace displays queue usage statistics for temporary dynamic queues running on the selected queue manager. Use the statistics to compare the activity and parameters of different queues in order to resolve performance problems.

The Queue Statistics for Monitored Temporary Dynamic Queues workspace does not contain information related to model queues. This is because model queues are templates from which queues can be created, not physical queues about which statistics can be collected.

Predefined views

The Queue Statistics for Monitored Temporary Dynamic Queues workspace includes the following predefined views:

- **Queue Statistics for Monitored Temporary Dynamic Queues** This view displays queue usage statistics for temporary dynamic queues running on the selected queue manager. Each local queue is only listed once, even if there are several alias queues mapped to it. Select a queue from this list to view more information about it. Use the statistics provided to compare the activity and parameters of different queues. The following factors can adversely affect performance:

- Lengthy logical units of work
- A resource intensive CICS transaction or program

You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, that means the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, that means the values of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Utilization for Monitored Temporary Dynamic Queues** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each monitored temporary dynamic queue managed by the selected queue manager.
- **Queue Statistics Summary** This view shows, as a bar chart, the following statistics about the selected queue manager:
 - Number of monitored queues
 - Number of open queues
 - Number of queues with high depth
 - Number of queues get-inhibited
 - Number of queues put-inhibited

For more information on the attributes listed in the tables of this workspace, see “Queue Statistics attributes” on page 317.

Predefined links

You can link to the following workspaces from the Queue Statistics for Monitored Temporary Dynamic Queues workspace:

- QSG CF Structure Statistics
- Queue Parameters
- Tran/Pgm Statistics by Queue
- Historical Queue Statistics
- Recent Queue Statistics
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Status (This link is visible only if the **DESTQMGR** value is equal to "" or the value of **QMNAME**.)
- Queue Messages with DLQ Header

Queue Statistics for Monitored Transmission Queues workspace

The Queue Statistics for Monitored Transmission Queues workspace displays queue usage statistics for transmission queues running on the selected queue manager. Use the statistics to compare the activity and parameters of different queues in order to resolve performance problems.

Predefined views

The Queue Statistics for Monitored Transmission Queues workspace includes the following predefined views:

- **Queue Statistics for Monitored Transmission Queues** This view displays queue usage statistics for transmission queues running on the selected queue manager. Each local queue is only listed once, even if there are several alias queues mapped to it. Select a queue from this list to view more information about it. Use the statistics provided to compare the activity and parameters of different queues. The following factors can adversely affect performance:

- Lengthy logical units of work.
- A resource intensive CICS transaction or program.

You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, that means the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, that means the values of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Utilization for Monitored Transmission Queues** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each monitored transmission queue managed by the selected queue manager.
- **Queue Statistics Summary** This view shows, as a bar chart, the following statistics about the selected queue manager:
 - Number of monitored queues
 - Number of open queues
 - Number of queues with high depth
 - Number of queues get-inhibited
 - Number of queues put-inhibited

For more information on the attributes listed in the tables of this workspace, see “Queue Statistics attributes” on page 317.

Predefined links

You can link to the following workspaces from the Queue Statistics for Monitored Transmission Queues workspace:

- QSG CF Structure Statistics
- Queue Parameters
- Tran/Pgm Statistics by Queue
- Historical Queue Statistics
- Recent Queue Statistics
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics

- Queue Status This link is visible only if the **DESTQMGR** value is equal to "" or the value of **QMNAME**.
- Queue Messages with DLQ Header

Queue Statistics workspace

The Queue Statistics workspace displays queue usage statistics for monitored queues running on the selected queue manager. Use the statistics to compare the activity and parameters of different queues in order to resolve performance problems.

The Queue Statistics workspace contains information only about local queues and about alias queues with target object configured. This workspace does not contain information related to model queues. This is because model queues are templates from which queues can be created, not physical queues about which statistics can be collected.

The WebSphere MQ Monitoring agent also provides recent and historical versions of this workspace. You can view a recent snapshot of the report data or up to 24 hours of historical data for each workspace component.

Predefined views

The Queue Statistics workspace includes the following predefined views:

- **Queue Statistics** This view displays queue usage statistics for monitored queues running on the selected queue manager. Each local queue is only listed once, even if there are several alias queues mapped to it. Select a queue from this list to view more information about it. Use the statistics provided to compare the activity and parameters of different queues. The following factors can adversely affect performance:

- Lengthy logical units of work
- A resource intensive CICS transaction or program

You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, that means the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, that means the values of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Utilization for Monitored Queues** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each monitored queue managed by the selected queue manager.
- **Queue Statistics Summary** This view shows, as a bar chart, the following statistics about the selected queue manager:
 - Number of monitored queues
 - Number of open queues
 - Number of queues with high depth
 - Number of queues get-inhibited

- Number of queues put-inhibited

For more information on the attributes listed in the tables of this workspace, see “Queue Statistics attributes” on page 317.

Predefined links

You can link to the following workspaces from the Queue Statistics workspace:

- QSG CF Structure Statistics
- Queue Parameters
- Tran/Pgm Statistics by Queue
- Historical Queue Statistics
- Recent Queue Statistics
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Queue Status (This link is visible only if the **DESTQMGR** value is equal to "" or the value of **QMNAME**.)
- Queue Messages with DLQ Header

Queue Status workspace

The Queue Status workspace contains information about the status of the selected open queue, including whether or not the queue has uncommitted messages, the current number of messages on the queue, and information regarding the handles that currently have the queue open.

Important: The data contained within this workspace is collected *on-request-only*, not during the standard sampling interval. *Each time you open, link to, or refresh this workspace*, the monitoring agent queries WebSphere MQ and collects the requested data. Therefore, for performance reasons, this workspace should *not* be placed in a short interval automatic refresh mode.

You can use the SCAN and STR functions with the Queue Name column of the Queue Status attribute group. You can create workspaces based on queries that include only queues with names containing certain strings, such as those that include the word SYSTEM. In addition, you can use these functions to create a situation that can be triggered by the same subset of queues, instead of having to create a new situation for each queue that you want to be able to trigger the situation.

For example, if you want to create a situation that would be triggered by any queue with a name field beginning with SYSTEM and a depth exceeding 100 messages, you could use the following formula.

```
IF STR(Queue_Name) == 1, SYSTEM AND Current_Depth > 100 THEN [situation event occurs]
```

Because the performance overhead of these functions is relatively high, when creating a query try to include additional filtering thresholds to reduce the number of times these functions are used. In particular, if you are creating your own query,

you can include a condition that includes only queues with a current depth attribute of greater than zero, eliminating all queues that do not currently contain messages. The default query already includes this condition.

If you want to create a new version of the queue status workspace containing only a filtered subset of the queues listed in the original, do not modify the original workspace and the queries on which it is based. Instead, create copies of both the workspace and query and modify the copies. The query must be copied because the original query is read-only and so cannot be modified. Predefined workspaces included with the WebSphere MQ Monitoring agent must never be modified, because this will cause problems when upgrading to future versions.

For more information about using the SCAN and STR functions, see the Formula functions appendix in the *Tivoli Enterprise Portal User's Guide*.

There are no recent or historical versions of the Queue Status workspace.

Predefined views

The Queue Status workspace includes the following predefined views:

- **Oldest Messaging Age** This view shows, as a bar chart, the Age of oldest message in seconds of the queue.
- **Number of Messages** This view shows, as a bar chart, the current depth of the queue.
- **Queue Status** This view shows, as a single-row table, the following general queue status data for the selected monitored queue:
 - The queue name
 - Whether the queue contains uncommitted messages
 - The current depth of the queue
 - The number of input opens performed during the last sampling interval
 - The number of output opens performed during the last sampling interval
 - Whether the queue is part of a queue-sharing group

This view contains data described in “Queue Status attributes” on page 323.

- **Number of Opens** This view shows, as a bar chart, the number of times the queue has been opened to perform input and output operations.
- **Open Handles for Queue** This view shows, as a table, detailed information about currently open queue handles. Multiple rows might be displayed depending on how many handles have been used to open the queue. This view contains data described in “Queue Handle Status attributes” on page 302.

Predefined links

You can link to the following workspace from the Queue Status workspace:

- Queue Definitions
- Recent Queue Statistics
- Queue Parameters
- Real-time Queue Data
- Application Topology View (Application Connections Workspace) This link is visible only if the **ACTCONN** value is not equal to Not_Connected_to_QMgr.

Real-time Channel Definitions workspace

The Real-time Channel Definitions workspace provides information about the characteristics, number and performance of the monitored channels of a queue manager. It is different from the Channel Definitions Workspace in that the data in its Real-time Channel Definitions view is on-demand, collected when the workspace is opened or refreshed. Use it to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Real-time Channel Definitions workspace includes the following predefined views:

- **Real-time Channel Definitions** This view contains a table summarizing the characteristics of the monitored channels of the selected queue manager. It displays on-demand data, collected when the workspace is opened or refreshed. Select a channel from this list to review and edit its parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.
- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager. The Channel Definitions Summary chart contained in this workspace does not necessarily match the data displayed in the table at the bottom of this workspace. It is intended only to give an overview of data sampled at the queue manager level according to the agent current parameters. The data displayed in the table is on-demand data, collected when the workspace is opened or refreshed, whereas the data on which the chart is based is sampled during standard sampling intervals.

For more information on the attributes listed in the tables of this workspace, see “Channel Definitions attributes” on page 104.

Predefined links

You can link to the following workspace from the Real-time Channel Definitions workspace:

- Channel Parameters
- Channel Status

Real-time Cluster Queue Manager workspace

The Real-time Cluster Queue Manager workspace provides information about cluster queue managers associated with the selected queue manager and the channels used by them. It is different from the Cluster Queue Manager workspace in that the data displayed in its Real-time Cluster Queue Manager view is on-demand data, collected when the workspace is opened or refreshed. Information about both explicit and automatically defined cluster sender channels is included.

Predefined views

The Real-time Cluster Queue Manager workspace includes the following predefined views:

- **Real-time Cluster Queue Manager** This view provides information about cluster queue managers associated with the selected queue manager and the channels used by them. Information about both explicitly defined and automatically defined cluster sender channels is included. You can select a queue manager/channel from this table to view and edit its definition.
- **Cluster Queue Manager Summary** This view shows, as a bar chart, the number of the following types of cluster channels used by the selected queue manager:
 - Auto-defined cluster channels
 - Cluster queue manager automatic cluster sender channels
 - Cluster queue manager explicit cluster sender channels
 - Cluster queue manager cluster receiver channels

The Cluster Queue Manager Summary chart contained in this workspace does not necessarily match the data displayed in the table at the bottom of this workspace. It is intended only to give an overview of data sampled at the queue manager level according to the agent current parameters. The data displayed in the table is on-demand data, collected when the workspace is opened or refreshed, whereas the data on which the chart is based is sampled during standard sampling intervals.

For more information on the attributes listed in the tables of this workspace, see “Channel Definitions attributes” on page 104.

Predefined links

You can link to the following workspace from the Real-time Cluster Queue Manager workspace:

- Channel Parameters

Real-time Queue Data for Open Queues workspace

The Real-time Queue Data for Open Queues workspace summarizes the definitions of the open queues managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Real-time Queue Data for Open Queues workspace includes the following predefined views:

- **Real-time Queue Data for Open Queues** This view summarizes the definitions of the open queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET. The data displayed in this view is collected on demand.

Remember:

- If a row in this table is highlighted in yellow, that means the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.

- If a row in this table is highlighted in red, that means the values of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Utilization for Open Queues** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each open queue that is managed by the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Real-time Queue Data for Open Queues workspace:

- Queue Parameters
- Queue Messages
- Queue Messages with DLQ Header

Real-time Queue Data for Queues with Messages workspace

The Real-time Queue Data for Queues with Messages workspace summarizes the definitions of the monitored queues that have messages on them and managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Real-time Queue Data for Queues with Messages workspace includes the following predefined views:

- **Real-time Queue Data for Queues with Messages** This view summarizes the definitions of the monitored queues that have messages on them and managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET. The data that is displayed in this view is collected on demand.

Remember:

- If a row in this table is highlighted in yellow, that means the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, that means the values of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** This view shows, as a bar chart, the numbers of different types of queues defined on the selected queue manager.
- **Queue Utilization for Queues with Messages** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each monitored queue with messages which is managed by the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Real-time Queue Data for Queues with Messages workspace:

- Queue Parameters
- Queue Messages
- Queue Messages with DLQ Header

Real-time Queue Data workspace

The Real-time Queue Data workspace summarizes the definitions of the monitored queues managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues. You can access this workspace by right-clicking a row in the Queue Status workspace and clicking **Link to > Real-time Queue Data**.

Predefined views

The Real-time Queue Data workspace includes the following predefined views:

- **Real-time Queue Data** This view summarizes the definitions of the monitored queues managed by the selected queue manager. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. The data displayed in this view is collected on demand.

Remember:

- If a row in this table is highlighted in yellow, that means the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, that means the values of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Utilization** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each queue which is managed by the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Queue Definitions attributes” on page 295.

Predefined links

You can link to the following workspaces from the Real-time Queue Data workspace:

- Queue Parameters
- Queue Messages
- Queue Messages with DLQ Header

Real-time Queue Definitions for Queues with Messages workspace

The Real-time Queue Definitions for Queues with Messages workspace summarizes the definitions of the queues with messages which are managed by the selected queue manager. Use it to resolve problems caused by incorrectly defined queues.

Predefined views

The Real-time Queue Definitions for Queues with Messages workspace includes the following predefined views:

- **Real-time Queue Definitions for Queues with Messages** This view summarizes the definitions of the queues with messages which are managed by the selected queue manager. Information displayed in the table is on-demand data, collected when the workspace is opened or refreshed. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** This view shows, as a bar chart, the number of queues by queue type for the selected queue manager. The Queue Definitions Summary chart does not necessarily match the data displayed in the table at the bottom of this workspace. It is intended only to give an overview of data sampled at the queue manager level according to the agent's current parameters. The data displayed in the table is on-demand data, collected when the workspace is opened or refreshed, whereas the data on which the chart is based is sampled during standard sampling intervals.

For more information on the attributes listed in the tables of this workspace, see “Queue Data attributes” on page 292.

Predefined links

You can link to the following workspaces from the Real-time Queue Definitions for Queues with Messages workspace:

- Queue Messages with DLQ Header
- Queue Parameters
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Application Topology (Application Connections Workspace)

Real-time Queue Definitions workspace

The Real-time Queue Definitions workspace summarizes the definitions of the queues managed by the selected queue manager. Use it to resolve problems that are caused by incorrectly defined queues.

Predefined views

The Real-time Queue Definitions workspace includes the following predefined views:

- **Real-time Queue Definitions** This view summarizes the definitions of the queues managed by the selected queue manager. Information displayed in the table is on-demand data, collected when the workspace is opened or refreshed. Once you have isolated a queue that is causing problems, you can often resolve the problems by modifying its definition. Select a queue from the list to edit its definition. You can also delete messages from a queue by clicking **Clear Queue** or **Purge Queue** in the menu when you right-click on the selected queue. The **Clear Queue** option deletes messages from a queue all together using MQSC command. The **Purge Queue** option deletes messages from a queue using MQGET.

Remember:

- If a row in this table is highlighted in yellow, it indicates that the value of its **%Full** attribute is greater than zero and the value of its **Total Opens** attribute is equal to zero.
- If a row in this table is highlighted in red, it indicates that the value of its **%Full** attribute is greater than the value of its **High Depth Threshold** attribute.
- **Queue Definitions Summary** shows, as a bar chart, the number of queues by queue type for the selected queue manager. The Queue Definitions Summary chart does not necessarily match the data displayed in the table at the bottom of this workspace. It is intended only to give an overview of data sampled at the queue manager level according to the agent current parameters. The data displayed in the table is on-demand data, collected when the workspace is opened or refreshed, whereas the data on which the chart is based is sampled during standard sampling intervals.

For more information on the attributes listed in the tables of this workspace, see “Queue Data attributes” on page 292.

Predefined links

You can link to the following workspaces from the Real-time Queue Definitions workspace:

- Queue Messages with DLQ Header
- Queue Parameters
- Queue Messages
- Current Message Statistics
- Current Message Statistics by Correlation ID
- Current Message Statistics by Application Name
- Current Message Statistics by Group ID
- Recent Message Statistics
- Application Connections (by the predefined link named Application Topology)

Recent Application Accounting workspace

The Recent Application Accounting workspace is workspace used to monitor application connections to queue managers within the WebSphere MQ environment. It provides statistics collected over several sampling intervals, which you can use to view trends in the data. The workspace might include application

connections which were once active, but are not currently active. It also *might not* include application connections that are currently active, in cases where the application connection is new and data collection has not yet begun.

The WebSphere MQ Monitoring agent also provides current and historical versions of this workspace.

Predefined views

The Recent Application Accounting workspace includes the following predefined views:

- **Recent Application Accounting** This table contains information about the number of MQI requests made by applications to a queue manager. For details of the individual attributes displayed in this table, see Application Accounting.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Application Accounting attributes (distributed systems only)” on page 85.

Predefined links

You can link to the following workspaces from the Recent Application Accounting workspace:

- MQI Call Statistics Details
- MQI Message Statistics Details
- Historical Application Accounting

Recent Channel Performance Workspace

Use the Recent Channel Performance workspace to view performance information related to the monitored channels in the WebSphere MQ environment. It provides statistics collected over several sampling intervals, which you can use to view trends in the data. Based on the information provided, you can make changes to improve performance, set up situations, and verify that changes made are improving performance.

A channel provides a communications link between two queue managers (running on the same or different platforms) and shields application programs from having to deal with the complexities of a network underlying protocols. A channel consists of a transmission queue, a message channel agent (communications program), and a communications link.

Note that statistics are not collected from client connection channel definitions and therefore these are not listed in any of the Channel Performance workspaces.

The WebSphere MQ Monitoring agent also provides current and historical versions of this workspace.

Predefined views

The Recent Channel Performance workspace includes the following predefined views:

- **Recent Channel Performance** This view displays a list of monitored channels. It provides statistics collected over several sampling intervals, which you can use to view trends in the data. The first row, Interval Summary, contains the averages of the attribute values listed in subsequent rows. If there are more than one active channels with the same channel and connection names, then multiple sets of recent history are displayed, one for each active connection. This can occur for receiver, cluster receiver, or server connection channels.

You can use this view to monitor the depth of the transmission queue. If this becomes very deep and remains so for a long time, consider assigning more channels to the queue to improve performance. This type of problem is especially common if your system has a high volume of traffic, different message priorities or uses different types of queues. Use the information related to sequence numbers and logical units of work when performing channel recovery or restart operations.

- **Transmission Rates** This view shows, as a bar chart, the average transmission rates of each of the selected monitored channels. It provides statistics collected over several sampling intervals, which you can use to view trends in the data.

For more information on the attributes listed in the tables of this workspace, see “Channel Short-Term History attributes” on page 115.

Predefined links

No other workspaces can be linked to from the Recent Channel Performance workspace.

Recent Message Statistics workspace

The Recent Message Statistics displays message statistics, such as message wait times, related to the selected queue.

This workspace displays all rows associated with the requested queue that are currently held by the agent waiting to be written to history. If there are no active situations associated with the Message Statistics attribute group for the selected queue, then No data is displayed.

Many of the message statistics use the put date and time of the message in the queue. If the queue contains messages with put dates and times that do not accurately reflect when they were put into the input queue, then the statistics calculated will be correspondingly inaccurate. Put dates and times are inaccurate if the origin context is preserved or set for a message when it is put into the queue by an application. This commonly occurs when an application is a message mover that moves messages from one queue to another, or when any application passes or sets origin context for a message.

Predefined views

The Recent Message Statistics workspace includes the following predefined views:

- **Recent Message Statistics** This view displays message statistics for the selected queue. If you attempt to display message statistics for a queue with no messages, a single row is displayed containing 0 values for all message counts and times. If no rows are displayed in this workspace, this might indicate that an error occurred during message statistics collection. Refer to the agent log and look for the KMQMI210E message code. This message provides additional information about the cause of the problem.

- **Recent Message Count** This view shows, as a bar chart, the number of delayed messages in comparison to the total number of messages .
- **Recent Message Duration** This view shows, as a bar chart, the length of time in seconds that messages have been waiting in the queue in term of oldest message, average message, newest message and highest priority message wait times.

For more information on the attributes listed in the tables of this workspace, see “Message Statistics attributes” on page 232.

Predefined links

No other workspaces can be linked to from the Recent Message Statistics workspace.

Recent MQ Channel Statistics workspace

The Recent MQ Channel Statistics workspace displays channel statistics for monitored channels within a queue manager. It provides statistics collected over several sampling intervals, which you can use to view trends in the data.

The WebSphere MQ Monitoring agent also provides current and historical versions of this workspace.

Predefined views

The Recent MQ Channel Statistics workspace includes the following predefined views:

- **Recent MQ Channel Statistics** This view displays channel statistics for monitored channels within a queue manager, including what data was transmitted by the queue manager using the channel. It provides statistics collected over several sampling intervals, which you can use to view trends in the data.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “MQ Channel Statistics attributes (distributed systems only)” on page 262.

Predefined links

You can link to the following workspaces from the Recent MQ Channel Statistics workspace:

- MQI Message Statistics Details
- Historical MQ Queue Statistics

Recent MQ Queue Statistics workspace

The Recent MQ Queue Statistics workspace displays statistics related to individual queues within a queue manager. It provides statistics collected over several sampling intervals, which you can use to view trends in the data.

The WebSphere MQ Monitoring agent also provides current and historical versions of this workspace.

Predefined views

The Recent MQ Queue Statistics workspace includes the following predefined views:

- **Recent MQ Queue Statistics** This view displays statistics related to individual queues within a queue manager, including the data published by the queue manager. It provides statistics collected over several sampling intervals, which you can use to view trends in the data.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal online help.

For more information on the attributes listed in the tables of this workspace, see “MQ Queue Statistics attributes (distributed systems only)” on page 265.

Predefined links

You can link to the following workspaces from the Recent MQ Queue Statistics workspace:

- MQI Message Statistics Details
- Historical MQ Queue Statistics

Recent MQI Statistics workspace

The Recent MQI Statistics workspace displays statistical data related to the use of the WebSphere MQ API by all queues within a queue manager. It provides statistics collected over several sampling intervals, which you can use to view trends in the data.

The WebSphere MQ Monitoring agent also provides current and historical versions of this workspace.

Predefined views

The Recent MQI Statistics workspace includes the following predefined views:

- **Recent MQI Statistics** This view displays statistical data related to the use of the WebSphere MQAPI by all queues within a queue manager. It provides statistics collected over several sampling intervals, which you can use to view trends in the data.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “MQI Statistics attributes (distributed systems only)” on page 273.

Predefined links

You can link to the following workspaces from the Recent MQI Statistics workspace:

- MQI Call Statistics Details
- MQI Message Statistics Details
- Historical MQI Statistics

Recent Queue Accounting workspace

The Recent Queue Accounting workspace displays information about the queues used by application connections. It provides statistics collected over several sampling intervals, which you can use to view trends in the data. It might include queues used by application connections which were once active, but are not currently active. However, it *does not* include queues used by application connections that are currently active, in cases where the application connection is new and for which accounting data has not yet been published by the queue manager.

WebSphere MQ Monitoring agent also provides current and historical versions of this workspace.

Predefined views

The Recent Queue Accounting workspace includes the following predefined views:

- **Recent Queue Accounting** This view displays information about the queues used by application connections. It provides statistics collected over several sampling intervals, which you can use to view trends in the data.
- **Message Log** The message log gives you an overview of changes in the status of your monitored system. It also provides information about the status of monitoring agents and other system events. For more information on this view, see Tivoli Enterprise Portal Help.

For more information on the attributes listed in the tables of this workspace, see “Queue Accounting attributes (distributed systems only)” on page 287.

Predefined links

You can link to the following workspaces from the Recent Queue Accounting workspace:

- MQI Message Statistics Details
- Historical Queue Accounting

Recent Queue Statistics Workspace

The Recent Queue Statistics workspace displays queue usage statistics for monitored queues running on the selected queue manager. It provides statistics collected over several sampling intervals, which you can use to view trends in the data. Use the statistics to compare the activity and parameters of different queues in order to resolve performance problems.

The WebSphere MQ Monitoring agent also provides current and historical versions of this workspace.

Predefined views

The Recent Queue Statistics workspace includes the following predefined views:

- **Recent Queue Statistics** This view displays queue usage statistics for monitored queues running on the selected queue manager. It provides statistics collected over several sampling intervals, which you can use to view trends in the data. The first row, Interval Summary, contains the average of values listed in subsequent rows. Each local queue is only listed once, even if there are several alias queues mapped to it. Use the statistics provided to compare the activity and parameters of different queues. The following factors can adversely affect performance:
 - lengthy logical units of work.
 - a resource intensive CICS transaction or program.
- **Queue Utilization** This view shows, as a bar chart, the current utilization level (percentage of available space used) of each queue managed by the selected queue manager's. It provides statistics collected over several sampling intervals, which you can use to view trends in the data.

For more information on the attributes listed in the tables of this workspace, see “Queue Short Term History attributes” on page 311.

Predefined links

No other workspaces can be linked to from the Recent Queue Statistics workspace.

Subscription Attribute Details workspace

The Subscriptions Attribute Details workspace is linked to from the Subscription Definitions workspace, and contains the full contents of several attributes that are often abbreviated in the Subscriptions Definitions workspace. The attributes are SUB name, User Data, and Selector.

Predefined views

The Subscription Attribute Details workspace includes the following predefined views:

- **Subscription Attribute Details** This view contains 2 columns: Attribute Name and Attribute Value. These rows contain information from Subscription-related attributes that might contain extra-long values. These attributes are as follows: Subscription Name, User Data, Topic String and Selector.
- **Message Log** This view contains IBM Tivoli Monitoring system level information, such as agent status information.

For more information on the attributes listed in the tables of this workspace, see “Object Attribute Details attributes” on page 286.

Predefined links

No other workspaces can be linked to from the Subscription Attribute Details workspace.

Subscription Definitions workspace

The Subscriptions Definitions workspace contains information about all system defined subscriptions. You can also use the MQ Search function to search for specific subscription definition information in this workspace.

Predefined views

The Subscription Definitions workspace includes the following predefined views:

- **Subscription Definitions** This view contains information about subscription definitions.
- **Message Log** This view contains IBM Tivoli Monitoring system level information, such as agent status information.

For more information on the attributes listed in the tables of this workspace, see “Subscription Definitions attributes” on page 325.

Predefined links

You can link to the following workspaces from the Subscription Definitions workspace:

- Subscription Status
- Subscription Attribute Details
- Topic Status - Subscribers (This link is visible when there is any active subscriber applications.)
- Queue Status (This link is visible only if the **DESTQMGR** value is equal to "" or the value of **QMNAME**.)

Subscription Status workspace

The Subscription Status workspace provides information about the status of subscriptions.

Predefined views

The Subscription Status workspace includes the following predefined views:

- **Subscription Status** This view contains information about the status of subscriptions.
- **Number of Messages** This bar chart view shows the number of messages that have been published to a particular subscription.

For more information on the attributes listed in the tables of this workspace, see “Subscription Status attributes” on page 328.

Predefined links

No other workspaces can be linked to from the Subscription Status workspace.

Telemetry Channels workspace

The Telemetry Channels workspace provides definition parameters about telemetry channels of a queue manager. Use this workspace to review channel performance and modify channel attributes when resolving problems.

Predefined views

The Telemetry Channels workspace includes the following predefined views:

- **Telemetry Channels** This view contains a table summarizing the properties of the selected queue manager's monitored telemetry channels. Select a channel from this list to review and edit its definition parameters. If your system has a high volume of traffic, or uses different types of queues or different message priorities, you might need to define multiple channels to handle this. Additionally, editing these parameters is often crucial to resolving problems.
- **Channel Definitions Summary** This view shows, as a bar chart, the total number of active and inactive channels of each type defined on the selected queue manager.

For more information on the attributes listed in the tables of this workspace, see “Telemetry Channels attributes” on page 329.

Remember: You cannot create a situation directly from this workspace by right-clicking the navigator item. To create a situation for the attributes in this workspace, perform the following steps:

1. Open the Situation editor from the main toolbar on Tivoli Enterprise Portal.
2. Create a situation template. This step involves defining the condition, distributing the situation, specifying the action, and writing expert advice.
3. Associate the situation template with the desired navigator item and specify the sound and state options for the situation.
4. Apply the situation to the distributed managed systems.

For detailed instructions about how to create a situation and associate a situation, see *IBM Tivoli Monitoring: Tivoli Enterprise Portal User's Guide*.

Accessing this workspace

To access this workspace, in the navigator view of the selected queue manager, right-click **Channel Definitions** and click **Workspace > Telemetry Channels**.

Topic Definitions workspace

The Topic Definitions workspace contains information about all system defined topics. You can also use the MQ Search function to search for specific topic definition information in this workspace.

Predefined views

The Topic Definitions workspace includes the following predefined views:

- **Topic Definitions** This view contains information about topic string definitions.
- **Message Log** This view contains IBM Tivoli Monitoring system level information, such as agent status information.

For more information on the attributes listed in the tables of this workspace, see “Topic Definitions attributes” on page 331.

Predefined links

You can link to the following workspaces from the Topic Definitions workspace:

- **Topic String Details** (This link is visible when **Publisher Count** value is equal to or greater than 0.)

Topic Status - Publishers Workspace

The Topic Status - Publishers workspace is linked to from the Topic Status workspace, and contains detailed information about the publishers (message producing applications) that use a particular topic.

Predefined views

The Topic Status - Publishers workspace includes the following predefined views:

- **Topic Status - Publishers** This view contains topic status information that is displayed from the perspective of publishers.
- **Number of Publications** This view contains a bar chart showing the number of publications that are made by a publisher to a topic.

For more information on the attributes listed in the tables of this workspace, see “Topic Publishers attributes” on page 334.

Predefined links

No other workspaces can be linked to from the Topic Status - Publishers workspace.

Topic Status - Subscribers workspace

The Topic Status - Subscribers workspace is linked to from the Topic Status workspace, and contains detailed information about the subscribers to a particular topic. From this workspace you can also link to more detailed information about subscribers and subscriptions. You can also use the MQ Search function to search for specific topic subscriber information in this workspace.

Tip: Refresh button is disabled during the search, you can perform another new search when you want to get the updated data.

Predefined views

The Topic Status - Subscribers workspace includes the following predefined views:

- **Topic Status - Subscribers** This view contains information about topic status displayed from the perspective of subscribers.
- **Subscribe Topology** This graphical view represents the publish-subscribe topology, including the relationships between topic strings, destination queues, and applications.
- **Number of Messages** This bar chart view shows the number of messages that have been published to a particular subscription.

Tip: If the subscription ID or the subscription name that is displayed along the y-axis of the chart is very long, characters along the x-axis overlap, which makes the bar chart seem abnormal. In this case, maximizing this view can solve the problem.

For more information on the attributes listed in the tables of this workspace, see “Topic Subscribers attributes” on page 337.

Predefined links

You can link to the following workspaces from the Topic Status - Subscribers workspace:

- Application Connections. This link is visible only if the **ACTCONN** value of is not equal to **Not_Connected_to_QMgr**.
- Subscription Definitions

In addition, the following workspaces can be linked by right-clicking on nodes in the topology view:

- Links from subscriptions nodes:
 - Subscription Definitions
 - Subscription Status
- Links from local destination queue nodes (these links are not available from remote destination queue icons):
 - Application Topology for Selected Queue (Application Connections Workspace) (This link is visible only if the **ACTCONN** value is not equal to **Not_Connected_to_QMgr**.)
 - Queue Status (This link is visible only if the **DESTQMGR** value of is equal to "" or the value of **QMNAME**.)
- Links from application nodes:
 - Application Topology for Selected Applications (Application Connections Workspace) (This link is visible only if the **ACTCONN** value is not equal to **Not_Connected_to_QMgr**.)

Topic Status workspace

The Topic Status workspace contains information about the root level of topic nodes. You can also use the MQ Search function to search for specific topic status information in this workspace.

The Topic Status Workspace lists all immediate children of the topic selected in the workspace from which the Topic Status Workspace (topic status for next level topics) is linked to.

Predefined views

The Topic Status workspace includes the following predefined views:

- **Topic Status** This view contains information about the root level of topic nodes in tabular form.
- **Number of Publishers and Subscribers** This view contains a bar chart showing the number of publishing and subscribing applications.

For more information on the attributes listed in the tables of this workspace, see "Topic Status attributes" on page 335.

Predefined links

You can link to the following workspaces from the Topic Status Workspace:

- Topic Status-Subscribers (This link is visible when there is any active subscriber applications.)

- **Topic Status-Publishers** (This link is visible when there is any active publisher applications.)
- **Topic Definitions** (This link is visible only if the **Admin Node** value is not equal to "" or "n/a".)
- **Topic Status** (Topic Status for next level Topics). (This link is invisible if the **Admin Node** value is equal to SYSTEM.BASE.TOPIC.)
- **Topic String Details** (This link is visible when the **Publisher Count** value is equal to or greater than 0.)

Tip: If the **Link To** list is empty, refresh Tivoli Enterprise Portal and try again.

Topic String Details workspace

The Topic String Details workspace shows the complete topic string of the topic that is selected in the workspace from which it was linked to. This information is useful if the topic string is very long, because the full string will not be displayed in other workspaces.

Predefined views

The Topic String Details workspace includes the following predefined views:

- **Topic String Details** This view contains two columns: Attribute Name and Attribute Value. This table shows the topic string that was selected when the workspace was linked to. In this view the topic string is not truncated.
- **Message Log** This view contains IBM Tivoli Monitoring system level information, such as agent status information.

For more information on the attributes listed in the tables of this workspace, see “Object Attribute Details attributes” on page 286.

Predefined links

No other workspaces can be linked to from the Topic String Details workspace.

Chapter 2. Attributes

Use attributes of WebSphere MQ Monitoring agent to create situations that monitor for specific alerts or types of alerts. For example, you can create situations that monitor for alerts with a specific severity. When the values for attributes of alerts that are relayed to a Tivoli Enterprise Monitoring Server match the values that you specify in situations, the appearances of the managed objects that are associated with the situations are changed, alerting you to problems. When building situations, specify attributes using the following format:

Group_Name.Attribute_Name

WebSphere MQ Monitoring agent provides a variety of default workspaces. A table view within a workspace corresponds to a group of attributes; in most cases, the columns in the table view correspond to the attributes that are available for the creation of situations.

For more information about workspaces, see Chapter 1, “Workspaces,” on page 1

Application Accounting attributes (distributed systems only)

Use the Application Accounting attributes to create situations for monitoring concerned attributes of applications. The Application Accounting attributes provide the information related to the number of MQI requests that are executed using a connection to a queue manager.

The Application Accounting attributes are available on distributed systems only.

Application Name Name of the application. The valid format is an alphanumeric string of up to 28 case-sensitive characters.

Backout Count Number of backouts that are processed, including implicit backouts. Valid format is an integer.

Backout Rate The rate per second of backouts that are processed, including implicit backouts. The valid format is a floating point number.

Browse Byte Rate The rate per second of bytes that are got nondestructively. The valid format is a floating point number.

Browse Bytes Total number of bytes that are got non-destructively. Valid format is an integer.

Browse Bytes (Deprecated) Total number of bytes that are got nondestructively. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Browse Count Number of non-destructive gets for messages. The valid format is an integer.

Browse Fail Count Number of unsuccessful non-destructive gets. Valid format is an integer.

Browse Fail Rate Rate per second of unsuccessful non-destructive gets. The valid format is a floating point number.

Browse Rate Rate per second of non-destructive gets for messages. The valid format is a floating point number.

Channel Name Name of this channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Close Count Number of objects that are closed. The valid format is an integer.

Close Fail Count Number of objects that are closed with failure. Valid format is an integer.

Close Fail Rate Rate per second of unsuccessful attempts to close queue objects. The valid format is a floating point number.

Close Rate Rate per second of objects that are closed. The valid format is a floating point number.

Command Level Command level of the queue manager. The valid format is an integer.

Commit Count Number of successful transactions. The valid format is an integer.

Commit Fail Count Number of unsuccessful attempts to complete a transaction. The valid format is an integer.

Commit Fail Rate Rate per second of unsuccessful attempts to complete a transaction. The valid format is a floating point number.

Commit Rate Rate per second of successful transactions. The valid format is a floating point number.

Connect Date & Time Date and time of the MQCONN operation. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Connection ID Connection identifier for the WebSphere MQ connection. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Connection Name Connection name for the client connection. The valid format is an alphanumeric string of up to 264 case-sensitive characters.

Disconnect Date & Time Date and time of the MQDISC operation. Standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Disconnect Type Type of disconnection. Valid values are as follows:

- Unknown = -1
- Normal = 0
- Implicit = 1
- QMgr = 2

Get Byte Rate Rate per second of bytes that are got destructively. The valid format is a floating point number.

Get Bytes Total number of bytes that are got destructively. The valid format is an integer.

Get Bytes (Deprecated) Total number of bytes that are got destructively. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Get Count Number of gets. Valid format is an integer.

Get Fail Count Number of unsuccessful destructive gets. The valid format is an integer.

Get Fail Rate Rate per second of unsuccessful destructive gets. The valid format is a floating point number.

Get Rate Rate per second of destructive gets. Valid format is a floating point number.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Inquire Count Number of successful inquiries for objects. The valid format is an integer.

Inquire Fail Count Number of unsuccessful attempts to inquire objects. The valid format is an integer.

Inquire Fail Rate Rate per second of unsuccessful attempts to inquire objects. The valid format is a floating point number.

Inquire Rate Rate per second of successful inquires for objects. Valid format is a floating point number.

Interval End Date & Time Date and time of the end of the monitoring period. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Interval Start Date & Time Date and time of the start of the monitoring period. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Interval Time Seconds of interval time. The valid format is an integer.

Open Count Number of objects that are opened. The valid format is an integer.

Open Fail Count Number of objects that are opened with failure. Valid format is an integer.

Open Fail Rate Rate per second of unsuccessful attempts to open objects. The valid format is a floating point number.

Open Rate Rate per second of objects that are opened. The valid format is a floating point number.

Origin Node The name of the node that is assigned by the WebSphere MQ Monitoring agent. The data for the queue manager originates from this node.

On distributed systems, this name takes the form *qmgr::MQ*. If the *hostid* value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 32 case-sensitive characters.

Process ID Operating system process identifier of the application. The valid format is an integer.

Put Byte Rate Rate per second of bytes that are put for messages. The valid format is a floating point number.

Put Bytes Total number of bytes that are put for messages. The valid format is an integer.

Put Bytes (Deprecated) Total number of bytes that are put for messages. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Put Count Number of puts. Valid format is an integer.

Put Fail Count Number of unsuccessful attempts to put a message. The valid format is an integer.

Put Fail Rate Rate per second of unsuccessful attempts to put a message. The valid format is a floating point number.

Put Rate Rate per second of messages that are successfully put to a queue. The valid format is a floating point number.

Put1 Count Number of messages that are put by the MQPUT1 call. The valid format is an integer.

Put1 Fail Count Number of unsuccessful attempts to put a message using MQPUT1 calls. The valid format is an integer.

Put1 Fail Rate Rate per second of unsuccessful attempts to put a message using MQPUT1 calls. The valid format is a floating point number.

Put1 Rate Rate per second of messages that are put to queue by the MQPUT1 call. The valid format is a floating point number.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Query Type Type of a SQL query. Valid values are Current = 0, Recent = 1, and Historical = 2.

Sample Handle Handle for a sample data record. The valid format is an integer.

Sequence Number Sequence number. The valid format is an integer.

Set Count Number of successful MQSET calls. The valid format is an integer.

Set Fail Count Number of unsuccessful MQSET calls. The valid format is an integer.

Set Fail Rate Rate per second of unsuccessful MQSET calls. The valid format is a floating point number.

Set Rate Rate per second of successful MQSET calls. The valid format is a floating point number.

Thread ID Thread identifier of the connection in the application. The valid format is an integer.

User ID User identifier of the application. The valid format is an alphanumeric string of up to 12 case-sensitive characters.

Application Connections attributes

The Application Connections attributes display connection information about the applications that are connected to the queue manager. Use these attributes to identify applications with long-running units of work.

Address Space ID The address space identifier of the application that makes the connection. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for z/OS systems only.

Application Tag Tag of the application that is connected to the queue manager. The valid format is an alphanumeric string of up to 28 case-sensitive characters.

Appl Type Type of the application that is connected to the queue manager. The valid format is an integer. Valid values are as follows:

- Unknown = -1,
- NoContext = 0,
- CICS = 1,
- MVS = 2,
- IMS = 3,
- OS2 = 4,
- DOS = 5,
- UNIX = 6,
- QMGR = 7,
- OS400 = 8,
- WINDOWS = 9,
- CICS_VSE = 10,
- WINDOWS_NT = 11,
- VMS = 12,
- GUARDIAN = 13,
- VOS = 14,
- IMS_BRIDGE = 19,
- XCF = 20,
- CICS_BRIDGE = 21,
- NOTES_AGENT = 22,
- USER = 25,
- BROKER = 26,
- QMGR_PUBLISH = 27,
- JAVA = 28,
- DQM = 29,
- CHINIT = 30,
- WLM = 31,
- BATCH = 32,

- RRS_BATCH = 33,
- SIB= 34,
- SYSTEMEXT=35,
- SYSTEM= 101 (z/OS systems only),
- USER_FIRST = 65536

Asynchronous State The state of asynchronous consumption on this connection handle. Valid values are as follows:

- n/a = 255
- NONE = 0
- STARTED = 1
- STARTWAIT = 2
- STOPPED = 3
- SUSPENDED = 4

Channel Name The name of this channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

CICS Region Name The CICS region name if the Appl Type attribute is CICS; otherwise, it is blank. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for CICS applications on z/OS systems only.

CICS Task NO A 7-digit CICS task number. This attribute is valid when the application type has the value CICS. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for z/OS systems only.

CICS Trans ID A 4-character CICS transaction identifier. This attribute is valid when the application type has the value CICS. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for z/OS systems only.

Conn ID Prefix\ (EXTCONN) Character hexadecimal representation of the prefix of connection ID. The valid format is an alphanumeric string of up to 32 characters.

Conn ID Suffix\ (CONN) Character hexadecimal representation of the suffix of connection ID. The valid format is an alphanumeric string of up to 16 characters.

Connection ID Identifier of the connections. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Connection Name The connection name that is associated with the channel that owns the connection. If there is no channel associated with the connection, this attribute is blank. The valid format is an alphanumeric string of up to 264 case-sensitive characters.

Connection Options The connection options that are currently in force for the application connection. The valid format is an alphanumeric string of up to 8 case-sensitive characters.

External Unit of Recovery ID The external unit of recovery identifier that is associated with the connection. Its format is determined by the value of external unit of recovery type. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

External Unit of Recovery Type The type of unit of recovery that is identified by the queue manager. The external unit of recovery type identifies the external unit of recovery ID type and not the type of the transaction coordinator. When the external unit of recovery type is QMGR, the associated identifier is in the queue manager unit of recovery ID (and not the external unit of recovery ID). The valid format is an integer. Valid values are as follows:

- $n/a = -1$,
- QMGR = 0,
- CICS = 1,
- RRS = 2,
- IMS = 3,
- XA = 4

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

IMS PSB Name The name of the program specification block (PSB) that is associated with the running IMS transaction. You can use the IMS PSD Name and IMS PST ID to purge the transaction using IMS commands. The attribute is valid only when the application type has the value IMS. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for z/OS systems only.

IMS PST ID The IMS program specification table (PST) region identifier for the connected IMS region. The attribute is valid only when the application type has the value IMS. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for z/OS systems only.

Origin Name The origin name that identifies the originator of the unit of recovery. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for z/OS systems only.

Origin Node The name of the node that is assigned by the WebSphere MQ Monitoring agent. The data for the queue manager originates from this node.

On z/OS systems, this name takes the form, *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form, *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Origin UOW ID The unit of recovery identifier that is assigned by the originator. Set only if the value of UOW state is UNRESOLVED. The valid format is an alphanumeric string of up to 16 case-sensitive characters. This attribute is for z/OS systems only.

Process ID The process identifier of the application that is connected to the queue manager. The valid format is an integer. This attribute is for non Compaq NSK and z/OS systems.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QMgr Unit of Recovery ID The unit of recovery identifier that is assigned by the queue manager. On z/OS systems, this is a 6-byte log Relative Byte Address (RBA), displayed as 12 hexadecimal characters. On systems other than z/OS systems, this is an 8-byte transaction identifier, displayed as *m.n*, where *m* and *n* are the decimal representation of the first and last 4 bytes of the transaction identifier. The valid format is an alphanumeric string of up to 32 case-sensitive characters.

Thread ID The thread identifier within the application process that has opened the specified queue. The valid format is an integer. This attribute is for non z/OS systems.

UOW Log Start Date & Time The date and time that the transaction that is associated with the current connection first writes to the log. Standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

UOW Log Start Extent The name of the first extent that is required to recover the transaction. The valid format is an alphanumeric string of up to 24 case-sensitive characters. This attribute is for non z/OS systems.

UOW State The state of the unit of work. The valid format is an integer. Valid values are as follows:

- n/a = -1,
- None = 0,
- Active = 1,
- Prepared = 2,
- Unresolved = 3.

UOW Start Date & Time The date and time that the transaction that is associated with the current connection is started. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

User ID The user identifier that is associated with the connection. The attribute does not have a value when the application type has the value SYSTEM. The valid format is an alphanumeric string of up to 64 case-sensitive characters.

Application Topology attributes

The Application Topology attributes display connections between the applications, the monitored queue manager, and the queues that are opened by these applications in the Application Topology view.

Address Space ID The address space identifier of the application that makes the connection. It is only valid for nodes that are of the APP type. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for z/OS systems only.

Application Tag Tag of the application that is connected to the queue manager. It is only valid for nodes that are of the APP type. The valid format is an alphanumeric string of up to 28 case-sensitive characters.

Appl Type Type of the application that is connected to the queue manager. It is only valid for nodes that are of the APP type. The valid format is an integer. Valid values are as follows:

- All = -2
- Unknown = -1,
- NoContext = 0,
- CICS = 1,
- MVS = 2,
- IMS = 3,
- OS2 = 4,
- DOS = 5,
- UNIX = 6,
- QMGR = 7,
- OS400 = 8,
- WINDOWS = 9,
- CICS_VSE = 10,
- WINDOWS_NT = 11,
- VMS = 12,
- GUARDIAN = 13,
- VOS = 14,
- IMS_BRIDGE = 19,
- XCF = 20,

- CICS_BRIDGE = 21,
- NOTES_AGENT = 22,
- USER = 25,
- BROKER = 26,
- QMGR_PUBLISH = 27,
- JAVA = 28,
- DQM = 29,
- CHINIT = 30,
- WLM = 31,
- BATCH = 32,
- RRS_BATCH = 33,
- SIB = 34,
- SYSTEMEXT = 35,
- SYSTEM = 101 (z/OS systems only),
- USER_FIRST = 65536

CICS Task No A 7-digit CICS task number. This attribute is valid when the node is of the APP type and the application type has the value CICS. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for z/OS systems only.

CICS Trans ID A 4-character CICS transaction identifier. This attribute is valid when the node is of the APP type and the application type has the value CICS. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for z/OS systems only.

Connection ID Identifier of the connections. It is only valid for nodes that are of the APP type. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

% Full The current number of messages on the queue (the current depth) divided by the maximum number of messages for the queue and expressed as a percentage. The valid format is a decimal (formatted to 1 decimal place) in the range 0.0 - 100.0.

High Depth Threshold Percent The percentage of the maximum message depth that triggers a Queue Depth High event for the current queue. This attribute is expressed as a percentage value to one decimal place.

IMS PSB Name The name of the program specification block (PSB) that is associated with the running IMS transaction. You can use the IMS PSD Name and IMS PST ID to purge the transaction using IMS commands. The attribute is only valid for nodes that are of the APP type. The valid format is an alphanumeric string of up to 8 case-sensitive characters (z/OS systems only).

IMS PST ID The IMS program specification table (PST) region identifier for the connected IMS region. The attribute is only valid for nodes that are of the APP type. Valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for z/OS systems only.

Max Rows The maximum number of rows that are returned by the agent. The valid format is an integer.

Node ID The UUID of the node that is addressed by this row in the table. If the node is of the APP type, the Node ID is the value of the Connection ID attribute in the Application Connections workspace. If the node is of other type, it is assigned a unique ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Node Name The name of the node that is addressed by this row in the table. If the node is of the APP type, the Node Name is the value of the Application Tag attribute in the Application Connections workspace. If the node is of the OBJ_* type, the Node Name is the value of the Object Name attribute in the Connection Objects workspace. If the node is of the QMGR type, the Node Name is the name of the monitored queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Node Type The type of the node that is addressed by this row in the table. Valid values are as follows:

- KMQ_APPTOP_NTTYPE_QMGR
- KMQ_APPTOP_NTTYPE_APP_UNKNOWN
- KMQ_APPTOP_NTTYPE_APP_NOCONTEXT
- KMQ_APPTOP_NTTYPE_APP_CICS
- KMQ_APPTOP_NTTYPE_APP_MVS
- KMQ_APPTOP_NTTYPE_APP_IMS
- KMQ_APPTOP_NTTYPE_APP_OS2
- KMQ_APPTOP_NTTYPE_APP_DOS
- KMQ_APPTOP_NTTYPE_APP_UNIX
- KMQ_APPTOP_NTTYPE_APP_QMGR
- KMQ_APPTOP_NTTYPE_APP_OS400
- KMQ_APPTOP_NTTYPE_APP_WINDOWS
- KMQ_APPTOP_NTTYPE_APP_CICS_VSE
- KMQ_APPTOP_NTTYPE_APP_WINDOWS_NT
- KMQ_APPTOP_NTTYPE_APP_VMS
- KMQ_APPTOP_NTTYPE_APP_GUARDIAN
- KMQ_APPTOP_NTTYPE_APP_VOS
- KMQ_APPTOP_NTTYPE_APP_IMS_BRIDGE
- KMQ_APPTOP_NTTYPE_APP_XCF
- KMQ_APPTOP_NTTYPE_APP_CICS_BRIDGE
- KMQ_APPTOP_NTTYPE_APP_NOTES_AGENT
- KMQ_APPTOP_NTTYPE_APP_USER
- KMQ_APPTOP_NTTYPE_APP_CHINIT
- KMQ_APPTOP_NTTYPE_APP_BATCH
- KMQ_APPTOP_NTTYPE_APP_RRS_BATCH
- KMQ_APPTOP_NTTYPE_APP_USER_FIRST
- KMQ_APPTOP_NTTYPE_OBJ_QUEUE

Object Name The name of the object that the connection has opened. The attribute is valid only when the node is of the OBJ_* type. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Object Type The type of the object that the connection has opened. The attribute is valid only when the node is of the OBJ_* type. Valid values are as follows:

- n/a = -1,
- Queue = 1,
- NameList = 2,
- Process = 3,
- StorageClass = 4,
- QMgr = 5,
- Channel = 6,
- AuthInfo = 7.

Process ID The number specifying the process identifier of the application that is connected to the queue manager. It is only valid for nodes that are of the APP type. The valid format is an integer.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Thread ID The number specifying the thread identifier within the application process that has opened the specified queue. It is only valid for nodes that are of the APP type. The valid format is an integer.

To Node ID The UUID of the node that is connected to the node addressed by this row in the table. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Topology mode A flag to enable the Application Topology view to switch to different modes. The valid format is an integer. Valid values are as follows:

- Compact Mode for Application Connections = 1
- Drill-Down Mode for an Application Connection = 2
- Drill-Down Mode for All Application Connections = 3
- Browse Mode for Connections to a Queue = 4

Origin Name The origin name that identifies the originator of the unit of recovery. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for z/OS systems only.

Origin Node The WebSphere MQ Monitoring agent assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

User ID The user identifier that is associated with the connection. The attribute does not have a value when the application type has the value SYSTEM. The valid format is an alphanumeric string of up to 64 case-sensitive characters.

Channel Data attributes

The Channel Data attributes provide detailed information about a channel.

Alter Date & Time The date and time that channel definition is last altered.

Batch Size The maximum number of messages that this channel processes before a checkpoint is taken; that is, the size of logical unit of work (LUW) of this channel. The valid format is an integer, in the range 0 - 9999.

Channel Description The description of this channel. This attribute is not available for CICS channels. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Channel Name The name of this channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Channel Type The type that is assigned to the channel (SDR for sender, SVR for server, RCVR for receiver, RQSTR for requester, CLNTCONN for client connection, SVRCONN for server connection, CLUSRCVR for cluster receiver, CLUSSDR for cluster sender, ClusQmgr for cluster queue manager) when it is created. Valid values are as follows:

- n/a = 0
- SDR = 1
- SVR = 2
- RCVR = 3
- RQSTR = 4
- CLNTCONN = 6
- SVRCONN = 7
- CLUSRCVR = 8
- CLUSSDR = 9
- MQCHT_MQTT = 10
- ClusQmgr = 254

Cluster The name of the cluster that the channel belongs to. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster Channel Definition Type Indicates how this channel is defined. Valid format is an integer. Valid values are as follows:

- Explicit_Cluster-Sender = 1
- Automatic_Cluster-Sender = 2
- Explicit_Cluster-Receiver = 3
- Explicit/Auto_Cluster-Sender = 4
- n/a = 255

Cluster Date & Time The date and time that this cluster channel definition is made available.

Cluster Namelist The name of the namelist that specifies a list of clusters that the channel belongs to. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster QMgr The name of the cluster queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster QMgr Suspend Indicates whether the cluster queue manager is suspended. Valid values are No = 0, Yes = 1, and n/a = 255.

Cluster QMgr Type The function of the associated queue manager in the cluster. The valid format is an integer. Valid values are Normal = 0, Repository = 1, and n/a = 255.

Connection Name The name of the physical or logical connection that this channel uses to transmit or receive data. This name is formed from the connection type (IP for TCP/IP, LU for LU6.2, or NETBIOS) and the connection address. Valid format is an alphanumeric string of up to 264 case-sensitive characters. If multiple connections are configured for the channel, this attribute is displayed as a comma separated list of names of systems for the stated **Transport Type** attribute.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Maximum Msg Len The longest message length that this channel can accommodate. The length must be less than or equal to 104857600. Zero indicates that the channel uses the same maximum message length as the queue manager that it belongs to. The valid format is an integer, in the range 0 - 104857600.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QSG Disp Disposition in the queue sharing group. Valid values are Qmgr = 0, Copy = 1, Group = 3, and Unknown = 255. This attribute is for QSG environment on z/OS systems only.

QSG Name The name of the queue sharing group. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for QSG environment on z/OS systems only.

Transport Type The transmission type (LU62, TCP for TCP/IP, NETBIOS, or CICS). Valid values are as follows:

- LOCAL = 0
- LU62 = 1
- TCP = 2
- NETBIOS = 3
- SPX = 4

- DECNET = 5
- UDP = 6
- CICS = 100

Channel Definition Details attributes

Use the Channel Definition Details attributes to view values that are associated with channel parameters, including name, description, and value. These attributes are informational only; they cannot be used to create situations.

Channel Name The name of this channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Channel Type The type of this channel. The valid format is an integer. Valid values are as follows:

- SDR = 1
- SVR = 2
- RCVR = 3
- RQSTR = 4
- ALL = 5
- CLNTCONN = 6
- SVRCONN = 7
- CLUSRCVR = 8
- CLUSSDR = 9
- MQCHT_MQTT=10
- ClusQmgr = 254

Cluster The name of the cluster to which the channel belongs. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster QMgr The name of the cluster queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Parameter Description The description of the parameter. The valid format is a one or 2-digit integer. Valid values are as follows:

- Channel name = 1
- Channel type = 2
- Connection name = 3

- Transport type = 4
- Description = 5
- Max msgs for checkpoint = 6
- Maximum message length = 7
- Transmission queue name = 8
- Sending MCA convert data = 9
- Max xmitq msg wait in s. = 10
- Max long retry attempts = 11
- Long retry wait in s. = 12
- Message channel agent = 13
- MCA program type = 14
- MCA user identifier = 15
- LU 6.2 mode name = 16
- Message exit user data = 17
- Message exit name = 18
- MCA SNA session password = 19
- Put authority userid = 20
- Receive exit user data = 21
- Receive exit name = 22
- Security exit user data = 23
- Security exit name = 24
- Send exit user data = 25
- Send exit name = 26
- Sequence number wrap = 27
- Max short retry attempts = 28
- Short retry wait in s. = 29
- Transaction program name = 30
- Task user identifier = 31
- Client connection Qmgr = 32
- Sequential delivery = 33
- Maximum transmission size = 34
- Retry count = 35
- Retry fast interval in s. = 36
- Retry slow interval in s. = 37
- MCA transaction ID = 38
- Target system identifier = 39
- CICS profile name = 40
- CICS region = 41
- Batch interval in ms. = 42
- Heartbeat interval in s. = 43
- Message retry exit user data = 44
- Message retry exit name = 45
- Message retry count = 46
- Message retry interval in ms. = 47
- Non-persistent message speed = 48

- Cluster name = 49
- Cluster namelist = 50
- Network connection priority = 51
- Cluster queue manager = 52
- Cluster queue manager type = 53
- Suspend indicator = 54
- Cluster channel definition type = 55
- Internal queue manager name = 56
- Batch heartbeat = 57
- Local address = 58
- Keep alive interval = 59
- SSL client authentication = 60
- SSL cipher specification = 61
- SSL peer name = 62
- Header compression techniques = 63
- Message compression techniques = 64
- Monitoring channel level = 65
- Statistics channel level = 66
- Cluster workload priority = 67
- Cluster workloadrank = 68
- Cluster workload weight = 69
- Sharing Conversations = 70
- Property Control = 71
- Maximum Instances = 72
- Maximum Instances Per Client = 73
- Client Channel Weight = 74,
- Connection Affinity = 75
- Default Reconnection = 76
- Batch Data Limit = 77
- Pending Reset Sequence Number = 78
- Use DLQ = 79

Parameter Name The name of the parameter. The valid format is a one or 2-digit integer. Valid values are as follows:

- CHANNEL = 1
- CHLTYPE = 2
- CONNAME = 3
- TRPTYPE = 4
- DESCR = 5
- BATCHSZ = 6
- MAXMSGL = 7
- XMITQ = 8
- CONVERT = 9
- DISCINT = 10
- LONGRTY = 11

- LONGTMR = 12
- MCANAME = 13
- MCATYPE = 14
- MCAUSER = 15
- MODENAME = 16
- MSGDATA = 17
- MSGEXIT = 18
- PASSWORD = 19
- PUTAUT = 20
- RCVDATA = 21
- RCVEXIT = 22
- SCYDATA = 23
- SCYEXIT = 24
- SENDDATA = 25
- SENDEXIT = 26
- SEQWRAP = 27
- SHORTRTY = 28
- SHORTTMR = 29
- TPNAME = 30
- USERID = 31
- QMNAME = 32
- DELIVER = 33
- MAXXMIT = 34
- RETRY = 35
- FASTTMR = 36
- SLOWTMR = 37
- TRANSID = 38
- TARGET = 39
- PROFILE = 40
- APPLID = 41
- BATCHINT = 42
- HBINT = 43
- MRDATA = 44
- MREXIT = 45
- MRRTY = 46
- MRTMR = 47
- NPMSPEED = 48
- CLUSTER = 49
- CLUSNL = 50
- NETPRTY = 51
- CLUSQMGR = 52
- QMTYPE = 53
- SUSPEND = 54
- DEFTYPE = 55
- QMID = 56

- BATCHHB = 57
- LOCLADDR = 58
- KAIN = 59
- SSLCAUTH = 60
- SSLCIPH = 61
- SSLPEER = 62
- COMPHDR = 63
- COMPMSG = 64
- MONCHL = 65
- STATCHL = 66
- CLWLPRTY = 67
- CLWLRANK = 68
- CLWLWGHT = 69
- SHARECNV = 70
- PROPCTL = 71
- MAXINST = 72
- MAXINSTC = 73
- CLNTWGHT = 74
- AFFINITY = 75
- DEFRECON = 76
- BATCHLIM = 77
- RESETSEQ = 78
- USEDQL = 79

Parameter Type The type of the parameter. The valid format is an alphanumeric string of up to 22 characters.

Parameter Value The value of the parameter. The valid format is an alphanumeric string of up to 264 characters.

Parameter Value (Deprecated) The value of the parameter. The valid format is an alphanumeric string of up to 264 characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Channel Definitions attributes

Use the Channel Definitions attributes to create situations that query definition parameters of a channel. This attribute group provides definition parameters for the channels that belong to a queue manager. For example, you can create a situation that queries the channel type. Channel Definitions is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

Alter Date & Time The date and time that the channel definition is last altered. Standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Batch Size The maximum number of messages that this channel processes before a checkpoint is taken; that is, the size of the logical unit of work (LUW) of the channel. The valid format is an integer, in the range 0 - 9999.

Channel Description (Deprecated) The description of this channel. This attribute is not available for CICS channels. The valid format is an alphanumeric string of up to 64 case-sensitive characters.

Channel Description The description of this channel. This attribute is not available for CICS channels. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Channel Name The name of this channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Channel Type The type that is assigned to the channel when it is created. Valid values are as follows:

- n/a = 0
- SDR = 1 (for sender)
- SVR = 2 (for server)
- RCVR = 3 (for receiver)
- RQSTR = 4 (for requester)
- CLNTCONN = 6 (for client connection)
- SVRCONN = 7 (for server connection)
- CLUSRCVR = 8 (for cluster receiver)
- CLUSSDR = 9 (for cluster sender)
- MQCHT_MQTT=10 (for telemetry channel)
- ClusQmgr = 254 (for cluster queue manager)

Cluster The name of the cluster to which the channel belongs. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster Channel Definition Type Indicates how this channel is defined. The valid format is an integer. Valid values are as follows:

- Explicit_Cluster-Sender = 1
- Automatic_Cluster-Sender = 2
- Explicit_Cluster-Receiver = 3
- Explicit/Auto_Cluster-Sender = 4
- n/a = 255

Cluster Date & Time The date and time that this cluster channel definition is made available. Standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Cluster Namelist The name of the namelist that specifies a list of clusters to which the channel belongs. Valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster QMgr The name of the cluster queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster Qmgr Suspend Indicates whether the cluster queue manager is suspended. Valid values are No = 0, Yes = 1, and n/a = 255.

Cluster QMgr Type The function of the associated queue manager in the cluster. The valid format is an integer. Valid values are Normal = 0, Repository = 1, and n/a = 255.

Connection Name The name of the physical or logical connection that this channel uses to transmit or receive data. This name is formed from the connection type (IP for TCP/IP, LU for LU6.2, or NETBIOS) and the connection address. The valid format is an alphanumeric string of up to 264 case-sensitive characters. If multiple connections are configured for the channel, this attribute is displayed as a comma separated list of names of systems for the stated Transport Type attribute.

Cur Defn Indicates whether the queue or channel is currently defined on the monitored queue manager. Valid values are No = 0 and Yes = 1.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Maximum Msg Len The longest message that this channel can accommodate. The length must be less than or equal to 104857600. Zero indicates that the channel uses the same maximum message length as the queue manager it belongs to. Valid format is an integer, in the range 0 - 104857600.

MCA Job Name The MCA job name string associated with a channel that uniquely identifies that channel. This name is provided to differentiate (along with Connection Name) between multiple active channel connections that can be defined to the same queue manager. The valid format is an alphanumeric string of up to 28 case-sensitive characters. This attribute is for non z/OS systems only.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QSG Disp Disposition in the queue sharing group. This attribute is for QSG environment on z/OS systems only. Valid values are as follows:

- n/a = -2
- Qmgr = 0
- Copy = 1
- Group = 3
- Unknown = 255

QSG Name The name of the queue sharing group. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for QSG environment on z/OS systems only.

Transport Type The transmission type (LU62, TCP for TCP/IP, NETBIOS, or CICS). Valid values are as follows:

- LOCAL = 0
- LU62 = 1
- TCP = 2
- NETBIOS = 3
- SPX = 4
- DECNET = 5
- UDP = 6
- CICS = 100

Channel Long-Term History attributes

Use the Channel Long-Term History attributes to detect channel performance problems. This attribute group provides channel performance information for each monitored channel within a queue manager. These attributes are informational only; they cannot be used to create situations.

Batches Complete The number of logical units of work (LUWs) that this channel has processed after it is initialized. This attribute is not available for CICS channels. The valid format is an integer.

Buffers Received The total number of buffers that are received during the current interval or aggregation period. The valid format is an integer.

Buffers Sent The total number of buffers that are sent during the current interval or aggregation period. The valid format is an integer.

Bytes Received The total number of bytes that are received during the current interval or aggregation period. The valid format is an integer.

Bytes Received (Deprecated) The total number of bytes that are received during the current interval or aggregation period. The valid format is an integer.

Bytes Sent The total number of bytes that are sent during the current interval or aggregation period. The valid format is an integer.

Bytes Sent (Deprecated) The total number of bytes that are sent during the current interval or aggregation period. The valid format is an integer.

Channel Name The name of this channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Channel Status The current operational status of the channel. "n/a" means the channel is not currently active (thus no short-term history data is available) but was active in the recent past (thus long-term history data is available).

For CICS channels, status is either In-Doubt or the CICS status (Conn_Not_Def, Out_Service, Going_Out, Released, Obtaining, Acquired, Freeing, or Available).

Valid values are as follows:

- n/a = 0
- Binding = 1
- Starting = 2
- Running = 3
- Stopping = 4
- Retrying = 5
- Stopped = 6
- Requesting = 7
- Paused = 8
- Initializing = 13
- Inactive = 101
- Conn_Not_Def = 200
- Out_Service = 201
- Going_Out = 202
- Released = 203
- Obtaining = 204
- Acquired = 205
- Freeing = 206
- Available = 207
- Unknown = 255

Channel Type The type that is assigned to the channel (SDR for sender, SVR for server, RCVR for receiver, RQSTR for requester, CLNTCONN for client connection, SVRCONN for server connection, CLUSRCVR for cluster receiver, or CLUSSDR for cluster sender) when it is created. Valid values are as follows:

- n/a = 0
- SDR = 1

- SVR = 2
- RCVR = 3
- RQSTR = 4
- CLNTCONN = 6
- SVRCONN = 7
- CLUSRCVR = 8
- CLUSSDR = 9
- MQCHT_MQTT = 10

Connection Name The name of the physical or logical connection that this channel uses to transmit or receive data. This name is formed from the connection type (IP for TCP/IP, LU for LU6.2, or NETBIOS) and the connection address. The valid format is an alphanumeric string of up to 264 case-sensitive characters. If multiple connections are configured for the channel, this attribute is displayed as a comma separated list of system names.

CurBatch LUW ID The identifier that is assigned to the current logical unit of work (LUW). If a sender channel is in doubt, this is the problem batch. This attribute is not available for CICS channels. The valid format is an alphanumeric string of up to 16 case-sensitive characters.

CurBatch Messages The number of messages that are processed for the current logical unit of work (LUW). If a sender channel is in doubt, this is the number of messages that are currently in doubt. This attribute is not available for CICS channels. The valid format is an integer.

CurMsg SeqNo The number of the last message that is sent for the logical unit of work (LUW) that the in-doubt channel is currently processing. This attribute is not available for CICS channels. The valid format is an integer.

Cur Defn Indicates whether the queue or channel is currently defined on the monitored queue manager. Valid values are No = 0 and Yes = 1.

Current Action State The current action that is being performed by the channel. Valid values are as follows:

- n/a = -1
- Other = 0
- End_Of_Batch = 100
- Sending = 200
- Receiving = 300
- Serializing = 400
- Resynching = 500
- Heartbeating = 600
- Security_exit = 700
- Receive_exit = 800
- Sending_exit = 900
- Message_exit = 1000
- Retry_exit = 1100
- Channel_definition_exit = 1200
- Net_connection = 1250

- SSL_hand_shaking = 1300
- Name_server = 1400
- MQPut = 1500
- MQGet = 1600
- MQI_Call = 1700
- Compressing = 1800

Default Header Compression The default techniques for header data compression that are supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length-Encoding_Compression = 1
- ZLIB-Encoding_Speed_Compression = 2
- ZLIB-Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Default Message Compression The default techniques for message data compression that are supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length-Encoding_Compression = 1
- ZLIB-Encoding_Speed_Compression = 2
- ZLIB-Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

In-Doubt Status Indicates whether this channel is in doubt. Valid values are No = 0, Yes = 1, and n/a = 255. A channel is considered in doubt when a logical unit of work (LUW) has been sent and the channel is waiting for an acknowledgment that the LUW has been successfully received.

Interval Length The interval time over which statistics were taken. The valid format is a character string in the form MMM:SS where M = Minute, S = Second.

Interval Time The size of the current sampling interval, in hundredths of seconds. For example, .50 is half a second. This value is determined by the control parameters that are set when configuring the WebSphere MQ Monitoring agent; it is usually specified as 60.00 (60 seconds). The valid format is a decimal (formatted to 2 decimal places).

Last Header Compression The last techniques for header data compression that are supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length-Encoding_Compression = 1

- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Last Message Compression The last techniques for message data compression that are supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Last Send Date & Time The date and time that the last message is sent to the current channel/connection name combination. This attribute is not available for CICS channels. Standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Local Address The local communications address for the channel. The value returned depends on the TRPRYPE value of the channel (currently only TCP/IP is supported). The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Long Term Batch Size The long-term number of messages in a batch. The valid format is an integer.

Long Term Compression Rate Long-term compression rate that is achieved to the nearest percentage. The valid format is a floating point number with a range from -1 - 100.

Long Term Compression Time Long-term amount of time per message, in microseconds, spent during compression or decompression. The valid format is an integer.

Long Term Exit Time Long term of the time that is taken executing user exits per message. The valid format is an integer.

Long Term Net Time Long term time of a network operation. The amount of time, in microseconds, to send a request to the remote end of the channel and receive a response. Valid format is an integer.

Long Term XmitQ Time The long-term transmission queue time. The time, in microseconds, that messages remain on the transmission queue before being retrieved. The time is measured from when the message is put onto the transmission queue until it is retrieved to be sent on the channel and, therefore, includes any interval that is caused by a delay in the putting applications. The valid format is an integer.

LUW Last Committed The identifier of the last-committed logical unit of work (LUW). The valid format is an alphanumeric string of up to 16 case-sensitive characters.

MCA Job Name The MCA job name string that is associated with a channel that uniquely identifies that channel. This name is provided to differentiate (along with Connection Name) between multiple active channel connections that can be defined to the same queue manager. The valid format is an alphanumeric string of up to 28 case-sensitive characters. This attribute is for non z/OS systems only.

MCA Status The status of the message channel agent. Valid values are Stopped = 0 and Running = 3.

Message Count The number of messages that are sent or received on this channel during the current interval or aggregation period. For the Interval Summary row in the Recent Channel report, this count is the sum of all the message counts in the subsequent rows. This attribute is not available for CICS channels. The valid format is an integer.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Remote Partner Application Name The name of the client application at the remote end of the channel. This parameter applies only to server-connection channels. The valid format is an alphanumeric string of up to 48 characters.

Remote Qmgr Name The name that is assigned to the queue manager or queue sharing group of the remote system. This parameter does not apply to server-connection channels, where no values are returned. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Sample Date & Time The date and time of the sample. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

SeqNo Last Committed The number of the last-committed message within the last-committed logical unit of work (LUW). The valid format is an integer.

Short Retries The number of short retry intervals that are completed after the channel goes into retry state because of a connection failure. The maximum number of short retries is defined during channel definition using the **SHORTRTY** keyword. The time interval in seconds for short retries is defined during channel definition using the **SHORTTMR** keyword.

If the channel continually fails to connect after reaching the maximum number of short retry attempts, the WebSphere MQ Monitoring agent attempts long retries using the longer interval defined. If this value is non-zero while the channel is not currently retrying, it gives the most recent retry information that is being returned as the current channel status by WebSphere MQ.

This value is not available for CICS channels. The valid format is an integer.

Short Term Batch Size The short-term number of messages in a batch. The valid format is an integer.

Short Term Compression Rate Short-term compression rate that is achieved to the nearest percentage. The valid format is a floating point number with a range from -1 - 100.

Short Term Compression Time Short-term amount of time per message, in microseconds, spent during compression or decompression. The valid format is an integer.

Short Term Exit Time Short-term of the time that is taken executing user exits per message. The valid format is an integer.

Short Term Net Time Short-term time of a network operation. The amount of time (in microseconds) to send a request to the remote end of the channel and receive a response. The valid format is an integer.

Short Term XmitQ Time Short-term transmission queue time. The time, in microseconds, that messages remain on the transmission queue before being retrieved. The time is measured from when the message is put onto the transmission queue until it is retrieved to be sent on the channel and, therefore, includes any interval that is caused by a delay in the putting applications. The valid format is an integer.

SSL Key Count The number of successful SSL secret key resets that occurred for this channel instance since the channel starts. The valid format is an integer.

SSL Key Date & Time The date and time of the previous successful SSL secret key reset. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Start Date & Time The start date and time of the sample. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Transmit KB/Sec The transmission rate (in kilobytes per second) over the latest interval. This attribute is not available for CICS channels. The valid format is a decimal (formatted to 2 decimal places).

User Stop Request Indicates whether user stop request is outstanding. Valid values are as follows:

- n/a = -1
- Stop_Not_Requested = 0
- Stop_Requested = 1

XmitQ Depth The number of messages on the transmission queue that are associated with this channel. Valid format is an integer.

XmitQ Messages Available The number of messages that are available. The valid format is an integer.

Channel Short-Term History attributes

Use the Channel Short-Term History attributes to detect channel performance problems. This attribute group provides channel performance information for each monitored channel within a queue manager. These attributes are informational only; they cannot be used to create situations.

Batches Complete The number of logical units of work (LUWs) this channel has processed since it is initialized. This attribute is not available for CICS channels. The valid format is an integer.

Buffers Received The total number of buffers received during the current interval or aggregation period. The valid format is an integer.

Buffers Sent The total number of buffers sent during the current interval or aggregation period. The valid format is an integer.

Bytes Received The total number of bytes received during the current interval or aggregation period. The valid format is an integer.

Bytes Received (Deprecated) The total number of bytes received during the current interval or aggregation period. The valid format is an integer.

Bytes Sent The total number of bytes sent during the current interval or aggregation period. The valid format is an integer.

Bytes Sent (Deprecated) The total number of bytes sent during the current interval or aggregation period. The valid format is an integer.

Channel Name The name of this channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Channel Status The current operational status of the channel (Starting, Binding, Running, Retrying, Requesting, Paused, Initializing, In-Doubt, Inactive, Stopping, Stopped, or Unknown). "n/a" means the channel is not currently active (thus no short-term history data is available) but has been active in the recent past (thus long-term history data is available).

For CICS channels, status is either In-Doubt or the CICS status (Conn_Not_Def, Out_Service, Going_Out, Released, Obtaining, Acquired, Freeing, or Available).

Valid values are as follows:

- n/a = 0
- Binding = 1
- Starting = 2
- Running = 3
- Stopping = 4
- Retrying = 5
- Stopped = 6
- Requesting = 7
- Paused = 8
- Initializing = 13
- Inactive = 101

- Conn_Not_Def = 200
- Out_Service = 201
- Going_Out = 202
- Released = 203
- Obtaining = 204
- Acquired = 205
- Freeing = 206
- Available = 207
- Unknown = 255

Channel Type The type assigned to the channel (SDR for sender, SVR for server, RCVR for receiver, RQSTR for requester, CLNTCONN for client connection, SVRCONN for server connection, CLUSRCVR for cluster receiver, or CLUSSDR for cluster sender) when it was created. Valid values are as follows:

- n/a = 0
- SDR = 1
- SVR = 2
- RCVR = 3
- RQSTR = 4
- CLNTCONN = 6
- SVRCONN = 7
- CLUSRCVR = 8
- CLUSSDR = 9
- MQCHT_MQTT=10

Connection Name The name of the physical or logical connection that this channel uses to transmit or receive data. This name is formed from the connection type (IP for TCP/IP, LU for LU6.2, or NETBIOS) and the connection address. The valid format is an alphanumeric string of up to 264 case-sensitive characters. If multiple connections are configured for the channel, this attribute is displayed as a comma separated list of system names.

CurBatch LUW ID The identifier assigned to the current logical unit of work (LUW). If a sender channel is in doubt, this is the problem batch. This attribute is not available for CICS channels. The valid format is an alphanumeric string of up to 16 case-sensitive characters.

CurBatch Messages The number of messages processed so far for the current logical unit of work (LUW). If a sender channel is in doubt, this is the number of messages currently in doubt. This attribute is not available for CICS channels. The valid format is an integer.

CurMsg SeqNo The number of the last message sent for the logical unit of work (LUW) that the in-doubt channel is currently processing. This attribute is not available for CICS channels. The valid format is an integer.

Cur Defn Whether the queue or channel is currently defined on the monitored queue manager. Valid values are No = 0 and Yes = 1.

Current Action State The current action being performed by the channel. Valid values are as follows:

- n/a = -1
- Other = 0
- End_Of_Batch = 100
- Sending = 200
- Receiving = 300
- Serializing = 400
- Resynching = 500
- Heartbeating = 600
- Security_exit = 700
- Receive_exit = 800
- Sending_exit = 900
- Message_exit = 1000
- Retry_exit = 1100
- Channel_definition_exit = 1200
- Net_connection = 1250
- SSL_hand_shaking = 1300
- Name_server = 1400
- MQPut = 1500
- MQGet = 1600
- MQI_Call = 1700
- Compressing = 1800

Default Header Compression The header data compression default techniques supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Default Message Compression The message data compression default techniques supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

In-Doubt Status Whether this channel is in doubt. Valid values are No = 0, Yes = 1, and n/a = 255. A channel is considered in doubt when a logical unit of work (LUW) has been sent and the channel is waiting for an acknowledgment that the LUW has been successfully received (in other words, when a syncpoint has been requested but not yet performed).

Interval Time The size of the current sampling interval, in hundredths of seconds. For example, .50 is half a second. This value is determined by the control parameters your site set when configuring the WebSphere MQ Monitoring agent; it is usually specified as 60.00 (60 seconds). Valid format is a decimal (formatted to 2 decimal places).

Last Header Compression The header data compression last techniques supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Last Message Compression The message data compression last techniques supported by the channel. Valid values are as follows:

- n/a = -1
- NONE = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Last Send Date & Time The date and time the last message was sent to the current channel/connection name combination. This attribute is not available for CICS channels. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C	Century (0 for 20th, 1 for 21st)
YY	Year
MM	Month
DD	Day
HH	Hour
MM	Minute
SS	Second
mmm	Millisecond

Local Address The local communication address for the channel. The value returned depends on the TRPRYPE value of the channel (currently only TCP/IP is supported). The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Long Term Batch Size Indicates the long term number of messages in a batch. The valid format is an integer.

Long Term Compression Rate Long-term compression rate achieved to the nearest percentage. The valid format is a floating point number with a range from -1 - 100.

Long Term Compression Time Long-term amount of time per message, displayed in microseconds, spent during compression or decompression. The valid format is an integer.

Long Term Exit Time Long-term time taken executing user exits per message. The valid format is an integer.

Long Term Net Time Long-term time of a network operation. The amount of time, in microseconds, to send a request to the remote end of the channel and receive a response. The valid format is an integer.

Long Term XmitQ Time Indicates the long-term transmission queue time. The time, in microseconds, that messages remained on the transmission queue before being retrieved. The time is measured from when the message is put onto the transmission queue until it is retrieved to be sent on the channel and, therefore, includes any interval caused by a delay in the putting applications. Valid format is an integer.

LUW Last Committed The identifier of the last-committed logical unit of work (LUW). Valid format is an alphanumeric string of up to 16 case-sensitive characters.

MCA Job Name Specifies the MCA job name string that is associated with a channel that uniquely identifies that channel. This name is provided to differentiate (along with Connection Name) between multiple active channel connections that can be defined to the same queue manager. The valid format is an alphanumeric string of up to 28 case-sensitive characters. This attribute is for non z/OS systems only.

MCA Status The status of the message channel agent. Valid values are Stopped = 0 and Running = 3.

Message Count The number of messages sent or received on this channel during the current interval or aggregation period. For the Interval Summary row in the Recent Channel report, this count is the sum of all the message counts in the subsequent rows. This attribute is not available for CICS channels. The valid format is an integer.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Name The name assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Remote Partner Application Name The name of the client application at the remote end of the channel. This attribute applies only to server-connection channels. The valid format is an alphanumeric string of up to 48 characters.

Remote Qmgr Name The name assigned to the queue manager or queue sharing group of the remote system. This parameter does not apply to server-connection channels, where no values are returned. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Sample Date & Time The date and time of the sample. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C	Century (0 for 20th, 1 for 21st)
YY	Year
MM	Month
DD	Day
HH	Hour
MM	Minute
SS	Second
mmm	Millisecond

SeqNo Last Committed The number of the last-committed message within the last-committed logical unit of work (LUW). The valid format is an integer.

Short Retries The number of short retry intervals that are completed since the channel went into retry state due to a connection failure. The maximum number of short retries is defined during channel definition using the SHORTRTY keyword. The time interval in seconds for short retries is defined during channel definition using the SHORTTMR keyword.

If the channel continually fails to connect after reaching the maximum number of short retry attempts, the WebSphere MQ Monitoring agent attempts long retries using the longer interval defined. If this value is non-zero while the channel is not currently retrying, it gives the most recent retry information still being returned as current channel status by WebSphere MQ.

This value is not available (0) for CICS channels. The valid format is an integer.

Short Term Batch Size Indicates the short-term number of messages in a batch. The valid format is an integer.

Short Term Compression Rate Short-term compression rate achieved to the nearest percentage. The valid format is a floating point number with a range from -1 - 100.

Short Term Compression Time Short-term amount of time per message, displayed in microseconds, spent during compression or decompression. Valid format is an integer.

Short Term Exit Time Short-term time taken executing user exits per message. The valid format is an integer.

Short Term Net Time Short-term time of a network operation. The amount of time (in microseconds) to send a request to the remote end of the channel and receive a response. The valid format is an integer.

Short Term XmitQ Time Short-term transmission queue time. The time, in microseconds, that messages remained on the transmission queue before being retrieved. The time is measured from when the message is put onto the transmission queue until it is retrieved to be sent on the channel and, therefore, includes any interval caused by a delay in the putting application. Valid format is an integer.

SSL Key Count The number of successful SSL secret key resets that occurred for this channel instance since the channel started. The valid format is an integer.

SSL Key Date & Time The date and time of the previous successful SSL secret key reset. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Start Date & Time Start date and time of the sample. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Transmit KB/Sec The transmission rate (in kilobytes per second) over the latest interval. This attribute is not available for CICS channels. The valid format is a decimal (formatted to 2 decimal places).

User Stop Request Indicates whether user stop request is outstanding. Valid values are n/a = -1, Stop_Not_Requested = 0, and Stop_Requested = 1.

XmitQ Depth The number (that is, depth) of messages on the transmission queue associated with this channel. The valid format is an integer.

XmitQ Messages Available The number of messages available. The valid format is an integer.

Channel Status attributes

Use the Channel Status attributes to create situations for detecting channel status problems. The Channel Status attributes provide channel status information for each monitored channel within a queue manager.

Batches Complete Number of complete batches. The valid format is an integer.

Batch Size Negotiated batch size. The valid format is an integer.

Buffers Received Number of buffers that are received. The valid format is an integer.

Buffers Sent Number of buffers that are sent. The valid format is an integer.

Bytes Received Number of bytes that are received. The valid format is an integer.

Bytes Received (Deprecated) Number of bytes that are received. The valid format is an integer.

Bytes Sent Number of bytes that are sent. The valid format is an integer.

Bytes Sent (Deprecated) Number of bytes that are sent. The valid format is an integer.

Channel Disp Disposition of channel on a z/OS system. Valid values are as follows:

- n/a = -2
- All = -1
- Shared = 2
- Private = 4
- Fixshared = 5

Channel Inst Type Type of channel instance. Valid values are as follows:

- Current = 1011
- Saved = 1012
- Short = 1015

Channel Name Name of the channel. Valid format is an alphanumeric string of up to 20 case-sensitive characters.

Channel Status Status of the channel. The valid format is an integer. Valid values are as follows:

- n/a = 0

- Binding = 1
- Starting = 2
- Running = 3
- Stopping = 4
- Retrying = 5
- Stopped = 6
- Requesting = 7
- Paused = 8
- Initializing = 13
- Inactive=101
- Conn_Not_Def=200
- Out_Service=201
- Going_Out=202
- Released=203
- Obtaining=204
- Acquired=205
- Freeing=206
- Available=207
- Unknown=255

Channel Type Type of the channel. Valid format is an integer. Valid values are as follows:

- n/a = 0
- Sender = 1
- Server = 2
- Receiver = 3
- Requester = 4
- Client-connection = 6
- Server-connection = 7
- Cluster-receiver = 8
- Cluster-sender = 9

Connection Name Name of the connection. This is the connection name that is obtained using the MQSC DIS CHS command (see WebSphere MQ documentation for further information about this command). The valid format is an alphanumeric string of up to 264 case-sensitive characters.

CurBatch LUW ID Logical unit of work identifier for in doubt batch. The logical unit of work identifier is associated with the current batch for a sending or receiving channel. For an in-doubt sending channel, it is the LUW ID of the in doubt batch. It is updated with the LUW ID of the next batch when it is known. The valid format is an integer.

CurBatch Messages Number of messages that are in doubt. For a sending channel, this is the number of messages that are sent in the current batch. It is incremented as each message is sent, and when the channel becomes in doubt, it is the number of messages that are in doubt. For a receiving channel, it is the number of messages that are received in the current batch. It is incremented as each message is received. The valid format is an integer.

CurMsg SeqNo Sequence number of the last message in the in-doubt batch. For a sending channel, this is the message sequence number of the last sent message. It is updated as each message is sent, and when the channel becomes in-doubt, it is the message sequence number of the last message in the in-doubt batch. For a receiving channel, it is the message sequence number of the last message that is received. It is updated as each message is received.

Current Action State Current action that is being performed by the channel. Valid values are as follows:

- n/a = -1
- Other = 0
- End_Of_Batch = 100
- Sending = 200
- Receiving = 300
- Serializing = 400
- Resynching = 500
- Heartbeating = 600
- Security_exit = 700
- Receive_exit = 800
- Sending_exit = 900
- Message_exit = 1000
- Retry_exit = 1100
- Channel_definition_exit = 1200
- Net_connection = 1250
- SSL_hand_shaking = 1300
- Name_server = 1400
- MQPut = 1500
- MQGet = 1600
- MQI_Call = 1700
- Compressing = 1800

Current Sharing Conversations It is blank for all channel types other than server-connection channels. For each instance of a server-connection channel, it gives the number of conversations that are currently running over that channel instance.

Default Header Compression Indicates whether header data that is sent by the channel is compressed. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Default Message Compression Whether message data that is sent by the channel is compressed. This is the default value assigned when the channel is created if no other value is assigned by the user. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Heartbeat Interval Interval of heartbeat. The valid format is an integer.

Host Name Name of the host on which the queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

In-Doubt Status Whether the channel is currently in doubt. A sending channel is in doubt only when the sending MCA is waiting for an acknowledgment that a batch of messages, which it sent, was successfully received. It is not in doubt at all other times, including the period during which messages are being sent, but before an acknowledgment is requested. The valid format is an alphanumeric string of up to 48 case-sensitive characters. Valid values are as follows:

- No = 0
- Yes = 1
- n/a = 255

Keep Alive Interval Keep alive interval. If the channel is idle for the length of time that is specified by this attribute (in seconds), the queue polls the other queue that is connected to the channel to ensure that the connection is still functioning. Valid values are as follows:

- Auto = -1
- n/a = -2

Last Header Compression Indicates whether header data that is sent by the channel is compressed. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Last Message Compression This value determines whether message data sent by the channel is compressed. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Last Message Date & Time Date and time at which the last message is sent or MQI call is handled. Standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Local Address The local communications address for the channel. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Long Retries Left Number of long retry attempts that remain. The valid format is an integer.

Long Term Batch Size Indicator of the number of messages in a batch based on activity over a long period of time. The valid format is an integer.

Long Term Compression Rate Compression rate to the nearest percentage point based on activity over a long period of time. The valid format is a floating point number.

Long Term Compression Time The amount of time per message, in microseconds, spent on compression or decompression based on activity over a long period of time. The valid format is an integer.

Long Term Exit Time The amount of time per message, in microseconds, spent processing user exits based on activity over a long period of time. If more than one exit is processed per message, the value is the sum of all the user exit times. The valid format is an integer.

Long Term Net Time The amount of time, in microseconds, from when a request is sent to the remote end of the channel until a response is received, based on activity over a long period of time. The valid format is an integer.

Long Term XmitQ Time The amount of time in microseconds that messages remain on the transmission queue before being retrieved, based on activity over a long period of time. The time is measured from when the message is put onto the transmission queue until it is retrieved to be sent on the channel, therefore, the value includes any interval caused by a delay in the putting application.

LUW Last Committed Logical unit of work identifier for last committed batch. The valid format is an integer.

Max Sharing Conversations It is blank for all channel types other than server-connection channels. For each instance of a server-connection channel, it gives the negotiated maximum of the number of conversations that can run over that channel instance. The valid format is an integer.

Maximum Msg Len Length of the maximum message. The valid format is an integer.

MCA Job Name Name of MCA job. The valid format is an alphanumeric string of up to 28 case-sensitive characters.

MCA Status Status of the MCA. Valid values are as follows:

- n/a = -1
- Stopped = 0
- Running = 3

MCA User ID User identifier used by the MCA. It applies to server-connection, receiver, requester, and cluster-receiver connections. The valid format is an alphanumeric string of up to 12 case-sensitive characters.

Message Count Number of messages that are sent or received, or number of MQI calls that are handled. The valid format is an integer.

Monitoring Level Current amount of monitoring data that is collected for the channel. Valid values are as follows:

- Queue_Manager = -3
- n/a = -1
- Off = 0
- Low = 17
- Medium = 33
- High = 65

QMgr Name Name of the queue manager. Valid format is an alphanumeric string of up to 48 case-sensitive characters.

Non-Persist Msg Speed Speed at which nonpersistent messages are sent. Valid values are as follows:

- n/a = -1
- Normal = 1
- Fast = 2

Origin Node Node name of the managed system. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Remote Partner Application Name Name of the client application at the remote end of the channel for server-connection channels. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Remote Qmgr Name Name of the remote queue manager, or queue sharing group. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

SeqNo Last Committed Sequence number of the last message in the last committed batch. The valid format is an integer.

Short Retries Left Number of short retry attempts remaining. The valid format is an integer.

Short Term Batch Size Indicator of the number of messages in a batch based on recent activity over a short period of time. The valid format is an integer.

Short Term Compression Rate Compression rate to nearest percentage point based on recent activity over a short period of time. The valid format is a floating point number.

Short Term Compression Time The amount of time per message, in microseconds, spent on compression or decompression based on recent activity over a short period of time. The valid format is an integer.

Short Term Exit Time The amount of time per message, in microseconds, spent processing user exits based on recent activity over a short period of time. If more than one exit is processed per message, the value is the sum of all the user exit times. The valid format is an integer.

Short Term Net Time The amount of time, in microseconds, from when a request is sent to the remote end of the channel until a response is received, based on recent activity over a short period of time. The valid format is an integer.

Short Term XmitQ Time The amount of time in microseconds that messages remained on the transmission queue before being retrieved, based on recent activity over a short period of time. The time is measured from when the message is put onto the transmission queue until it is retrieved to be sent on the channel, therefore, the value includes any interval caused by a delay in the putting application.

SSL Cert Issuer Name The full Distinguished Name of the Certificate Authority that issues the remote certificate. Valid format is an alphanumeric string of up to 256 case-sensitive characters.

SSL Cert User ID The local user ID that is associated with the remote certificate (z/OS systems only). The valid format is an alphanumeric string of up to 12 case-sensitive characters.

SSL Key Count The number of SSL secret key resets that occurred for this channel instance since the channel was started. If the SSL secret key negotiation is enabled, the count is incremented whenever a secret key reset is performed. The valid format is an integer.

SSL Key Date & Time Date and time of the previous SSL secret key reset. The valid format is the standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

SSL Short Peer Name Distinguished name of the peer queue manager or client at the other end of the channel. The valid format is an alphanumeric string of up to 256 case-sensitive characters. Exceptionally long distinguished names are truncated.

Start Date & Time The date and time at which the channel is started. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Transmit KB/Sec Channel transmission rate in kilobytes per second. The valid format is an integer.

User Stop Request Indicates whether user stop request is outstanding. Valid values are as follows:

- n/a = -1
- Stop_Not_Requested = 0
- Stop_Requested = 1

XmitQ Messages Available Number of messages on the transmission queue that are available to the channel for the MQGET call. The valid format is an integer.

XmitQ Name Name of the transmission queue. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Channel Statistics attributes

Use the Channel Statistics attributes to create situations for detecting channel performance problems. This attribute group provides channel performance information for each monitored channel within a queue manager. For example, you can create a situation to detect in-doubt channels or problems with channel status. Channel Statistics is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

Batches Complete The number of logical units of work (LUWs) that this channel processed since it was initialized. This attribute is not available for CICS channels. The valid format is an integer.

Buffers Received The total number of buffers that are received during the current interval or aggregation period. The valid format is an integer.

Buffers Sent The total number of buffers that are sent during the current interval or aggregation period. The valid format is an integer.

Bytes Received The total number of bytes that are received during the current interval or aggregation period. The valid format is an integer.

Bytes Received (Deprecated) The total number of bytes that are received during the current interval or aggregation period. The valid format is an integer.

Bytes Sent The total number of bytes that are sent during the current interval or aggregation period. The valid format is an integer.

Bytes Sent (Deprecated) The total number of bytes that are sent during the current interval or aggregation period. The valid format is an integer.

Channel Name The name of this channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Channel Status The current operational status of the channel. n/a means the channel is not currently active (thus no short-term history data is available) but was active in the recent past (thus long-term history data is available).

For CICS channels, status is either In-Doubt or the CICS status (Conn_Not_Def, Out_Service, Going_Out, Released, Obtaining, Acquired, Freeing, or Available).

Valid values are as follows:

- n/a = 0
- Binding = 1
- Starting = 2
- Running = 3
- Stopping = 4
- Retrying = 5
- Stopped = 6
- Requesting = 7
- Paused = 8
- Initializing = 13
- Inactive = 101
- Conn_Not_Def = 200
- Out_Service = 201
- Going_Out = 202
- Released = 203
- Obtaining = 204
- Acquired = 205
- Freeing = 206
- Available = 207
- Unknown = 255

Channel Type The type that is assigned to the channel when it is created. Valid values are as follows:

- n/a = 0
- SDR = 1 (for sender)
- SVR = 2 (for server)
- RCVR = 3 (for receiver)

- RQSTR = 4 (for requester)
- CLNTCONN = 6 (for client connection)
- SVRCONN = 7 (for server connection)
- CLUSRCVR = 8 (for cluster receiver)
- CLUSSDR = 9 (for cluster sender)
- MQCHT_MQTT=10 (for telemetry channel)

Completed Retry Time The time in seconds for all completed retry intervals after the channel goes into a retry state. This does not indicate elapsed time because it only includes the interval time up to the last completed retry interval. This value includes both short and long retry intervals. The valid format is an integer.

Connection Name The name of the physical or logical connection that this channel uses to transmit or receive data. This name is formed from the connection type (IP for TCP/IP, LU for LU6.2, or NETBIOS) and the connection address. This is the name of a currently active connection. One channel might have more than one active connection simultaneously. The valid format is an alphanumeric string of up to 264 case-sensitive characters. If multiple connections are configured for the channel, this attribute is displayed as a comma separated list of names of systems for the stated **Transport Type** attribute.

CurBatch LUW ID The identifier that is assigned to the current logical unit of work (LUW). If a sender channel is in doubt, this is the problem batch. This attribute is not available for CICS channels. The valid format is an alphanumeric string of up to 16 case-sensitive characters.

CurBatch Messages The number of messages that are processed for the current logical unit of work (LUW). If a sender channel is in doubt, this is the number of messages currently in doubt. This attribute is not available for CICS channels. The valid format is an integer.

CurMsg SeqNo The number of the last message that is sent for the logical unit of work (LUW) that the in-doubt channel is currently processing. This attribute is not available for CICS channels. The valid format is an integer.

Cur Defn Indicates whether the queue or channel is currently defined on the monitored queue manager. Valid values are No = 0 and Yes = 1.

Current Action State The current action that is being performed by the channel. Valid values are as follows:

- n/a = -1
- Other = 0
- End_Of_Batch = 100
- Sending = 200
- Receiving = 300
- Serializing = 400
- Resynching = 500
- Heartbeating = 600
- Security_exit = 700
- Receive_exit = 800
- Sending_exit = 900
- Message_exit = 1000

- Retry_exit = 1100
- Channel_definition_exit = 1200
- Net_connection = 1250
- SSL_hand_shaking = 1300
- Name_server = 1400
- MQPut = 1500
- MQGet = 1600
- MQI_Call = 1700
- Compressing = 1800

Default Header Compression The default techniques for header data compression that are supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Default Message Compression The default techniques for message data compression that are supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

In-Doubt Status Indicates whether this channel is in doubt. Valid values are No = 0, Yes = 1, and n/a = 255. A channel is considered in doubt when a logical unit of work (LUW) was sent and the channel is waiting for an acknowledgment that the LUW was successfully received.

Interval Time The size of the current sampling interval, in hundredths of seconds. For example, .50 is half a second. This value is determined by the control parameters your site set when configuring the WebSphere MQ Monitoring agent; it is usually specified as 60 (60 seconds). The valid format is a decimal (formatted to 2 decimal places).

Last Header Compression The last techniques for header data compression that are supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1

- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Last Message Compression The last techniques for message data compression that are supported by the channel. Valid values are as follows:

- n/a = -1
- None = 0
- Run_Length_Encoding_Compression = 1
- ZLIB_Encoding_Speed_Compression = 2
- ZLIB_Encoding_High_Compression = 4
- System = 8
- Any = 268435455

Last Send Date & Time The date and time that the last message was sent to the current channel/connection name combination. This attribute is not available for CICS channels.

Local Address The local communications address for the channel. The value returned depends on the TRPRYPE of the channel (currently only TCP/IP is supported). The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Long Retries The number of long retry intervals that were completed since the channel went into retry state due to a connection failure. The maximum number of long retries is defined during channel definition using the LONGRTY keyword. The time interval in seconds for long retries is defined during channel definition using the LONGTMR keyword. The WebSphere MQ Monitoring agent attempts long retries after the channel reaches the maximum number of short retry attempts for the channel. The valid format is an integer.

Long Term Batch Size The long-term number of messages in a batch. The valid format is an integer.

Long Term Compression Rate Long term compression rate that is achieved to the nearest percentage. The valid format is a floating point number with a range from -1 - 100.

Long Term Compression Time Long term amount of time per message, in microseconds, spent during compression or decompression. The valid format is an integer.

Long Term Exit Time Long term amount of time per message, in microseconds, spent during executing user exits. The valid format is an integer.

Long Term Net Time Long term time of a network operation. The amount of time, in microseconds, to send a request to the remote end of the channel and receive a response. The valid format is an integer.

Long Term XmitQ Time Long term transmission queue time. The valid format is an integer.

LUW Last Committed The identifier of the last-committed logical unit of work (LUW). The valid format is an alphanumeric string of up to 16 case-sensitive characters.

MCA Job Name The MCA job name string that is associated with a channel that uniquely identifies that channel. This is not a user-friendly name, but it is provided to differentiate (along with Connection Name) between multiple active channel connections that can be defined to the same queue manager. The valid format is an alphanumeric string of up to 28 case-sensitive characters. This attribute is for non z/OS systems only.

MCA Status The status of the message channel agent. Valid values are Stopped = 0 and Running = 3.

Message Count The number of messages that are sent or received on this channel during the current interval or aggregation period. For the Interval Summary row in the Recent Channel report, this count is the sum of all the message counts in the subsequent rows. This attribute is not available for CICS channels. The valid format is an integer.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QSG Disp Indicates the disposition of the channel in a queue-sharing group environment. Valid values are Qmgr = 0, Copy = 1, Group = 3, and Unknown = 255. This attribute is for QSG environment on z/OS systems only.

QSG Name The name of the queue sharing group. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for QSG environment on z/OS systems only.

Remote Partner Application Name Name of the client application at the remote end of the channel. This parameter applies only to server-connection channels. The valid format is an alphanumeric string of up to 48 characters.

Remote Qmgr Name The queue manager name or queue sharing group name of the remote system, or the remote partner application name of a server-connection channel if the server-connection channel exists. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

SeqNo Last Committed The number of the last-committed message within the last-committed logical unit of work (LUW). The valid format is an integer.

Short Retries The number of short retry intervals that complete after the channel goes into a retry state because of a connection failure. The maximum number of

short retries is defined during channel definition using the SHORTRTY keyword. The time interval in seconds for short retries is defined during channel definition using the SHORTTMR keyword.

If the channel continually fails to connect after reaching the maximum number of short retry attempts, the WebSphere MQ Monitoring agent attempts long retries using the longer interval defined. If this value is non-zero and the channel is not currently retrying, it gives the most recent retry information that is returned as the current channel status by WebSphere MQ.

This value is not available for CICS channels. The valid format is an integer.

Short Term Batch Size Indicates the short-term number of messages in a batch. The valid format is an integer.

Short Term Compression Rate Short-term compression rate that is achieved to the nearest percentage. The valid format is a floating point number with a range from -1 - 100.

Short Term Compression Time Short-term amount of time per message, in microseconds, spent during compression or decompression. The valid format is an integer.

Short Term Exit Time Short-term amount of time per message, displayed in microseconds, spent during executing user exits. The valid format is an integer.

Short Term Net Time Short-term time of a network operation. The amount of time (in microseconds) to send a request to the remote end of the channel and receive a response. The valid format is an integer.

Short Term XmitQ Time Short-term transmission queue time. The valid format is an integer.

SSL Key Count The number of successful SSL secret key resets that occurred for this channel instance since the channel started. The valid format is an integer.

SSL Key Date & Time The date and time of the previous successful SSL secret key reset. Standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Start Date & Time The start date and time of the sample. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Transmission Queue Name The name of the transmit queue. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Transmit KB/Sec The transmission rate (in kilobytes per second) over the latest interval. This attribute is not available for CICS channels. The valid format is a decimal (formatted to 2 decimal places).

Transport Type The transmission type. Valid values are as follows:

- LOCAL = 0
- LU62 = 1
- TCP = 2
- NETBIOS = 3
- SPX = 4
- DECNET = 5
- UDP = 6
- CICS = 100

User Stop Request Indicates whether user stop request is outstanding. Valid values are n/a = -1, Stop_Not_Requested = 0, and Stop_Requested = 1.

XmitQ Depth The number of messages on the transmission queue that is associated with this channel. The valid format is an integer.

XmitQ Messages Available The number of messages that are queued on the transmission queue and available to the channel for the MQGET call. The valid format is an integer.

The Channel Statistics attributes defined above are *summarized* (or otherwise used in calculations) to create the Channel Performance by Type/Status table view. The columns displayed in the Channel Performance by Type/Status table view are informational only, and have the following meanings:

Last Send Date and Time Last Send Date and Time value of the channels that match this channel type/channel status combination.

Number of Channels Number of channels that match the channel type/channel status combination that are displayed in this row of the Channel Performance by Type/Status table view. It is calculated using the Channel Name attribute that is previously described.

Total Batches Complete Sum of Batches Complete values for channels that match this channel type/channel status combination.

Total Buffers Received Sum of Buffers Received values for channels that match this channel type/channel status combination.

Total Buffers Sent Sum of Buffers Sent values for channels that match this channel type/channel status combination.

Total Bytes Received Sum of Bytes Received values for channels that match this channel type/channel status combination.

Total Bytes Sent Sum of Bytes Sent values for channels that match this channel type/channel status combination.

Total CurBatch Messages Sum of Current Batch Messages values for channels that match this channel type/channel status combination.

Total Message Count Sum of Message Count values for channels that match this channel type/channel status combination.

Total Transmit KB/Sec Sum of Transmit Kilobytes per Second values for channels that match this channel type/channel status combination.

MAX Transmit KB/Sec Maximum value of Transmit Kilobytes per Second for channels that match this channel type/channel status combination.

Channel Summary attributes

Use the Channel Summary attributes to create situations for detecting problems of application client connections and channels. The Channel Summary attributes provide the summarized data on a channel level or on a connection level. By default, historical data collection is disabled for this attribute group. You can enable historical data collection for the summarized data only on a channel level. Channel Summary is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

% Max Instances The total number of instances of a server-connection channel as a percentage of the maximum number of instances of a server-connection channel that can be started. This attribute is valid only for server-connection channels of WebSphere MQ 7.0.1 and later versions.

% Max Instances per Client The highest number of instances of a given channel that are grouped by clients as a percentage of the maximum number of instances of a channel that can be started from a single client. This attribute is valid only for server-connection channels of WebSphere MQ 7.0.1 and later versions.

% Max Sharing Conversations The highest number of current conversations of a server-connection channel as a percentage of the maximum number of conversations that can run over each instance. The valid format is a decimal (formatted to 1 decimal place) in the range 0.0 - 100.0. This attribute is valid only for server-connection channels of WebSphere MQ 7.0.1 and later versions.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Average Buffers Received The average of the Buffers Received attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Buffers Received value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Average Buffers Sent The average of the Buffers Sent attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Buffers Sent value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Average Bytes Received The average of the Bytes Received attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Bytes Received value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Average Bytes Received (Deprecated) The average of the Bytes Received attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Bytes Received value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Average Bytes Sent The average of the Bytes Sent attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Bytes Sent value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Average Bytes Sent (Deprecated) The average of the Bytes Sent attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Bytes Sent value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Average Message Count The average of the Message Count attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Message Count attribute value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Average Transmit KB/Sec The average of the Transmit KB per Sec attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Transmit KB per Sec attribute value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Channel Name The name of this channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Channel Type The type that is assigned to the channel when it is created. Valid values are as follows:

- n/a
- SDR = 1 (for sender)
- SVR = 2 (for server)
- RCVR = 3 (for receiver)
- RQSTR = 4 (for requester)
- CLNTCONN = 6 (for client connection)
- SVRCONN = 7 (for server connection)
- CLUSRCVR = 8 (for cluster receiver)
- CLUSSDR = 9 (for cluster sender)
- MQCHT_MQTT=10 (for telemetry channel)

Client Count The number of clients that have different network addresses. The total number of individual clients with different network addresses, from which client applications are connecting a given channel respectively with a channel instance. This attribute is always 1 and will not be displayed in the Channel Summary by Connection Name workspace.

Connection Name The name of the connection. This attribute is available only in the Channel Summary by Connection Name workspace.

Earliest Start Date & Time The earliest time stamp among the Start Date & Time time stamps from all instances of a multi-instance channel. For single-instance channels, this attribute value is the same as the Start Date & Time time stamp.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Buffers Received The highest attribute value among the Buffers Received attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Buffers Received attribute value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Buffers Sent The highest attribute value among the Buffers Sent attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Buffers Sent attribute value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Bytes Received The highest attribute value among the Bytes Received attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Bytes Received attribute value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Bytes Received (Deprecated) The highest attribute value among the Bytes Received attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Bytes Received attribute value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Bytes Sent The highest attribute value among the Bytes Sent attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Bytes Sent attribute value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Bytes Sent (Deprecated) The highest attribute value among the Bytes Sent attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Bytes Sent attribute value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Compression Time The highest attribute value among the Short Term Compression Time attribute values from all instances of a multi-instance channel. For a single-instance channel, the attribute value is the same as the Short Term Compression Time attribute value. Although WebSphere MQ provides both a short-term value and a long-term value, the short-term value is selected and displayed by default.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Conversations per Client The highest value among the numbers of conversations of a server-connection channel that are grouped by clients. This attribute is valid only for server-connection channels of WebSphere MQ 7.0.1 and later versions.

Highest Current Conversations The highest value among the numbers of conversations that are running over each instance of a server-connection channel. This attribute is valid only for server-connection channels of WebSphere MQ 7.0.1 and later versions. A value of 0 indicates that the channel is running in a mode earlier than that of WebSphere MQ version 7.0 with respect to the following behaviors:

- Administrator stop-quiesce
- Heartbeating
- Read ahead
- Sharing conversations
- Client Asynchronous Consume

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Exit Time The highest attribute value among the Short Term Exit Time attribute values from all instances of a multi-instance channel. For single-instance channels, the attribute value is the same as the Short Term Exit Time value.

Although WebSphere MQ provides both a short-term value and a long-term value, the short-term value is selected and displayed by default.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest In-Doubt Samples The highest value among the numbers of consecutive samples from all instances of a channel that are found in-doubt. This attribute is not applicable to server-connection channels. Besides sender-type channels, it is applicable to receiver-type channels that can have multiple instances. This attribute is set to 0 for the channels that are not applicable.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Instances per Client The highest value among the numbers of instances of a given channel that are grouped by clients.

Highest Message Count The highest attribute value among the Message Count attribute values from all instances of a server-connection channel. For single-instance channels, this attribute is the same as the Message Count value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Net Time The short-term duration of a network operation. The amount of time (in microseconds) to send a request to the remote end of the channel and to receive a response. The valid format is an integer. Although WebSphere MQ provides both a short-term value and a long-term value, the short-term value is selected and displayed by default. For historical data, this attribute shows the highest sampled value.

This attribute is only applicable to single-instance channels, and is not applicable to the channels that can have multiple instances, such as server-connection or receiver channels.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest Transmit KB/Sec The highest attribute value among the Transmit KB per Sec attribute values from all instances of a multi-instance channel. For single-instance channels, this attribute is the same as the Transmit KB per Sec attribute value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest XmitQ Depth The number (depth) of messages on the transmission queue that are associated with this channel. The valid format is an integer.

This attribute is only applicable to single-instance channels, and is not applicable to the channels that can have multiple instances, such as server-connection or receiver channels. It shows the highest sampled value for historical data.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Highest XmitQ Time The short-term transmission queue time. The time, in microseconds, that messages remained on the transmission queue before being retrieved. The time is measured from when the message is put onto the transmission queue until it is retrieved to be sent on the channel, therefore, the time includes any interval that is caused by a delay in the putting operation. The valid format is an integer. Although WebSphere MQ provides both a short-term value and a long-term value, the short-term value is selected and displayed by default. For historical data, this attribute shows the highest sampled value.

This attribute is only applicable to single-instance channels, and is not applicable to the channels that can have multiple instances, such as server-connection or receiver channels.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Latest Send Date & Time The latest time stamp among the Last Message Date & Time time stamps from all instances of a multi-instance channel. For single-instance channels, this attribute value is the same as the Last Message Date & Time value.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Max Instances The maximum number of simultaneous instances of a server-connection channel that can be started. This attribute can be set in the range 0 - 999,999,999. A value of zero indicates that no client connections are allowed on this channel. The default value is 999,999,999. This attribute is valid only for server-connection channels of WebSphere MQ 7.0.1 and later versions.

Max Instances per Client The maximum number of simultaneous instances of a server-connection channel from a single client. This attribute can be set in the range 0 - 999,999,999. A value of 0 indicates that no client connections are allowed on this channel. The default value is 999,999,999. This attribute is valid only for server-connection channels of WebSphere MQ 7.0.1 and later versions.

Max Sharing Conversations The maximum number of conversations that can run over each instance of a server-connection channel. This attribute is valid only for server-connection channels of WebSphere MQ 7.0.1 and later versions. A value of 0 indicates that the channel is running in a mode earlier than that of WebSphere MQ version 7.0 with respect to the following behaviors:

- Administrator stop-quiesce
- Heartbeating
- Read ahead
- Sharing conversations
- Client asynchronous consume

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Running Instances The number of instances of a given channel or a connection in the running status.

Retrying Instances The number of instances of a given channel or a connection in the retrying status.

Summary Type Indicates whether the data is summarized on a channel level or on a connection level. Valid values are as follows:

- Channel Summary = 0 (default)
- Connection Name Summary = 1

Total Conversations The total number of conversations across all instances of a server-connection channel. This attribute is valid only for server-connection channels of WebSphere MQ 7.0.1 and later versions.

In the Channel Summary by Connection Name workspace, this attribute is summarized for a given connection.

Total Instances The number of total instances of a given channel or a connection.

Connection Objects attributes

Use the Connection Object attributes to create situations for monitoring the status of handle. The Connection Objects attributes display connection information about the applications that are connected to the queue manager. Use these attributes to identify applications with long-running units of work. If an attribute is specified that is not relevant for the connection, operating environment, or type of status information requested, that parameter is ignored.

Asynchronous State The state of the asynchronous consumer on this object handle. Valid values are as follows:

- n/a = 255
- NONE = 0
- SUSPENDED = 4
- SUSPENDEDTEMP = 5
- ACTIVE = 6
- INACTIVE = 7

Connection ID The identifier of the connection. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Conn ID Prefix (EXTCONN) Character hexadecimal representation of the prefix of connection ID. The valid format is an alphanumeric string of up to 32 characters.

Conn ID Suffix (CONN) Character hexadecimal representation of the suffix of connection ID. The valid format is an alphanumeric string of up to 16 characters.

Destination The destination queue for messages that are published to this subscription. This parameter is only relevant for handles of subscriptions to topics. Valid format is an alphanumeric string of up to 48 characters.

Destination Qmgr The destination queue manager for messages that are published to this subscription. The valid format is an alphanumeric string of up to 48 characters.

Handle Status This attribute is the status of the handle. Valid values are n/a = -1, Inactive = 0, and Active = 1.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Object Name The name of an object that the connection has opened. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Object Type The type of the object that the connection has opened. Valid values are as follows:

- n/a = -1,
- Queue = 1,
- NameList = 2,
- Process = 3,
- StorageClass = 4,
- QMgr = 5,
- Channel = 6,
- AuthInfo = 7,
- TOPIC = 8

Open Options The open options that are currently in force for the connection for the object. The valid format is an alphanumeric string of up to 8 case-sensitive characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters. This attribute is for z/OS systems only.

QSG Disp Indicates the disposition of the object in QSG environment. Valid values are QMgr = 0, Copy = 1, Shared = 2, and Unknown = 255.

Read Ahead The read ahead connection status. Valid values are as follows:

- NO = 0
- YES = 1
- INHIBITED = 3
- BACKLOG = 4

Subscription ID The internal, all-time unique identifier of the subscription. This parameter is relevant only for handles of subscriptions to topics. The valid format is an alphanumeric string of up to 24 characters.

Sub Name The unique subscription name of the application that is associated with the handle. This parameter is relevant only for handles of subscriptions to topics. Not all subscriptions will have a subscription name. The valid format is an alphanumeric string of up to 256 characters.

Topic String The resolved topic string. This parameter is relevant for handles with OBJTYPE(TOPIC). It is blank for any other object type. The valid format is an alphanumeric string of up to 256 characters.

Current Events attributes

Use the Current Events attributes to create situations to monitor the status of certain WebSphere MQ events that occur within the interval specified in the situation. The supported WebSphere MQ events are as follows:

- Channel_Stopped,
- Queue_Depth_High,
- Queue_Full,
- Queue_Service_Interval_High,
- Bridge_Stopped,
- Channel_Not_Activated

When you create Current_Events situations, the Situation Monitor continuously monitors your queue managers and issues an alert when an event, such as Queue_Full, occurs. When the Situation Monitor does not detect a WebSphere MQ event occurrence or detects another, contrary event occurrence, such as the Queue_Not_Full event, the status of the situation changes. Current Events situations alert you to WebSphere MQ events that occur within the interval that you specify in the Situation Editor dialog for the situation you are monitoring. The default interval is 5 minutes. Current Events is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

Appl ID The application identifier that is associated with the event or message. On z/OS systems, this is the JOBNAME; in CICS it is the VTAM Application ID; in IMS it is the IMS subsystem ID. The valid format is an alphanumeric string of up to 28 case-sensitive characters.

Appl Type The application type that is associated with the event or message. The valid format is an integer. Valid values are as follows:

- n/a = -2,
- Unknown = -1,
- NoContext = 0,

- CICS = 1,
- MVS = 2,
- IMS = 3,
- OS2 = 4,
- DOS = 5,
- UNIX = 6,
- QMGR = 7,
- OS400 = 8,
- WINDOWS = 9,
- WINDOWS_NT = 11,
- CICS_VSE = 10,
- VMS = 12,
- GUARDIAN = 13,
- VOS = 14,
- IMS_BRIDGE = 19,
- XCF = 20,
- CICS_BRIDGE = 21,
- NOTES_AGENT = 22,
- SYSTEMEXT = 35,
- USER = 65536.

Event The description of the outstanding WebSphere MQ event (for example, Channel_Stopped). The valid format is an integer. Valid values are as follows:

- Queue_Full = 2053,
- Bridge_Stopped = 2126,
- Queue_Depth_High = 2224,
- Queue_Service_Interval_High = 2226,
- Channel_Stopped = 2283,
- Channel_Not_Activated = 2296.

Event Date & Time The time and date that the event is posted to the WebSphere MQ event queue. The valid format is the standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Event Host Name The name of the host system on which this event occurred (which is not necessarily the host system reporting the event). On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Event QMgr Name The name of the queue manager on which this event occurs. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Event Qualifier The condition that generates the event. The valid format is an integer. Valid values are as follows:

- n/a = 0,
- Connection_Not_Authorized = 1,
- Open_Not_Authorized = 2,
- Close_Not_Authorized = 3,
- Command_Not_Authorized = 4,
- Queue_Manager_Stopping = 5,
- Queue_Manager_Quiescing = 6,
- Channel_Stopped_OK = 7,
- Channel_Stopped_Error = 8,
- Channel_Stopped_Retry = 9,
- Channel_Stopped_Disabled = 10,
- Bridge_Stopped_OK = 11,
- Bridge_Stopped_Error = 12.

Internal EventID The internal identifier that is assigned to the event. The valid format is an alphanumeric string of up to 8 characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Subsys The subsystem ID that is associated with this queue manager. The valid format is an alphanumeric string of up to 4 characters. This attribute is for z/OS systems only.

Reporting Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Reporting Qmgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Resource Name The name of the WebSphere MQ resource (channel or queue) on which the event occurs. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Current Queue Manager Status attributes

Use the Current Queue Manager Status attributes to display the most current status information that is associated with the related queue manager. You can specify one or more attributes that define the data to be displayed. The attributes can be specified in any order, but do not specify the same parameter more than

once. Use the Current Queue Manager Object attributes to create situations for monitoring the status of queue manager or command server.

% Max Active Channels The number of active channel connections as percentage of the maximum number of active channels. The valid value is a decimal in the range 0.0 - 100.0.

% Max Channels The number of current channel connections as a percentage of the maximum number of current channels. The valid value is a decimal in the range 0.0 - 100.0.

Active Channel Connections The number of active channel connections. The valid format is an integer. This attribute is always set to be n/a for distributed systems.

Active Log Copy 1 Dataset Name The name of the first copy of the current active log data set. The valid format is an alphanumeric string of up to 44 case-sensitive characters.

Active Log Copy 2 Dataset Name The name of the second copy of the current active log data set. The valid format is an alphanumeric string of up to 44 case-sensitive characters.

Channel Health Indicator of the channel health. Possible values are as follows:

- 15 (Critical)
 - If there is one or more current channel connections that are not running (default of **CCNRC**)
 - If current channel connections exceeds 90% (default of **CMCPC**) of the maximum number of current channels
 - If active channel connections exceeds 90% (default of **CMAPC**) of the maximum number of active channels
- 10 (Warning)
 - If there is one or more indoubt channel connections (default of **CIDBW**)
 - If current channel connections exceeds 80% (default of **CMCPW**) of the maximum number of current channels
 - If active channel connections exceeds 80% (default of **CMAPW**) of the maximum number of active channels
 - If there are more than 100 server channel connections (default of **CSERW**)
- 5 (OK)
- 0 (Unknown) If the queue manager is stopped

Channel Health Thresholds The threshold value that is used to evaluate the channel health indicator and queue manager health indicator. For performance considerations, you can disable the evaluation or change the threshold value by customizing the associated queries. Use one of the following syntaxes in the query:

- `CHLTHRESH = 'NONE'`
- `CHLTHRESH = 'CCNRC= integer,CIDBW= integer,CMAPC= integer,CMAPW= integer,CMCPC= integer, CMCPW= integer,CSERW= integer'`

where:

NONE

Disables the data collection of realtime channel metrics. The channel health status and the queue manager health status are not evaluated.

CCNRC

Specifies the critical threshold for the number of current channel connections that are not running. If the number of current channel connections that are not running (**Current Channel Connections Not Running**) is greater than the specified value, the **Channel Health** attribute is Critical. The default value is 0.

CIDBW

Specifies the warning threshold for the number of the indoubt channel connections. If the number of the indoubt channel connections (**Indoubt Channels**) is greater than the specified value, the **Channel Health** attribute is Warning. The default value is 0.

CMAPC

Specifies the critical threshold for the number of active channel connections as a percentage of the maximum number of active channels. If the percentage (% **Max Active Channels**) is greater than the specified value, the **Channel Health** attribute is Critical. The default value is 90.

CMAPW

Specifies the warning threshold for the number of active channel connections as a percentage of the maximum number of active channels. If the percentage (% **Max Active Channels**) is greater than the specified value, the **Channel Health** attribute is Warning. The default value is 80.

CMCPC

Specifies the critical threshold for the number of current channel connections as a percentage of the maximum number of current channels. If the percentage (% **Max Channels**) is greater than the specified value, the **Channel Health** attribute is Critical. The default value is 90.

CMCPW

Specifies the warning threshold for the number of current channel connections as a percentage of the maximum number of current channels. If the percentage (% **Max Channels**) is greater than the specified value, the **Channel Health** attribute is Warning. The default value is 80.

CSERW

Specifies the warning threshold for the number of the server channel connections. If the number of server channel connections (**Server Connections**) is greater than the specified value, the **Channel Health** attribute is Warning. The default value is 100.

Channel Initiator Status The status of the channel initiator reading. Valid values are n/a = -1, Stopped = 0, Starting = 1, Running = 2, Stopping = 3, and Retrying = 4.

Command Server Status The status of the command server. Valid values are as follows:

- NotResponding = -2
- n/a = -1
- Stopped = 0
- Starting = 1
- Running = 2
- Stopping = 3
- Retrying = 4
- Waiting = 5

Connection Count Indicates the current number of connection to the queue manager. The valid format is an integer.

Current Channel Connections The number of current channel connections. The valid format is an integer. This attribute is always set to be n/a for distributed systems.

Current Channel Connections Not Running The number of current channel connections that are not running.

Current Log The name of the log extent that is written to at the time that the DISPLAY QMSTATUS command is processed. It is blank for non-linear logging. The valid format is an alphanumeric string of up to 24 case-sensitive characters. This attribute is always blank for z/OS systems.

Current MQEvents The number of rows that the current events table holds in memory.

DLQ Depth The current depth of the dead letter queue.

Get Inhibited Queue Count The number of queues that are get-inhibited.

High Depth Queue Count The number of queues that exceed the high depth threshold.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Indoubt Channels The number of the indoubt channel connections.

Installation Name The WebSphere MQ installation name that is associated with this queue manager. This attribute is for WebSphere MQ V7.1 or later and it is always set to be n/a for z/OS systems.

Installation Path The installation path of this queue manager. This attribute is for WebSphere MQ V7.1 or later and it is always set to be n/a for z/OS systems.

Max Active Channels The maximum number of channels that can be active at any time. Valid value is an integer. The default value is specified by the Max Channels attribute. On z/OS systems, the value must be in the range 1 - 9999. On other systems, the value must be in the range 1 - 65535.

Max Channels The maximum number of channels that can be current (including server-connection channels with connected clients). The valid value is an integer. On z/OS systems, the value must be in the range 1 - 9999, with a default value of 200. On other systems, the value must be in the range 1 - 65535, with the a default value of 100.

Media Recovery Log The name of the oldest log extent that is required by the queue manager to perform media recovery. It is blank for nonlinear logging. The valid format is an alphanumeric string of up to 24 case-sensitive characters. This attribute is always blank for z/OS systems.

Oldest Active UOW Log Dataset Name The name of the oldest active UOW log data set. The valid format is an alphanumeric string of up to 44 case-sensitive characters. This attribute is always blank for distributed systems.

Open Queue Count The number of queues that are open for input or output.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Page Set Recovery Log Dataset Name The name of the log data set that contains the oldest restart Relative Byte Address (RBA) of any page set for the queue manager. The valid format is an alphanumeric string of up to 44 case-sensitive characters. This attribute is always blank for distributed systems.

Permit Standby Indicates whether the queue manager permits standby queue manager instances. This attribute has the following valid values:

- n/a = -1 (z/OS systems only)
- No = 0
- Yes = 1

Put Inhibited Queue Count The number of queues that are put-inhibited.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QMgr Status The current execution status of the queue manager. The valid values are as follows:

- n/a = -1
- Stopped = 0
- Starting = 1
- Running = 2
- Quiescing = 3
- Stopping = 4
- Standby=5

QMgr Type Type of the operating system where this queue manager is running. Valid values are as follows:

- MVS = M
- AIX = A
- OS2 = O
- NT = N
- HPUX = H
- OS400 = 4
- Solaris = S

- Guardian = G
- Windows = W
- Linux = L
- UNIX = U
- VMS = V
- NSK = K
- VSE = E
- n/a = R

Queue Health Indicator of the queue health. Possible values are as follows:

- 15 (Critical)
 - If there is one or more queues exceeding the high depth threshold (default of **QHDPC**)
 - If there are more than 15 messages on transmission queues (default of **QXQMC**)
- 10 (Warning)
 - If the current depth of the dead letter queue is greater than 1 (default of **QDLQW**)
 - If there is one or more put-inhibited queues (default of **QPIHW**)
 - If there is one or more get-inhibited queues (default of **QGIHW**)
 - If there is one or more messages on transmission queues (default of **QXQMW**)
- 5 (OK)
- 0 (Unknown) If the queue manager is stopped

Queue Health Thresholds The threshold value that is used to evaluate the queue health indicator and queue manager health indicator. For performance considerations, you can disable the evaluation or change the threshold value by customizing the associated queries. Use one of the following syntaxes in the query:

- QTHRESH = 'NONE'
- QTHRESH = 'QDLQW= *integer*,QHDPC= *integer*,QGIHW= *integer*,QPIHW= *integer*,QXQMC= *integer*,QXQMW= *integer*'

where:

NONE

Disables the data collection of realtime queue metrics. The queue health status and the queue manager health status are not evaluated.

QDLQW

Specifies the warning threshold for the number of total messages on dead letter queues. If the number of total messages on dead letter queues (**DLQ Depth**) is greater than the specified value, the **Queue Health** attribute is Warning. The default value is 1.

QHDPC

Specifies the threshold against which the number of messages on a queue is compared to determine whether the queue depth has become greater than or equal to the queue depth high limit. The value is expressed as percentage of the maximum queue depth. Valid value is 0 - 100. If the value is 0, the QDepthHighLimit parameter value is used as the high depth threshold. The queue that exceeds a queue depth of the QDepthHighLimit value is identified as a queue that reaches its queue depth high limit.

If the value is greater than 0, the queue that exceeds a queue depth of the QHDPC value is identified as a queue that reaches the queue depth high limit.

If there is one or more queues that reach the queue depth high limit (**High Depth Queue Count** > 0), the **Queue Health** attribute is Critical.

The default value is 0.

QGIHW

Specifies the warning threshold for the number of get inhibited queues. If the number of get inhibited queues (**Get Inhibited Queue Count**) is greater than the specified value, the **Queue Health** attribute is Warning. The default value is 0.

QPIHW

Specifies the warning threshold for the number of put inhibited queues. If the number of put inhibited queues (**Put Inhibited Queue Count**) is greater than the specified value, the **Queue Health** attribute is Warning. The default value is 0.

QXQMC

Specifies the critical threshold for the number of total messages on transmission queues. If the number of total messages on transmission queues (**Total Messages on XMIT Queues**) is greater than the specified value, the **Queue Health** attribute is Critical. The default value is 15.

QXQMW

Specifies the warning threshold for the number of total messages on transmission queues. If the number of total messages on transmission queues (**Total Messages on XMIT Queues**) is greater than the specified value, the **Queue Health** attribute is Warning. The default value is 1.

Queue Manager Health Indicator of the queue manager health. Possible values are as follows:

- 15 (Critical) if the queue manager status is quiescing, stopping, stopped, or n/a
- 10 (Warning)
 - If the queue manager status is starting
 - If the channel initiator status is not running
 - If the command server status is not running
 - If the Queue Health or Channel Health attribute value is Critical
- 5 (OK)
 - If the queue manager, the channel initiator, and the command server are all running
 - If the queue manager status is standby

Recovery Log Path Location of the recovery log extents. The valid format is an alphanumeric string of up to 1024 case-sensitive characters. This attribute is always blank for z/OS systems.

Restart Recovery Log The name of the oldest log extent that is required by the queue manager to perform restart recovery. It is blank if not linear logging. This attribute is always blank for z/OS systems.

Server Connections The number of server connections.

Start Date The date when this queue manager is started. This attribute is not displayed on the portal by default. To display it, create a query to customize the workspace.

Start Time The time when this queue manager is started. This attribute is not displayed on the portal by default. To display it, create a query to customize the workspace.

Total Messages The number of messages that are on all queues.

Total Messages on XMIT Queues The number of messages that are on transmission queues.

Error Log attributes (distributed systems only)

Use the Error Log attributes to create situations that are associated with messages in the error log of a monitored (non z/OS systems only) queue manager. Error Log is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

The Error Log attributes are available on distributed systems only.

Error Message Host Name The host name of the error message. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Explanation (Deprecated) Text that further explains the message in the error log of the queue manager. The valid format is an alphanumeric string of up to 512 case-sensitive characters.

Explanation Text that further explains the message in the error log of the queue manager. The valid format is an alphanumeric string of up to 1024 case-sensitive characters.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Installation Name The name of the installation of the queue manager on which the error occurred. This attribute does not apply to i5/OS™ systems and it is displayed as n/a for an i5/OS system.

Involved Object The name of the object that is associated with the reported message, if found in the message. The agent first scans the Message Text field and extracts text from between the first pair of single quotation marks that are found. If none are found, the agent next scans the Explanation field in the same way. If no text enclosed in single quotation marks is found, the Involved Object field is blank. The valid format is an alphanumeric string of up to 64 case-sensitive characters.

Log Date & Time The date and time of the sample. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Message ID The identifier of the message in the error log of the queue manager. The valid format is an alphanumeric string of up to 12 case-sensitive characters.

Message Text (Deprecated) The text of the message in the error log of the queue manager. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Message Text The text of the message in the error log of the queue manager. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On distributed systems, this name takes the form *qmgr::MQ*. If the *hostid* value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Program Name The name of the program that encounter the error.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

User Action (Deprecated) Text that recommends a user response to the message in the error log of the queue manager. The valid format is an alphanumeric string of up to 512 case-sensitive characters.

User Action Text that recommends a user response to the message in the error log of the queue manager. The valid format is an alphanumeric string of up to 1024 case-sensitive characters.

User Name The name of the user ID that runs the program of errors.

Event Archive attributes

Use the Event Archive attributes to view the archived WebSphere MQ events that are reported to a queue manager. By default, historical data collection is defined for this attribute group, but is not distributed to any agents so no data will be collected unless distribution is defined. This attribute group is eligible for use with Tivoli Data Warehouse. If you enable historical data collection for this attribute group, use Tivoli Data Warehouse to store historical data and set up the Summarization and Pruning Agent if possible. Otherwise, the amount of event data might be large. Event Archive is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

Tip: When you enable historical data collection for this attribute group, you can use the **Filter** tab in the Historical Collection Configuration window to specify the types of events that are necessary for archival. Using the event type filter can avoid all events being collected historically, which might result in a large number of

event records. For example, to archive configuration events to maintain an audit log of configuration changes to queue managers, define the Event column filter to collect only the four types of events, Configuration_Create_Object, Configuration_Change_Object, Configuration_Delete_Object, and Configuration_Refresh_Object. It is also possible to set up multiple historical collections on this same attribute group in case they have different requirements for different event type filters.

Appl ID The application identifier that is associated with the event or message. On z/OS systems, this is the job name; in CICS it is the VTAM Application ID; in IMS it is the IMS subsystem ID. The valid format is an alphanumeric string of up to 28 case-sensitive characters.

Appl Type The application type that is associated with the event or message. The valid format is an integer. Valid values are as follows:

- n/a=-2
- Unknown=-1
- NoContext=0
- CICS=1
- MVS=2
- IMS=3
- OS2=4
- DOS=5
- UNIX=6
- QMGR=7
- OS400=8
- WINDOWS=9
- CICS_VSE=10
- WINDOWS_NT=11
- VMS=12
- GUARDIAN=13
- VOS=14
- IMS_BRIDGE=19
- XCF=20
- CICS_BRIDGE=21
- NOTES_AGENT=22
- USER=25
- CHINIT=30
- BATCH=32
- RRS_BATCH=33
- SYSTEMEXT=35
- USER_FIRST=65536

Event The description of the WebSphere MQ event (for example, Channel_Stopped). The valid format is an integer. Valid values are as follows:

- Alias_Base_Queue_Type_Error=2001
- Get_Inhibited=2016
- Not_Authorized=2035

- Put_Inhibited=2051
- Queue_Full=2053
- Queue_Type_Error=2057
- Unknown_Alias_Base_Queue=2082
- Unknown_Object_Name=2085
- Unknown_Remote_Queue_Manager=2087
- Transmission_Queue_Type_Error=2091
- Transmission_Queue_Usage_Error=2092
- Bridge_Started=2125
- Bridge_Stopped=2126
- Remote_Queue_Name_Error=2184
- Unknown_Transmission_Queue=2196
- Unknown_Default_Xmit_Queue=2197
- Default_Xmit_Queue_Type_Error=2198
- Default_Xmit_Queue_Usage_Error=2199
- Queue_Manager_Active=2222
- Queue_Manager_Not_Active=2223
- Queue_Depth_High=2224
- Queue_Depth_Low=2225
- Queue_Service_Interval_High=2226
- Queue_Service_Interval_OK=2227
- Channel_Auto_Definition_OK=2233
- Channel_Auto_Definition_Error=2234
- Channel_Stopped_By_User=2279
- Channel_Started=2282
- Channel_Stopped=2283
- Channel_Conversion_Error=2284
- Channel_Activated=2295
- Channel_Not_Activated=2296
- Configuration_Create_Object=2367
- Configuration_Change_Object=2368
- Configuration_Delete_Object=2369
- Configuration_Refresh_Object=2370
- Channel_SSL_Error=2371
- Logger=2411
- Command_MQSC=2412
- Command_PCF=2413
- Queue_Not_Full=1002053

Event Date & Time The time and date when the event was posted to the WebSphere MQ event queue. The valid format is standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year

MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Event MQ Host Name The name of the host where this event occurred. This host is not necessarily the host that reported the event. If this is a z/OS system, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Event MQ Manager Name The name of the queue manager on which this event occurred. This queue manager is not necessarily the queue manager that reported the event. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Event Qualifier The condition that generated the event. The valid format is an integer. Valid values are as follows:

- n/a=0
- Connection_Not_Authorized=1
- Open_Not_Authorized=2
- Close_Not_Authorized=3
- Command_Not_Authorized=4
- Queue_Manager_Stopping=5
- Queue_Manager_Quiescing=6
- Channel_Stopped_OK=7
- Channel_Stopped_Error=8
- Channel_Stopped_Retry=9
- Channel_Stopped_Disabled=10
- Bridge_Stopped_OK=11
- Bridge_Stopped_Error=12
- SSL_Handshake_Error=13
- SSL_Cipher_Spec_Error=14
- SSL_Client_Auth_Error=15
- SSL_Peer_Name_Error=16
- Sub_Not_Authorized=17
- Sub_Dest_Not_Authorized=18
- COMMAND_NONE=1000
- Change_Queue_Manager=1001
- Inquire_Queue_Manager=1002
- Change_Process=1003
- Copy_Process=1004
- Create_Process=1005
- Delete_Process=1006
- Inquire_Process=1007

- Change_Queue=1008
- Clear_Queue=1009
- Copy_Queue=1010
- Create_Queue=1011
- Delete_Queue=1012
- Inquire_Queue=1013
- Refresh_Queue_Manager=1016
- Reset_Queue_Stats=1017
- Inquire_Queue_Names=1018
- Inquire_Process_Names=1019
- Inquire_Channel_Names=1020
- Change_Channel=1021
- Copy_Channel=1022
- Create_Channel=1023
- Delete_Channel=1024
- Inquire_Channel=1025
- Ping_Channel=1026
- Reset_Channel=1027
- Start_Channel=1028
- Stop_Channel=1029
- Start_Channel_Initiator=1030
- Start_Channel_Listener=1031
- Change_Namelist=1032
- Copy_Namelist=1033
- Create_Namelist=1034
- Delete_Namelist=1035
- Inquire_Namelist=1036
- Inquire_Namelist_Names=1037
- Escape=1038
- Resolve_Channel=1039
- Ping_Queue_Manager=1040
- Inquire_Queue_Status=1041
- Inquire_Channel_Status=1042
- Config_Event=1043
- Queue_Manager_Event=1044
- Performance_Event=1045
- Channel_Event=1046
- Delete_Publication=1060
- Deregister_Publisher=1061
- Deregister_Subscriber=1062
- Publish=1063
- Register_Publisher=1064
- Register_Subscriber=1065
- Request_Update=1066
- Broker_Internal=1067

- Activity_Message=1069
- Inquire_Cluster_Queue_Manager=1070
- Resume_Queue_Manager_Cluster=1071
- Suspend_Queue_Manager_Cluster=1072
- Refresh_Cluster=1073
- Reset_Cluster=1074
- Trace_Route=1075
- Refresh_Security=1078
- Change_Authentication_Information=1079
- Copy_Authentication_Information=1080
- Create_Authentication_Information=1081
- Delete_Authentication_Information=1082
- Inquire_Authentication_Information=1083
- Inquire_Authentication_Information_Names=1084
- Inquire_Connection=1085
- Stop_Connection=1086
- Inquire_Authority_Records=1087
- Inquire_Entity_Auth=1088
- Delete_Authority_Records=1089
- Set_Authority_Records=1090
- Logger_Event=1091
- Reset_Queue_Manager=1092
- Change_Listener=1093
- Copy_Listener=1094
- Create_Listener=1095
- Delete_Listener=1096
- Inquire_Listener=1097
- Inquire_Listener_Status=1098
- Command_Event=1099
- Change_Security=1100
- Change_CF_Structure=1101
- Change_Storage_Class=1102
- Change_Trace=1103
- Archive_Log=1104
- Backup_CF_Structure=1105
- Create_Buffer_Pool=1106
- Create_Page_Set=1107
- Create_CF_Structure=1108
- Create_Storage_Class=1109
- Copy_CF_Structure=1110
- Copy_Storage_Class=1111
- Delete_CF_Structure=1112
- Delete_Storage_Class=1113
- Inquire_Archive=1114
- Inquire_CF_Structure=1115

- Inquire_CF_Structure_Status=1116
- Inquire_Command_Server=1117
- Inquire_Channel_Init=1118
- Inquire_QSG=1119
- Inquire_Log=1120
- Inquire_Security=1121
- Inquire_Storage_Class=1122
- Inquire_System=1123
- Inquire_Thread=1124
- Inquire_Trace=1125
- Inquire_Usage=1126
- Move_Queue=1127
- Recover_BSDS=1128
- Recover_CF_Structure=1129
- Reset_Tpipe=1130
- Resolve_Indoubt=1131
- Resume_Queue_Manager=1132
- Reverify_Security=1133
- Set_Archive=1134
- Set_Log=1136
- Set_System=1137
- Start_Command_Server=1138
- Start_Queue_Manager=1139
- Start_Trace=1140
- Stop_Channel_Init=1141
- Stop_Channel_Listener=1142
- Stop_Command_Server=1143
- Stop_Queue_Manager=1144
- Stop_Trace=1145
- Suspend_Queue_Manager=1146
- Inquire_CF_Structure_Names=1147
- Inquire_Storage_Class_Names=1148
- Change_Service=1149
- Copy_Service=1150
- Create_Service=1151
- Delete_Service=1152
- Inquire_Service=1153
- Inquire_Service_Status=1154
- Start_Service=1155
- Stop_Service=1156
- Delete_Buffer_Pool=1157
- Delete_Page_Set=1158
- Change_Buffer_Pool=1159
- Change_Page_Set=1160
- Inquire_Queue_Manager_Status=1161

- Create_Log=1162
- Statistics_MQI=1164
- Statistics_Queue=1165
- Statistics_Channel=1166
- Accounting_MQI=1167
- Accounting_Queue=1168
- Inquire_Authority_Service=1169
- Attributes_Before_Change=1000001
- Attributes_After_Change=1000002
- Change_Topic=1170
- Copy_Topic=1171
- Create_Topic=1172
- Delete_Topic=1173
- Inquire_Topic=1174
- Inquire_Topic_Names=1175
- Inquire_Subscription=1176
- Create_Subscription=1177
- Change_Subscription=1178
- Delete_Subscription=1179
- Clear_Subscription=1180
- Copy_Subscription=1181
- Inquire_SBStatus=1182
- Inquire_Topic_Status=1183
- Clear_Topic_String=1184
- Inquire_PubSub_Status=1185

Event User ID The user ID that issued the command or call that generated the event. This attribute is not displayed on the portal by default. To display it, create a query to customize the workspace.

Internal EventID The internal identifier that is assigned to the event. The valid format is an alphanumeric string of up to 8 characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node where the data for the queue manager originates.

On z/OS systems, this name takes the form of *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system or SMF ID.

On distributed systems, this name takes the form of *qmgr::MQ*. If you used the SET AGENT command to set the host ID value, this name takes the form of *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Reporting Host Name The name of the host that reported this event. This host is not necessarily the host where the event occurred. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Reporting Qmgr Name The name of the queue manager that reported this event. This queue manager is not necessarily the queue manager where the event occurred). The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Resource Name The name of the WebSphere MQ resource (channel or queue) where the event occurred. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Sequence ID The sequence identifier of the event details when the details about an event are too many and must be split into several rows.

XML Event Details Event parameter details that are shown in the form of XML attributes.

Event Details attributes

Use the Event Parameters attributes to view event parameters, including name, description, and value.

Event Date & Time The date and time that the event is posted to the WebSphere MQ event queue. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Internal EventID The internal identifier that is assigned to the event. The valid format is an alphanumeric string of up to 8 characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Parameter Description The parameter name of detail for the event. The valid format is an integer. Valid values are as follows:

- Event = 0

- ApplType = 1
- CodedCharSetId = 2
- CurrentQDepth = 3
- DefInputOpenOption = 4
- DefPersistence = 5
- DefPriority = 6
- DefinitionType = 7
- HardenGetBackout = 8
- InhibitGet = 9
- InhibitPut = 10
- MaxHandles = 11
- Usage = 12
- MaxMsgLength = 13
- MaxPriority = 14
- QDepth = 15
- MsgDeliverySequence = 16
- OpenInputCount = 17
- OpenOutputCount = 18
- NameCount = 19
- Qtype = 20
- RetentionInterval = 21
- BackoutThreshold = 22
- Shareability = 23
- TriggerControl = 24
- TriggerInterval = 25
- TriggerMsgPriority = 26
- CPILevel = 27
- TriggerType = 28
- TriggerDepth = 29
- Syncpoint = 30
- CommandLevel = 31
- Platform = 32
- MaxUncommittedMsgs = 33
- TimeSinceReset = 35
- HighQDepth = 36
- MsgEnqCount = 37
- MsgDeqCount = 38
- ExpiryInterval = 39
- QDepthHighLimit = 40
- QDepthLowLimit = 41
- QDepthMaxEvent = 42
- QDepthHighEvent = 43
- QDepthLowEvent = 44
- AuthorityEvent = 47
- InhibitEvent = 48

- LocalEvent = 49
- RemoteEvent = 50
- ConfigurationEvent = 51
- StartStopEvent = 52
- PerformanceEvent = 53
- QServiceInterval = 54
- ChannelAutoDef = 55
- ChannelAutoDefEvent = 56
- IndexType = 57
- ClusterWorkloadLength = 58
- ClusterQType = 59
- Archive = 60
- DefBind = 61
- PagesetId = 62
- QSGDisp = 63
- IntraGroupQueuing = 64
- IGQPutAuthority = 65
- AuthInfoType = 66
- MsgMarkBrowseInterval = 68
- SSLTasks = 69
- CFLevel = 70
- CFRecover = 71
- LastUsed = 72
- ChannelEvent=73
- BridgeEvent = 74
- SSLEvent = 75
- SSLResetCount = 76
- SharedQQMgrName = 77
- NPMClass = 78
- MaxOpenQueue = 80
- MonitorInterval = 81
- QueueUsers = 82
- MaxGlobalLocks = 83
- MaxLocalLocks = 84
- ListenerPortNumber = 85
- BatchInterfaceAuto = 86
- CmdServerAuto = 87
- CmdServerConvertMsg = 88
- CmdServerDlqMsg = 89
- MaxQueueTriggers = 90
- TriggerRestart = 91
- SSLFIPSRequired = 92
- IPAddressVersion = 93
- LoggerEvent = 94
- CLWLQRank = 95

- CLWLQPriority = 96
- CLWLMRUChannels = 97
- CLWLUseQ = 98
- CommandEvent = 99
- MaxActiveChannels = 100
- ChinitAdapters = 101
- AdoptNewMCACheck = 102
- AdoptNewMCAType = 103
- ChinitDispatchers = 105
- DNSWLM = 106
- ListenerTimer = 107
- LU62Channels = 108
- MaxChannels = 109
- OutboundPortMin = 110
- ReceiveTimeout = 111
- ReceiveTimeoutType = 112
- ReceiveTimeoutMin = 113
- TCPChannels = 114
- TCPKeepAlive = 115
- TCPStackType = 116
- ChinitTraceAutoStart = 117
- ChinitTraceTableSize = 118
- ChannelInitiatorControl = 119
- CommandServerControl = 120
- ServiceType = 121
- MonitoringChannel = 122
- MonitoringQ = 123
- MonitoringAutoClusSdr = 124
- MQIStatistics = 127
- QueueStatistics = 128
- ChannelStatistics = 129
- ClusterSenderMonitoringDefault = 130
- StatisticsInterval = 131
- MQIAccounting = 133
- AccountingQ = 134
- AccountingInterval = 135
- AccountingConnOverride = 136
- TraceRouteRecording = 137
- ActivityRecording = 138
- StartMode = 139
- OutboundPortMax = 140
- SecurityCase = 141
- QMOPTCsmtOnError = 150
- QMOPTConsInfoMsgs = 151
- QMOPTConsWarningMsgs = 152

- QMOPTConsErrorMsgs = 153
- QMOPTConsCriticalMsgs = 154
- QMOPTConsCommsMsgs = 155
- QMOPTConsReorgMsgs = 156
- QMOPTConsSystemMsgs = 157
- QMOPTLogInfoMsgs = 158
- QMOPTLogWarningMsgs = 159
- QMOPTLogErrorMsgs = 160
- QMOPTLogCriticalMsgs = 161
- QMOPTLogCommsMsgs = 162
- QMOPTLogReorgMsgs = 163
- QMOPTLogSystemMsgs = 164
- QMOPTTraceMQICalls = 165
- QMOPTTraceComms = 166
- QMOPTTraceReorg = 167
- QMOPTTraceConversion = 168
- QMOPTTraceSystem = 169
- QMOPTInternalDump = 170
- MaxRecoveryTasks = 171
- MaxClients = 172
- AutoReorganization = 173
- AutoReorgInterval = 174
- DurableSubs = 175
- Multicast = 176
- MonitoringTopic = 177
- InhibitPub = 181
- InhibitSub = 182
- TreeLifeTime = 183
- DefPutResponseType = 184
- TopicDefPersistence = 185
- MasterAdmin = 186
- PubSubMode = 187
- DefReadAhead = 188
- ReadAhead = 189
- PropertyControl = 190
- MaxPropertiesLength = 192
- BaseType = 193
- PMDelivery = 195
- NPMDelivery = 196
- ProxySub = 199
- PubSubNPMsg = 203
- SubCount = 204
- PubSubNPResp = 205
- PubSubMaxmsgRetryCount = 206
- PubSubSyncPt = 207

- TopicType = 208
- PubCount = 215
- WildcardOperation = 216
- SubScope = 218
- PubScope = 219
- CommInfoType = 223
- CFOffload = 224
- CFOffloadThreshold1 = 225
- CFOffloadThreshold2 = 226
- CFOffloadThreshold3 = 227
- CFSMDSBuffers = 228
- CFOfflduse = 229
- MaxResponses = 230
- ResponseRestartPoint = 231
- COMMEvent = 232
- MCastBridge = 233
- UseDeadLetterQ = 234
- TolerateUnprotected = 235
- SignatureAlgorithm = 236
- EncryptionAlgorithm = 237
- PolicyVersion = 238
- ActivityConnOverride = 239
- ActivityTrace = 240
- SubConfigurationEvent = 242
- XrCapability = 243
- CFRecauto = 244
- CFConlos = 246
- SuiteBStrength = 247
- ChlauthRecords = 248
- PubsubCluster = 249
- QueueManagerAttrs = 1001
- QueueAttrs = 1002
- ProcessAttrs = 1003
- NamelistAttrs = 1004
- Force = 1005
- Replace = 1006
- Purge = 1007
- Quiesce = 1008
- All = 1009
- EventApplType = 1010
- EventOrigin = 1011
- ErrorIdentifier = 1013
- Selector = 1014
- ChannelAttrs = 1015
- ObjectType = 1016

- EscapeType = 1017
- ErrorOffset = 1018
- AuthInfoAttrs = 1019
- ReasonQualifier = 1020
- Command = 1021
- Options = 1022
- OpenType = 1023
- ProcessID = 1024
- ThreadID = 1025
- QueueStatusAttrs = 1026
- UncommittedMsgs = 1027
- HandleState = 1028
- AuxErrorDataInt1 = 1070
- AuxErrorDataInt2 = 1071
- ConversionReasonCode = 1072
- BridgeType = 1073
- Inquiry = 1074
- WaitInterval = 1075
- Options = 1076
- BrokerOptions = 1077
- RefreshType = 1078
- RefreshType = 1078
- SequenceNumber = 1079
- IntegerData = 1080
- RegistrationOptions = 1081
- PublicationOptions = 1082
- ClusterInfo = 1083
- QueueManagerDefinitionType = 1084
- QueueManagerType = 1085
- Action = 1086
- Suspend = 1087
- BrokerCount = 1088
- ApplCount = 1089
- AnonymousCount = 1090
- RegRegOptions = 1091
- DeleteOptions = 1092
- ClusterQMgrAttrs = 1093
- RefreshInterval = 1094
- RefreshRepository = 1095
- RemoveQueues = 1096
- OpenInputType = 1098
- OpenOutput = 1099
- OpenSet = 1100
- OpenInquire = 1101
- OpenBrowse = 1102

- QueueStatusType = 1103
- QueueHandle = 1104
- QueueStatus = 1105
- SecurityType = 1106
- ConnectionAttrs = 1107
- ConnectOptions = 1108
- ConnInfoType = 1110
- ConnInfoConn = 1111
- ConnInfoHandle = 1112
- ConnInfoAll = 1113
- AuthProfileAttrs = 1114
- AuthorizationList = 1115
- AuthAddAuths = 1116
- AuthRemoveAuths = 1117
- EntityType = 1118
- CommandInfo = 1120
- CmdscopeQueueManagerCount = 1121
- QueueManagerSystem = 1122
- QueueManagerEvent = 1123
- QueueManagerDQM = 1124
- QueueManagerCluster = 1125
- QSGDisps = 1126
- UOWState = 1128
- SecurityItem = 1129
- CFStrucStatus = 1130
- UOWType = 1132
- CFStrucAttrs = 1133
- ExcludeInterval = 1134
- CFStatusType = 1135
- CFStatusSummary = 1136
- CFStatusConnect = 1137
- CFStatusBackup = 1138
- CFStrucType = 1139
- CFStrucSizeMax = 1140
- CFStrucSizeUsed = 1141
- CFStrucEntriesMax = 1142
- CFStrucEntriesUsed = 1143
- CFStrucBackupSize = 1144
- MoveType = 1145
- MoveTypeMove = 1146
- MoveTypeAdd = 1147
- QueueManagerNumber = 1148
- QueueManagerStatus = 1149
- DB2ConnStatus = 1150
- SecurityAttrs = 1151

- SecurityTimeout = 1152
- SecurityInterval = 1153
- SecuritySwitch = 1154
- SecuritySetting = 1155
- StorageClassAttrs = 1156
- UsageType = 1157
- BufferPoolID = 1158
- UsageTotalPages = 1159
- UsageUnusedPages = 1160
- UsagePersistPages = 1161
- UsageNonpersistPages = 1162
- UsageRestartExtents = 1163
- UsageExpandCount = 1164
- PagesetStatus = 1165
- UsageTotalBuffers = 1166
- UsageDataSetType = 1167
- UsagePageset = 1168
- UsageDataSet = 1169
- UsageBufferPool = 1170
- MoveCount = 1171
- ExpiryQueueCount = 1172
- ConfigurationObjects = 1173
- ConfigurationEvents = 1174
- SyspType = 1175
- SyspDeallocInterval = 1176
- SyspMaxArchive = 1177
- SyspMaxReadTapes = 1178
- SyspInBufferSize = 1179
- SyspOutBufferSize = 1180
- SyspOutBufferCount = 1181
- SyspArchive = 1182
- SyspDualActive = 1183
- SyspDualArchive = 1184
- SyspDualBsds = 1185
- SyspMaxConns = 1186
- SyspMaxConnsFore = 1187
- SyspMaxConnsBack = 1188
- SyspExitInterval = 1189
- SyspExitTasks = 1190
- SyspChkpointCount = 1191
- SyspOTMAInterval = 1192
- SyspQIndexDefer = 1193
- SyspDB2Tasks = 1194
- SyspReslevelAudit = 1195
- SyspRoutingCode = 1196

- SyspSMFAccounting = 1197
- SyspSMFStats = 1198
- SyspSMFInterval = 1199
- SyspTraceClass = 1200
- SyspTraceSize = 1201
- SyspWLMInterval = 1202
- SyspAllocUnit = 1203
- SyspArchiveRetain = 1204
- SyspArchiveWTOR = 1205
- SyspBlockSize = 1206
- SyspCatalog = 1207
- SyspCompact = 1208
- SyspAllocPrimary = 1209
- SyspAllocSecondary = 1210
- SyspProtect = 1211
- SyspQuiesceInterval = 1212
- SyspTimestamp = 1213
- SyspUnitAddress = 1214
- SyspUnitStatus = 1215
- SyspLogCopy = 1216
- SyspLogUsed = 1217
- SyspLogSuspend = 1218
- SyspOffloadStatus = 1219
- SyspTotalLogs = 1220
- SyspFullLogs = 1221
- ListenerAttrs = 1222
- ListenerStatusAttrs = 1223
- ServiceAttrs = 1224
- ServiceStatusAttrs = 1225
- QTimeIndicator = 1226
- OldestMsgAge = 1227
- AuthOptions = 1228
- QueueManagerStatusAttrs = 1229
- ConnectionCount = 1230
- QueueManagerFacility = 1231
- ChinitStatus = 1232
- CmdServerStatus = 1233
- RouteDetail = 1234
- RecordedActivities = 1235
- MaxActivities = 1236
- DiscontinuityCount = 1237
- RouteAccumulation = 1238
- RouteDelivery = 1239
- OperationType = 1240
- BackoutCount = 1241

- CompCode = 1242
- Encoding = 1243
- Expiry = 1244
- Feedback = 1245
- MsgFlags = 1247
- MsgLength = 1248
- MsgType = 1249
- Offset = 1250
- OriginalLength = 1251
- Persistence = 1252
- Priority = 1253
- ReasonCode = 1254
- Report = 1255
- Version = 1256
- UnrecordedActivities = 1257
- Monitoring = 1258
- RouteForwarding = 1259
- ServiceStatus = 1260
- QueueTypes = 1261
- UserIdSupport = 1262
- InterfaceVersion = 1263
- AuthServiceAttrs = 1264
- UsageExpandType = 1265
- SyspClusterCache = 1266
- SyspDB2BlobTasks = 1267
- SyspWLMIntUnits = 1268
- TopicAttrs = 1269
- PubSubProperties = 1271
- DestinationClass = 1273
- DurableSubscription = 1274
- SubscriptionScope = 1275
- VariableUserID = 1277
- RequestOnly = 1280
- PubPriority = 1283
- SubAttrs = 1287
- WildcardSchema = 1288
- SubType = 1289
- MessageCount = 1290
- QMGRPubSub = 1291
- QMGRVersion = 1292
- SubStatusAttrs = 1294
- TopicStatus = 1295
- TopicSub = 1296
- TopicPub = 1297
- RetainedPublication = 1300

- TopicStatusAttrs = 1301
- TopicStatusType = 1302
- SubOptions = 1303
- PublishCount = 1304
- ClearType = 1305
- ClearScope = 1306
- SubLevel = 1307
- AsyncState = 1308
- SubSummary = 1309
- ObsoleteMsgs = 1310
- PubSubStatus = 1311
- PSStatusType = 1314
- PubSubStatusAttrs = 1318
- HierarchyLocal = 1319
- HierarchyStatus = 1320
- SelectorType = 1321
- LogCompression = 1322
- GroupURCheckId = 1323
- MulcCapture = 1324
- PermitStandby = 1325
- OperationMode = 1326
- ComminfoAttrs = 1327
- CFSMDSBlockSize = 1328
- CFSMDSExpand = 1329
- UsageFreeBuff = 1330
- UsageFreeBuffPerc = 1331
- CFStrucAccess = 1332
- CFStatusSMDS = 1333
- SMDSAttrs = 1334
- UsageSMDS = 1335
- UsageBlockSize = 1336
- UsageDataBlocks = 1337
- UsageEmptyBuffers = 1338
- UsageInuseBuffers = 1339
- UsageLowestFree = 1340
- UsageOffloadMsgs = 1341
- UsageReadsSaved = 1342
- UsageSavedBuffers = 1343
- UsageTotalBlocks = 1344
- UsageUsedBlocks = 1345
- UsageUsedRate = 1346
- UsageWaitRate = 1347
- SMDSOpenmode = 1348
- SMDSStatus = 1349
- SMDSAvail = 1350

- MCastRelIndicator = 1351
- ChlauthType = 1352
- MQXRDiagnosicsType = 1354
- ChlauthAttrs = 1355
- OperationId = 1356
- APICallerType = 1357
- APIEnvironment = 1358
- TraceDetail = 1359
- HOBJ = 1360
- CallType = 1361
- MQCBOperation = 1362
- MQCBType = 1363
- MQCBOptions = 1364
- CloseOptions = 1365
- CTLOperation = 1366
- GetOptions = 1367
- RecsPresent = 1368
- KnownDestCount = 1369
- UnknownDestCount = 1370
- InvalidDestCount = 1371
- ResolvedType = 1372
- PutOptions = 1373
- BufferLength = 1374
- TraceDataLength = 1375
- SMDSExpandst = 1376
- StrucLength = 1377
- ItemCount = 1378
- ExpiryTime = 1379
- ConnectTime = 1380
- DisconnectTime = 1381
- HSub = 1382
- SubRqOptions = 1383
- XARMId = 1384
- XAFlags = 1385
- XARetCode = 1386
- XAHandle = 1387
- XARetVal = 1388
- StatusType = 1389
- XACount = 1390
- SelectorCount = 1391
- Selectors = 1392
- IntAttrCount = 1393
- IntAttrs = 1394
- SubRqAction = 1395
- NumPubs = 1396

- PointerSize = 1397
- RemoveAuthRec = 1398
- XRAttrs = 1399
- ApplFunctionType = 1400
- ExportType = 1402
- ExportAttrs = 1403
- SystemObjects = 1404
- XmitProtocolType = 1501
- BatchSize = 1502
- DiscInterval = 1503
- ShortTimer = 1504
- ShortRetry = 1505
- LongTimer = 1506
- LongRetry = 1507
- PutAuthority = 1508
- SequenceNumberWrap = 1509
- MaxMsgLength = 1510
- ChannelType = 1511
- DataCount = 1512
- NetBIOSNameCount = 1513
- MsgSequenceNumber = 1514
- DataConversion = 1515
- InDoubt = 1516
- MCAType = 1517
- NetBIOSSessionCount = 1518
- NetBIOSAdapter = 1519
- NetBIOSCommandCount = 1520
- SPXSocket = 1521
- Port = 1522
- ChannelInstanceType = 1523
- ChannelInstanceAttrs = 1524
- ChannelErrorData = 1525
- ChannelTable = 1526
- ChannelStatus = 1527
- IndoubtStatus = 1528
- LastSequenceNumber = 1529
- CurrentMsgs = 1531
- CurrentSeqNumber = 1532
- SSLReturnCode = 1533
- Msgs = 1534
- BytesSent = 1535
- BytesReceived = 1536
- Batches = 1537
- BuffersSent = 1538
- BuffersRcvd = 1539

- LongRetriesLeft = 1540
- ShortRetriesLeft = 1541
- MCASStatus = 1542
- StopRequested = 1543
- MRCount = 1544
- MRInterval = 1545
- NPMSpeed = 1562
- HBInterval = 1563
- BatchInterval = 1564
- NetworkPriority = 1565
- BatchHB = 1567
- SSLClientAuth = 1568
- SSLAllocRetry = 1570
- SSLAllocFastTimer = 1571
- SSLAllocSlowTimer = 1572
- DiscRetry = 1573
- PortNumber = 1574
- HdrCompression = 1575
- MsgCompression = 1576
- CLWLChannelRank = 1577
- CLWLChannelPriority = 1578
- CLWLChannelWeight = 1579
- ChannelDisp = 1580
- InboundDisp = 1581
- ChannelTypes = 1582
- AdapsStarted = 1583
- AdapsMax = 1584
- DispsStarted = 1585
- DispsMax = 1586
- SSLTasksStarted = 1587
- SSLTasksMax = 1588
- CurrentChl = 1589
- CurrentChlMax = 1590
- CurrentChlTcp = 1591
- CurrentChlLU62 = 1592
- ActiveChl = 1593
- ActiveChlMax = 1594
- ActiveChlPaused = 1595
- ActiveChlStarted = 1596
- ActiveChlStopped = 1597
- ActiveChlRetry = 1598
- ListenerStatus = 1599
- SharedChlRestart = 1600
- StartMode = 1601
- Backlog = 1602

- XmitQTimeIndicator = 1604
- NetworkTimeIndicator = 1605
- ExitTimeIndicator = 1606
- BatchSizeIndicator = 1607
- XmitQMsgsAvailable = 1608
- ChannelSubstate = 1609
- SSLKeyResets = 1610
- CompressionRate = 1611
- CompressionTime = 1612
- MaxXmitSize = 1613
- DefChannelDisp = 1614
- SharingConversations = 1615
- MaxSharingConvs = 1616
- CurrentSharingConvs = 1617
- MaxInstances = 1618
- MaxInstsPerClient = 1619
- ClientChannelWeight = 1620
- ConnectionAffinity = 1621
- ResetRequested = 1623
- BatchDataLimit = 1624
- MsgHistory = 1625
- MulticastProperties = 1626
- NewSubscriberHistory = 1627
- MCHBInterval = 1628
- UseClientId = 1629
- MQTTKeepAlive = 1630
- InDoubtInBound = 1631
- InDoubtOutBound = 1632
- MsgsSent = 1633
- MsgsReceived = 1634
- PendingOut = 1635
- AvailableCipherspecs = 1636
- MATCH = 1637
- UserSource = 1638
- Warning = 1639
- DefReconnect = 1640
- ChannelSummaryAttrs = 1642
- UserList = 2000
- ApplId = 2001
- BaseQName = 2002
- CommandInputQName = 2003
- CreationDate = 2004
- CreationTime = 2005
- DeadLetterQName = 2006
- EnvData = 2007

- InitiationQName = 2008
- NamelistDesc = 2009
- NamelistName = 2010
- ProcessDesc = 2011
- ProcessName = 2012
- QDesc = 2013
- QmgrDesc = 2014
- QmgrName = 2015
- QName = 2016
- RemoteQmgrName = 2017
- RemoteQName = 2018
- BackoutReqQName = 2019
- Names = 2020
- UserData = 2021
- Storage_Class = 2022
- Trigger_Data = 2023
- XmitQName = 2024
- DefXmitQName = 2025
- ChannelAutoDefExit = 2026
- AlterationDate = 2027
- AlterationTime = 2028
- ClusterName = 2029
- ClusterNamelist = 2030
- ClusterQmgrName = 2031
- QMgrIdentifier = 2032
- ClusterWorkloadExit = 2033
- ClusterWorkloadData = 2034
- RepositoryName = 2035
- RepositoryNamelist = 2036
- ClusterDate = 2037
- ClusterTime = 2038
- CFStrucName = 2039
- QSGName = 2040
- IGQUserId = 2041
- StorageClassDesc = 2042
- XCFGGroupName = 2043
- XCFMemberName = 2044
- AuthInfoName = 2045
- AuthInfoDesc = 2046
- LDAPUserName = 2047
- LDAPPASSWORD = 2048
- SSLKeyRepository = 2049
- SSLCRLNamelist = 2050
- SSLCryptoHardware = 2051
- CFStrucDesc = 2052

- AuthInfoConnName = 2053
- CICSFileName = 2060
- TriggerTransId = 2061
- TriggerProgramName = 2062
- TriggerTermId = 2063
- TriggerChannelName = 2064
- SystemLogQName = 2065
- MonitorQName = 2066
- CommandReplyQName = 2067
- BatchInterfaceId = 2068
- SSLKeyLibrary = 2069
- SSLKeyMember = 2070
- DNSGroup = 2071
- LUGroupName = 2072
- LUName = 2073
- LU62ARMSuffix = 2074
- TCPName = 2075
- ChInitServiceParm = 2076
- ServiceName = 2077
- ServiceDesc = 2078
- StartCommand = 2079
- StartArguments = 2080
- StopCommand = 2081
- StopArguments = 2082
- StdoutDestination = 2083
- StderrDestination = 2084
- TpipeName = 2085
- PassTicketAppl = 2086
- AutoReorgStartTime = 2090
- AutoReorgCatalog = 2091
- TopicName = 2092
- TopicDesc = 2093
- TopicString = 2094
- ModelDurableQ = 2096
- ModelNonDurableQ = 2097
- ResumeDate = 2098
- ResumeTime = 2099
- Child = 2101
- Parent = 2102
- AdminTopicName = 2105
- LastUsed = 2108
- OCSPResponderURL = 2109
- CommInfoName = 2110
- CommInfoDesc = 2111
- PolicyName = 2112

- SignerDN = 2113
- RecipientDN = 2114
- InstallationDesc = 2115
- InstallationName = 2116
- InstallationPath = 2117
- ChlauthDesc = 2118
- Custom = 2119
- Version = 2120
- XRVersion = 2122
- XRSSLCipherSuites = 2123
- FromQName = 3001
- ToQName = 3002
- FromProcessName = 3003
- ToProcessName = 3004
- FromNamelistName = 3005
- ToNamelistName = 3006
- FromChannelName = 3007
- ToChannelName = 3008
- FromAuthInfoName = 3009
- ToAuthInfoName = 3010
- QueueNames = 3011
- ProcessNames = 3012
- NamelistNames = 3013
- EscapeText = 3014
- LocalQueueNames = 3015
- ModelQueueNames = 3016
- AliasQueueNames = 3017
- RemoteQueueNames = 3018
- SenderChannelNames = 3019
- ServerChannelNames = 3020
- RequesterChannelNames = 3021
- ReceiverChannelNames = 3022
- ObjectQMgrName = 3023
- ApplName = 3024
- UserIdentifier = 3025
- AuxErrorDataStr1 = 3026
- AuxErrorDataStr2 = 3027
- AuxErrorDataStr3 = 3028
- BridgeName = 3029
- StreamName = 3030
- Topic = 3031
- ParentQueueManagerName = 3032
- CorrelId = 3033
- PublishTimestamp = 3034
- StringData = 3035

- SupportedStreamName = 3036
- RegTopic = 3037
- RegTime = 3038
- RegUserId = 3039
- ChildQueueManagerName = 3040
- RegStreamName = 3041
- RegQueueManagerName = 3042
- RegQueueName = 3043
- RegCorrelId = 3044
- EventUserId = 3045
- ObjectName = 3046
- EventQMgr = 3047
- AuthInfoNames = 3048
- EventApplIdentity = 3049
- EventApplName = 3050
- EventApplOrigin = 3051
- SubscriptionName = 3052
- RegSubName = 3053
- SubscriptionIdentity = 3054
- RegSubIdentity = 3055
- SubscriptionUserData = 3056
- RegSubUserData = 3057
- ApplTag = 3058
- DataSetName = 3059
- UOWStartDate = 3060
- UOWStartTime = 3061
- UOWLogStartDate = 3062
- UOWLogStartTime = 3063
- UOWLogExtentName = 3064
- PrincipalEntityNames = 3065
- GroupEntityNames = 3066
- AuthProfileNames = 3067
- EntityNames = 3068
- ServiceComponent = 3069
- ResponseQueueManagerName = 3070
- CurrentLogExtent = 3071
- RestartRecoveryLogExtent = 3072
- MediaRecoveryLogExtent = 3073
- LogPath = 3074
- CommandMQSC = 3075
- QueueManagerCPF = 3076
- UsageLogRBA = 3078
- UsageLogLRSN = 3079
- CommandScope = 3080
- ASID = 3081

- PSBName = 3082
- PST_ID = 3083
- TaskNumber = 3084
- TransactionId = 3085
- QueueManagerUOWId = 3086
- OriginName = 3088
- EnvInfo = 3089
- SecurityProfile = 3090
- ConfigurationDate = 3091
- ConfigurationTime = 3092
- FromCFStrucName = 3093
- ToCFStrucName = 3094
- CFStrucNames = 3095
- FailDate = 3096
- FailTime = 3097
- BackupDate = 3098
- BackupTime = 3099
- SystemName = 3100
- CFStrucBackupStart = 3101
- CFStrucBackupEnd = 3102
- CFStrucLogQueueManagers = 3103
- FromStorageClassName = 3104
- ToStorageClassName = 3105
- StorageClassNames = 3106
- DSG_Name = 3108
- DB2_Name = 3109
- SyspCmdUserId = 3110
- SyspOTMAGroup = 3111
- SyspOTMAMember = 3112
- SyspOTMADruExit = 3113
- SyspOTMATpipePFX = 3114
- SyspArchivePFX1 = 3115
- SyspArchiveUnit1 = 3116
- SyspLogCorrelId = 3117
- SyspUnitVolser = 3118
- SyspQueueManagerTime = 3119
- SyspQueueManagerDate = 3120
- SyspQueueManagerRBA= 3121
- SyspLogRBA = 3122
- SyspService = 3123
- FromListenerName = 3124
- ToListenerName = 3125
- FromServiceName = 3126
- ToServiceName = 3127
- LastPutDate = 3128

- LastPutTime = 3129
- LastGetDate = 3130
- LastGetTime = 3131
- OperationDate = 3132
- OperationTime = 3133
- ActivityDesc = 3134
- ApplIdentityData = 3135
- ApplOriginData = 3136
- PutDate = 3137
- PutTime = 3138
- ReplyToQ=3139
- ReplyToQMgr = 3140
- ResolvedQName = 3141
- StrucId = 3142
- ValueName = 3143
- ServiceStartDate = 3144
- ServiceStartTime = 3145
- SyspOfflineRBA = 3146
- SyspArchivePFX2 = 3147
- SyspArchiveUnit2 = 3148
- ToTopicName = 3149
- FromTopicName = 3150
- TopicNames = 3151
- SubName = 3152
- DestinationQMGR = 3153
- Destination = 3154
- SubUserID = 3156
- SubUserData = 3159
- SubSelector = 3160
- LastPubDate = 3161
- LastPubTime = 3162
- FromSubName = 3163
- ToSubName = 3164
- LastMsgTime = 3167
- LastMsgDate = 3168
- SubscriptionPoint = 3169
- Filter = 3170
- None = 3171
- AdminTopicNames = 3172
- RoutingFingerPrint = 3173
- ApplDesc = 3174
- QMgrStartDate = 3175
- QMgrStartTime = 3176
- FromCommInfoName = 3177
- ToCommInfoName = 3178

- COffloadSize1 = 3179
- COffloadSize2 = 3180
- COffloadSize3 = 3181
- CFSMDSGenericName = 3182
- CFSMDS = 3183
- RecoveryDate = 3184
- RecoveryTime = 3185
- SMDSConn = 3186
- CFStrucName = 3187
- AlternateUserid = 3188
- CharAttrs = 3189
- DynamicQName = 3190
- HostName = 3191
- MQCBName = 3192
- ObjectString = 3193
- ResolvedLocalQMgr = 3194
- ResolvedLocalQName = 3195
- ResolvedObjectString = 3196
- ResolvedQMgr = 3197
- SelectionString = 3198
- XAInfo = 3199
- ApplFunction = 3200
- XQHRemoteQName = 3201
- XQHRemoteQMgr = 3202
- XQHPutTime = 3203
- XQHPutDate = 3204
- ChannelName = 3501
- Desc = 3502
- ModeName = 3503
- TPName = 3504
- XmitQName = 3505
- ConnectionName = 3506
- MCAName = 3507
- SecExitName = 3508
- MsgExitName = 3509
- SendExitName = 3510
- RcvExitName = 3511
- ChannelNames = 3512
- SecExitUserData = 3513
- MsgExitUserData = 3514
- SendExitUserData = 3515
- RcvExitUserData = 3516
- UserId = 3517
- Password = 3518
- LocalAddress = 3520

- NetBIOSLocalName = 3521
- LastMsgTime = 3524
- LastMsgDate = 3525
- MCAUserId = 3527
- ChannelStartTime = 3528
- ChannelStartDate = 3529
- MCAJobName = 3530
- LastLUWID = 3531
- CurrentLUWID = 3532
- Format = 3533
- MRExitName = 3534
- MRExitUserData = 3535
- SSLCipherSpec = 3544
- SSLPeerName = 3545
- SSLHandshakeStage = 3546
- SSLShortPeerName=3547
- RemoteApplTag=3548
- SSLCertUserId=3549
- SSLCertIssuerName=3550
- LU_Name = 3551
- IPAddress = 3552
- TCP_Name = 3553
- ListenerName = 3554
- ListenerDesc = 3555
- ListenerStartDate = 3556
- ListenerStartTime = 3557
- SSLKeyResetDate = 3558
- SSLKeyResetTime = 3559
- RemoteVersion = 3560
- RemoteProduct = 3561
- GroupAddress = 3562
- JassConfig = 3563
- ClientId = 3564
- SSLKeyPassphrase = 3565
- ConnectionNameList = 3566
- ClientUserIdentifier = 3567
- MCAUserIdList = 3568
- SSLCipherSuite = 3569
- EventAccountingToken = 7001
- EventSecurityID = 7002
- ResponseSet = 7003
- ResponseID = 7004
- ExternalUOWID = 7005
- ConnectionID = 7006
- GenericConnectionID = 7007

- OriginUOWID = 7008
- QMGRUOWID = 7009
- AccountingToken = 7010
- CorrelID = 7011
- GroupID = 7012
- MsgID = 7013
- CFLEID = 7014
- DestinationCorrelID = 7015
- SubID = 7016
- AlternateSecurityId = 7019
- MessageData = 7020
- MQBOStruct = 7021
- MQCBFunction = 7022
- MQCBCStruct = 7023
- MQCBDStruct = 7024
- MQCDStruct = 7025
- MQCNOStruct = 7026
- MQGMOStruct = 7027
- MQMDStruct = 7028
- MQPMOStruct = 7029
- MQSDStruct = 7030
- MQSTSStruct = 7031
- SubCorrelId = 7032
- XA_XID = 7033
- XQHCorrelId = 7034
- XQHMsgId = 7035
- Instances = 1001001

Parameter Type The type of the parameter. The valid format is an alphanumeric string of up to 22 characters.

Parameter Value (Deprecated) The value of the parameter. The valid format is an alphanumeric string of up to 264 characters. This attribute has been deprecated.

Parameter Value The value of the parameter. The valid format is an alphanumeric string of up to 264 characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Event History attributes

Use the Event History attributes to look for trends in the occurrence of WebSphere MQ events. Because you can monitor events that occur in a queue manager from the same or another queue manager, the Event QMgr Name and Event Host Name attributes indicate where the event actually occurs. Events are displayed whether they are local or if they occur on a remote queue manager that reports to the selected queue manager. These attributes are informational only; they cannot be used to create situations.

Appl ID The application identifier that is associated with the event or message. On z/OS systems, this is the JOBNAME; in CICS it is the VTAM Application ID; in IMS it is the IMS subsystem ID. The valid format is an alphanumeric string of up to 28 case-sensitive characters.

Appl Type The application type that is associated with the event or message. The valid format is an integer. Valid values are as follows:

- n/a = -2,
- Unknown = -1,
- NoContext = 0,
- CICS = 1,
- MVS = 2,
- IMS = 3,
- OS2 = 4,
- DOS = 5,
- UNIX = 6,
- QMGR = 7,
- OS400 = 8,
- WINDOWS = 9,
- CICS_VSE = 10,
- VMS = 12,
- GUARDIAN = 13,
- VOS = 14,
- IMS_BRIDGE = 19,
- XCF = 20,
- CICS_BRIDGE = 21,
- NOTES_AGENT = 22,
- USER = 25,
- BROKER = 26,
- QMGR_PUBLISH = 27,
- JAVA = 28,
- DQM = 29,
- CHINIT = 30,
- WLM = 31,
- BATCH = 32,
- RRS_BATCH = 33,
- SIB = 34,
- SYSTEMEXT = 35,
- SYSTEM = 101 (z/OS systems only),
- USER_FIRST = 65536

Event The description of the outstanding WebSphere MQ event (for example, Channel_Stopped). The valid format is an integer. Valid values are as follows:

- Alias_Base_Queue_Type_Error = 2001,
- Get_Inhibited = 2016,
- Not_Authorized = 2035,
- Put_Inhibited = 2051,

- Queue_Full = 2053,
- Queue_Type_Error = 2057,
- Unknown_Alias_Base_Queue = 2082,
- Unknown_Object_Name = 2085,
- Unknown_Remote_Queue_Manager = 2087,
- Transmission_Queue_Type_Error = 2091,
- Transmission_Queue_Usage_Error = 2092,
- Bridge_Started = 2125,
- Bridge_Stopped = 2126,
- Remote_Queue_Name_Error = 2184,
- Unknown_Transmission_Queue = 2196,
- Unknown_Default_Xmit_Queue = 2197,
- Default_Xmit_Queue_Type_Error = 2198,
- Default_Xmit_Queue_Usage_Error = 2199,
- Queue_Manager_Active = 2222,
- Queue_Manager_Not_Active = 2223,
- Queue_Depth_High = 2224,
- Queue_Depth_Low = 2225,
- Queue_Service_Interval_High = 2226,
- Queue_Service_Interval_OK = 2227,
- Channel_Auto_Definition_OK = 2233,
- Channel_Auto_Definition_Error = 2234,
- Channel_Stopped_By_User = 2279,
- Channel_Started = 2282,
- Channel_Stopped = 2283,
- Channel_Conversion_Error = 2284,
- Channel_Activated = 2295,
- Channel_Not_Activated = 2296,
- Configuration_Create_Object = 2367,
- Configuration_Change_Object = 2368,
- Configuration_Delete_Object = 2369,
- Configuration_Refresh_Object = 2370,
- Channel_SSL_Error = 2371,
- Logger = 2411,
- Command_MQSC = 2412,
- Command_PCF = 2413,
- PDS_Events_Lost = 1002052,
- Queue_Not_Full = 1002053.

Event Date & Time The time and date that the event is posted to the WebSphere MQ event queue. The valid format is the standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month

DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Event Host Name The name of the host system on which this event occurs (which is not necessarily the host system reporting the event). If this is a z/OS system, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Event QMgr Name The name of the queue manager on which this event occurs (which is not necessarily the queue manager reporting the event). The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Event Qualifier Describes the condition that generates the event. Valid format is an integer. Valid values are as follows:

- n/a = 0,
- Connection_Not_Authorized = 1,
- Open_Not_Authorized = 2,
- Close_Not_Authorized = 3,
- Command_Not_Authorized = 4,
- Queue_Manager_Stopping = 5,
- Queue_Manager_Quiescing = 6,
- Channel_Stopped_OK = 7,
- Channel_Stopped_Error = 8,
- Channel_Stopped_Retry = 9,
- Channel_Stopped_Disabled = 10,
- Bridge_Stopped_OK = 11,
- Bridge_Stopped_Error = 12,
- SSL_Handshake_Error = 13,
- SSL_Cipher_Spec_Error = 14,
- SSL_Client_Auth_Error = 15,
- SSL_Peer_Name_Error = 16,
- SUB_Not_Authorized = 17,
- SUB_Dest_Not_Authorized = 18,
- COMMAND_NONE = 1000,
- Change_Queue_Manager = 1001,
- Inquire_Queue_Manager = 1002,
- Change_Process = 1003,
- Copy_Process = 1004,
- Create_Process = 1005,
- Delete_Process = 1006,
- Inquire_Process = 1007,
- Change_Queue = 1008,
- Clear_Queue = 1009,

- Copy_Queue = 1010,
- Create_Queue = 1011,
- Delete_Queue = 1012,
- Inquire_Queue = 1013,
- Refresh_Queue_Manager = 1016,
- Reset_Queue_Stats = 1017,
- Inquire_Queue_Names = 1018,
- Inquire_Process_Names = 1019,
- Inquire_Channel_Names = 1020,
- Change_Channel = 1021,
- Copy_Channel = 1022,
- Create_Channel = 1023,
- Delete_Channel = 1024,
- Inquire_Channel = 1025,
- Ping_Channel = 1026,
- Reset_Channel = 1027,
- Start_Channel = 1028,
- Stop_Channel = 1029,
- Start_Channel_Initiator = 1030,
- Start_Channel_Listener = 1031,
- Change_Namelist = 1032,
- Copy_Namelist = 1033,
- Create_Namelist = 1034,
- Delete_Namelist = 1035,
- Inquire_Namelist = 1036,
- Inquire_Namelist_Names = 1037,
- Escape = 1038, Resolve_Channel = 1039,
- Ping_Queue_Manager = 1040,
- Inquire_Queue_Status = 1041,
- Inquire_Channel_Status = 1042,
- Config_Event = 1043,
- Queue_Manager_Event = 1044,
- Performance_Event = 1045,
- Channel_Event = 1046,
- Delete_Publication = 1060,
- Deregister_Publisher = 1061,
- Deregister_Subscriber = 1062,
- Publish = 1063,
- Register_Publisher = 1064,
- Register_Subscriber = 1065,
- Request_Update = 1066,
- Broker_Internal = 1067,
- Activity_Message = 1069,
- Inquire_Cluster_Queue_Manager = 1070,
- Resume_Queue_Manager_Cluster = 1071,

- Suspend_Queue_Manager_Cluster = 1072,
- Refresh_Cluster = 1073,
- Reset_Cluster = 1074,
- Trace_Route = 1075,
- Refresh_Security = 1078,
- Change_Authentication_Information = 1079,
- Copy_Authentication_Information = 1080,
- Create_Authentication_Information = 1081,
- Delete_Authentication_Information = 1082,
- Inquire_Authentication_Information = 1083,
- Inquire_Authentication_Information_Names = 1084,
- Inquire_Connection = 1085,
- Stop_Connection = 1086,
- Inquire_Authority_Records = 1087,
- Inquire_Entity_Auth = 1088,
- Delete_Authority_Records = 1089,
- Set_Authority_Records = 1090,
- Logger_Event = 1091,
- Reset_Queue_Manager = 1092,
- Change_Listener = 1093,
- Copy_Listener = 1094,
- Create_Listener = 1095,
- Delete_Listener = 1096,
- Inquire_Listener = 1097,
- Inquire_Listener_Status = 1098,
- Command_Event = 1099,
- Change_Security = 1100,
- Change_CF_Structure = 1101,
- Change_Storage_Class = 1102,
- Change_Trace = 1103,
- Archive_Log = 1104,
- Backup_CF_Structure = 1105,
- Create_Buffer_Pool = 1106,
- Create_Page_Set = 1107,
- Create_CF_Structure = 1108,
- Create_Storage_Class = 1109,
- Copy_CF_Structure = 1110,
- Copy_Storage_Class = 1111,
- Delete_CF_Structure = 1112,
- Delete_Storage_Class = 1113,
- Inquire_Archive = 1114,
- Inquire_CF_Structure = 1115,
- Inquire_CF_Structure_Status = 1116,
- Inquire_Command_Server = 1117,
- Inquire_Channel_Init = 1118,

- Inquire_QSG = 1119,
- Inquire_Log = 1120,
- Inquire_Security = 1121,
- Inquire_Storage_Class = 1122,
- Inquire_System = 1123,
- Inquire_Thread = 1124,
- Inquire_Trace = 1125,
- Inquire_Usage = 1126,
- Move_Queue = 1127,
- Recover_BSDS = 1128,
- Recover_CF_Structure = 1129,
- Reset_Tpipe = 1130,
- Resolve_Indoubt = 1131,
- Resume_Queue_Manager = 1132,
- Reverify_Security = 1133,
- Set_Archive = 1134,
- Set_Log = 1136,
- Set_System = 1137,
- Start_Command_Server = 1138,
- Start_Queue_Manager = 1139,
- Start_Trace = 1140,
- Stop_Channel_Init = 1141,
- Stop_Channel_Listener = 1142,
- Stop_Command_Server = 1143,
- Stop_Queue_Manager = 1144 ,
- Stop_Trace = 1145,
- Suspend_Queue_Manager = 1146,
- Inquire_CF_Structure_Names = 1147,
- Inquire_Storage_Class_Names = 1148,
- Change_Service = 1149,
- Copy_Service = 1150,
- Create_Service = 1151,
- Delete_Service = 1152,
- Inquire_Service = 1153,
- Inquire_Service_Status = 1154,
- Start_Service = 1155,
- Stop_Service = 1156,
- Delete_Buffer_Pool = 1157,
- Delete_Page_Set = 1158,
- Change_Buffer_Pool = 1159,
- Change_Page_Set = 1160,
- Inquire_Queue_Manager_Status = 1161,
- Create_Log = 1162,
- Statistics_MQI = 1164,
- Statistics_Queue = 1165,

- Statistics_Channel = 1166,
- Accounting_MQI = 1167,
- Accounting_Queue = 1168,
- Inquire_Authority_Service = 1169,
- Change_Topic = 1170,
- Copy_Topic = 1171,
- Create_Topic = 1172,
- Delete_Topic = 1173,
- Inquire_Topic = 1174,
- Inquire_Topic_Names = 1175,
- Inquire_Subscription = 1176,
- Create_Subscription = 1177,
- Change_Subscription = 1178,
- Delete_Subscription = 1179,
- Clear_Subscription = 1180,
- Copy_Subscription = 1181,
- Inquire_SBStatus = 1182,
- Inquire_Topic_Status = 1183,
- Clear_Topic_String = 1184,
- Inquire_PUBSUB_Status = 1185.
- Attributes_Before_Change = 1000001,
- Attributes_After_Change = 1000002

Event User ID The user ID that issued the command or call that generated the event. This attribute is not displayed on the portal by default. To display it, create a query to customize the workspace.

Instances The count of instances of the event. The valid format is an integer.

Internal EventID The internal identifier that is assigned to the event. The valid format is an alphanumeric string of up to 8 characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

PCF Length The length of the PCF parameters for the event. The valid format is an integer.

PCF Parameters The PCF parameters structures for the event. Valid format is an alphanumeric string of up to 2048 case-sensitive characters.

Reporting Host Name The name of the system reporting this event (which is not necessarily the host system on which the event occurred). On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Reporting QMgr Name The name assigned to the queue manager reporting this event (which is not necessarily the queue manager on which the event occurred). The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Resource Name The name of the WebSphere MQ resource (channel or queue) on which the event occurs. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Resource Name (Deprecated) The name of the WebSphere MQ resource (channel or queue) on which the event occurs. The valid format is an alphanumeric string of up to 48 case-sensitive characters. This attribute is deprecated.

Listener Status attributes (distributed systems only)

Use the Listener Status attributes to display status information for one or more listeners. You must specify a listener for which you want to display status information. You can specify a listener by using either a specific listener name or a generic listener name. By using a generic listener name, you can display either of the following:

- Status information for all listener definitions, by using a single asterisk (*)
- Status information for one or more listeners that match the specified name

The Listener Status attributes are available on distributed systems only.

Concurrent Conn Request Count The number of concurrent connection requests that the listener supports. The valid format is an integer.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Listener Description The descriptive plain text comment that is defined with listener. Valid format is an alphanumeric string of up to 256 case-sensitive characters.

Listener Name The name of the listener. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

LU62 Tran Pgm Name The LU6.2 transaction program name. This is applicable only to Windows system when the transport type is LU62. The valid format is an alphanumeric string of up to 64 case-sensitive characters.

NetBIOS Adapter The adapter number on which NetBIOS listens. This attribute is applies only to Windows system when the transport type is NETBIOS. The valid format is an integer.

NetBIOS Command Count The number of commands that the listener can use. This attribute is valid only on Windows systems when the transport type is NETBIOS. The valid format is an integer.

NetBIOS Local Name The NETBIOS local name that the listener uses. This is applicable to Windows systems only when the transport type is NETBIOS. The valid format is an alphanumeric string of up to 264 case-sensitive characters.

NetBIOS Name Count The number of names that the listener can use. This attribute is valid only on Windows systems when the transport type is NETBIOS. The valid format is an integer.

NetBIOS Session Count The number of sessions that the listener can use. This attribute is valid only on Windows systems when the transport type is NETBIOS. The valid format is an integer.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Process Identifier The operating system process identifier that is associated with the listener. Valid format is an integer.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

SPX Socket The SPX socket on which to listen. This is valid only if the transport type is SPX. The valid format is an integer.

Start Date & Time The date and time at which the listener is started. The valid format is the standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C	Century (0 for 20th, 1 for 21st)
YY	Year
MM	Month
DD	Day
HH	Hour
MM	Minute
SS	Second
mmm	Millisecond

Start Stop Control Specifies how the listener is started and stopped. Valid values are as follows:

- n/a = -1
- Queue_Manager = 0
- QMgr_Start_Only = 1
- Manual = 2

Status The current status of the listener. Valid values are as follows:

- n/a = -1
- Stopped = 0

- Starting = 1
- Running = 2
- Stopping = 3

TCP IP Address The listener IP address for the TCP protocol. If it is not defined, the listener listens on all configured IPv4 and IPv6 stacks. It is blank when not available. The valid format is an alphanumeric string of up to 264 case-sensitive characters.

TCP Port The port number for TCP/IP. This is valid only when the transport type is TCP. The valid format is an integer.

Transport Type The transmission protocol type. Valid values are as follows:

- n/a = -2
- LU62 = 1
- TCP = 2
- NETBIOS = 3
- SPX = 4

Manager Definition Details attributes

The Manager Definition Details attributes are associated with WebSphere MQ manager parameters, including name, description, and value. These attributes are informational only and they cannot be used to create situations.

Group Type Type of the queue manager parameter. Possible values are as follows:

- Queue_Manager_Definition = 1
- System_Parameter = 2
- System_Log_Parameter = 3

Host Name Name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Parameter Description The description of the parameter. The valid format is an integer.

Valid values are as follows:

- MQ manager name = 1
- Authority events = 2
- Coded character set ID = 3
- Command input queue name = 4

- Command level = 5
- Dead letter queue name = 6
- Description = 7
- Inhibit events = 8
- Local error events = 9
- Maximum open handles = 10
- Maximum message length = 11
- Maximum message priority = 12
- Maximum uncommitted msgs = 13
- Performance events = 14
- Architecture of platform = 15
- Remote error events = 16
- Start and stop events = 17
- Syncpoint support = 18
- Trigger interval in ms = 19
- Default transmission Q = 20
- Channel auto definition = 21
- Channel auto definition events = 22
- Channel auto definition exit = 23
- Distribution lists = 24
- Connection = 25
- Channel Group = 26
- Cluster workload exit = 27
- Cluster workload exit data = 28
- Cluster workload exit maximum = 29
- Internal queue manager name = 30
- Repository cluster = 31
- Repository clusters namelist = 32
- Configuration event = 33
- Expiry interval = 34
- SSL tasks = 35
- SSL CRL namelist = 36
- SSL key repository = 37
- SSL crypto hardware = 38
- Maximum user messages = 39
- Intra group queuing = 40
- Intra group queuing authority checking = 41
- Intra group queuing user = 42
- Queue sharing group name = 43
- Connection threads = 44
- Background connections = 45
- Foreground connections = 46
- Log record load = 47
- Command userid = 48
- Queue manager coded character set ID = 49

- Route code = 50
- SMF accounting = 51
- SMF statistics = 52
- SMF collection interval = 53
- OTMA connection group = 54
- OTMA connection member = 55
- OTMA connection dest user exit = 56
- OTMA connection age = 57
- OTMA connection tpipe prefix = 58
- Global tracing = 59
- Global trace table size = 60
- Exit tasks count = 61
- Exit time limit = 62
- Workload manager time = 63
- QSG data queue sharing group = 64
- QSG data DB2 data sharing group = 65
- QSG data DB2 subsystem = 66
- QSG data DB2 server tasks = 67
- RACF auditing = 68
- Queue index build wait = 69
- Input buffer size = 70
- Output buffer size = 71
- Maximum tape units = 72
- Maximum archive log volumes = 73
- Dual active logging = 74
- Dual archive logging = 75
- Dual bootstrap data sets = 76
- Archiving = 77
- Write threshold = 78
- Deallocation time = 79
- Unitname for first archive log = 80
- Unitname for second archive log = 81
- Space allocation units = 82
- Space primary quantity = 83
- Space secondary quantity = 84
- Block size = 85
- Archive log first dataset prefix = 86
- Archive log second dataset prefix = 87
- Timestamp archive log = 88
- Archive log retention period = 89
- Archive log WTOR = 90
- Archive log routing codes = 91
- Archive log cataloged = 92
- Archive log compacted = 93
- Archive log protected = 94

- Quiesce time = 95
- Accounting connection override = 96
- Accounting interval = 97
- Accounting MQI level = 98
- Accounting queue level = 99
- Max active channels = 100
- Activity report recording = 101
- Adopt new MCA check = 102
- Adopt new MCA type = 103
- Bridge events = 104
- Channel initiator adapter subtasks = 105
- Channel initiator dispatchers = 106
- Channel events = 107
- Cluster workload max recently used channels = 108
- Cluster workload use queue = 109
- Command events = 110
- DNS group name = 111
- DNS WLM registration = 112
- IP address version = 113
- Logger events = 114
- Listener restart interval = 115
- Listener generic LU name = 116
- Outbound LU name = 117
- APPCPM suffix = 118
- Max LU62 channels = 119
- Max current channels = 120
- Monitoring cluster sender channel level = 121
- Monitoring channel level = 122
- Monitoring queue level = 123
- Outbound port number max = 124
- Outbound port number min = 125
- Receive timeout = 126
- Receive timeout min = 127
- Receive timeout type = 128
- Trace route recording = 129
- Start channel initiator control = 130
- Start command server control = 131
- Shared queue qmgr name = 132
- SSL events = 133
- SSL FIPS required = 134
- SSL reset key count = 135
- Statistics cluster sender channel level = 136
- Statistics channel level = 137
- Statistics interval = 138
- Statistics MQI level = 139

- Statistics queue level = 140
- Max TCP/IP channels = 141
- TCP keepalive = 142
- TCP/IP system name = 143
- TCP/IP stack type = 144
- Channel initiator trace auto start = 145
- Channel initiator trace table size = 146
- Tree life time = 147
- Parent = 148
- Max properties length = 149
- Pub Sub mode = 150
- Pub Sub max msg retry count = 151
- Pub Sub non-persistent message = 152
- Pub Sub response message = 153
- Pub Sub sync point = 154
- Message mark browse interval = 155
- Log compression = 156
- MULC capture algorithm = 157
- Security profile case = 158
- Activity connection override = 159
- Activity trace = 160
- Cert val policy = 161
- Channel auth records = 162
- Custom = 163
- Def cluster xmitQ type = 164
- PubSub cluster = 165
- Websphere MQ AMS capability = 166
- Suite b strength = 167
- Version = 168
- XR capability = 169

Parameter Name The name of the defined parameter. The valid format is an integer.

Valid values are as follows:

- QMNAME = 1
- AUTHOREV = 2
- CCSID = 3
- COMMANDQ = 4
- CMDLEVEL = 5
- DEADQ = 6
- DESCR = 7
- INHIBTEV = 8
- LOCALEV = 9
- MAXHANDS = 10
- MAXMSGL = 11

- MAXPRTY = 12
- MAXSMGS = 13
- PERFMEV = 14
- PLATFORM = 15
- REMOTEEV = 16
- STRSTPEV = 17
- SYNCPT = 18
- TRIGINT = 19
- DEFXMITQ = 20
- CHAD = 21
- CHADEV = 22
- CHADEXIT = 23
- DISTL = 24
- CONNECTN = 25
- CHANGRP = 26
- CLWLEXIT = 27
- CLWLDATA = 28
- CLWLLEN = 29
- QMID = 30
- REPOS = 31
- REPOSNL = 32
- CONFIGEV = 33
- EXPRYINT = 34
- SSLTASKS = 35
- SSLCRLNL = 36
- SSLKEYR = 37
- SSLCRYP = 38
- MAXUMSGS = 39
- IGQ = 40
- IGQAUT = 41
- IGQUSER = 42
- QSGNAME = 43
- CTHREAD = 44
- IDBACK = 45
- IDFORE = 46
- LOGLOAD = 47
- CMDUSER = 48
- QMCCSID = 49
- ROUTCDE = 50
- SMFACCT = 51
- SMFSTAT = 52
- STATIME = 53
- OTMACON_GROUP = 54
- OTMACON_MEMBER = 55
- OTMACON_DRUEXIT = 56

- OTMACON_AGE = 57
- OTMACON_TPIPEPFX = 58
- TRACSTR = 59
- TRACTBL = 60
- EXITTCB = 61
- EXITLIM = 62
- WLMTIME = 63
- QSGDATA_QSGNAME = 64
- QSGDATA_DSGNAME = 65
- QSGDATA_DB2NAME = 66
- QSGDATA_DB2SERV = 67
- RESAUDIT = 68
- QINDEXBLD = 69
- INBUFF = 70
- OUTBUFF = 71
- MAXRTU = 72
- MAXARCH = 73
- TWOACTV = 74
- TWOARCH = 75
- TWOBSDS = 76
- OFFLOAD = 77
- WRTHRSH = 78
- DEALLCT = 79
- UNIT = 80
- UNIT2 = 81
- ALCUNIT = 82
- PRIQTY = 83
- SECQTY = 84
- BLKSIZE = 85
- ARCPFX1 = 86
- ARCPFX2 = 87
- TSTAMP = 88
- ARCRETN = 89
- ARCWTOR = 90
- ARCWRTC = 91
- CATALOG = 92
- COMPACT = 93
- PROTECT = 94
- QUIESCE = 95
- ACCTCONO = 96
- ACCTINT = 97
- ACCTMQI = 98
- ACCTQ = 99
- ACTCHL = 100
- ACTIVREC = 101

- ADOPTCHK = 102
- ADOPTMCA = 103
- BRIDGEEV = 104
- CHIADAPS = 105
- CHIDISPS = 106
- CHLEV = 107
- CLWLMRUC = 108
- CLWLUSEQ = 109
- CMDEV = 110
- DNSGROUP = 111
- DNSWLM = 112
- IPADDRV = 113
- LOGGEREV = 114
- LSTRTMR = 115
- LUGROUP = 116
- LUNAME = 117
- LU62ARM = 118
- LU62CHL = 119
- MAXCHL = 120
- MONACLS = 121
- MONCHL = 122
- MONQ = 123
- OPORTMAX = 124
- OPORTMIN = 125
- RCVTIME = 126
- RCVTMIN = 127
- RCVTTYPE = 128
- ROUTEREC = 129
- SCHINIT = 130
- SCMDSERV = 131
- SQQMNAME = 132
- SSLEV = 133
- SSLFIPS = 134
- SSLRKEYC = 135
- STATACLS = 136
- STATCHL = 137
- STATINT = 138
- STATMQI = 139
- STATQ = 140
- TCPCHL = 141
- TCPKEEP = 142
- TCPNAME = 143
- TCPSTACK = 144
- TRAXSTR = 145
- TRAXTBL = 146

- TREELIFE = 147
- PARENT = 148
- MAXPROPL = 149
- PSMODE = 150
- PSRTYCNT = 151
- PSNPMSG = 152
- PSNPRES = 153
- PSSYNCPT = 154
- MARKINT = 155
- COMPLOG = 156
- MULCCAPT = 157
- SCYCASE = 158
- ACTVCONO = 159
- ACTVTRC = 160
- CERTVPOL = 161
- CHLAUTH = 162
- CUSTOM = 163
- DEFCLXQ = 164
- PSCLUS = 165
- SPLCAP = 166
- SUITEB = 167
- VERSION = 168
- XRCAP = 169

Parameter Type The type of the parameter. The valid format is an alphanumeric string of up to 22 characters.

Parameter Value The value of the parameter. The valid format is an alphanumeric string of up to 256 characters.

Parameter Value (Deprecated) The value of the parameter. The valid format is an alphanumeric string of up to 64 characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Repository Namelist The name of the namelist that is associated with the repository. Valid format is an alphanumeric string of up to 48 characters.

Managers attributes

The Managers attributes provide performance statistics and summary information for all of your WebSphere MQ managers. Use this attribute group to query dead-letter queue usage and in-doubt channels. You can also use this group to detect performance problems with the log manager, buffer manager, or message manager components of a queue manager on a z/OS system. For example, you can create situations for detecting unavailable log manager buffers or a shortage of buffer pools. Managers is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

of ApplIDS The number of entries in the trace data set for this object. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer. This attribute is for z/OS systems only.

of Page Sets The number of page sets that are defined. The valid format is an integer in the range 0 - 100. This attribute is for z/OS systems only.

of Pools In Use Number of buffer pools that are in use by this queue manager. The valid format is an integer in the range 0 - 4. This attribute is for z/OS systems only.

of Queues The number of queues that are accessed by an application, transaction, or program running on this queue manager. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer. This attribute is for z/OS systems only.

of Qs Get-Inhib The number of monitored queues that belong to this queue manager that are get-inhibited. Users cannot issue the WebSphere MQ API routine MQGET for these queues. The valid format is an integer.

of Qs Put-Inhib The number of monitored queues that belong to this queue manager that are put-inhibited. Users cannot issue the WebSphere MQ API routines MQPUT and MQPUT1 for these queues. The valid format is an integer.

Qs with High Depth The number of monitored queues that belong to this queue manager that are marked as having too many messages (that is, their number of messages exceeds the high-depth threshold defined for each queue). The valid format is an integer.

of Task IDs The number of task IDs that are associated with this queue manager, application, program, or CICS transaction that are active at the time of the last data sample. This information is only available if Application Queue Statistics are collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer.

of Tran/Pgms The number of unique CICS transactions or program names. This information is only available if Application Queue Statistics are collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer. This attribute is for z/OS systems only.

% Current Active Log Full The percent full of the first copy of the current active log. The valid format is an integer.

% Failed Look ahead Tape Mounts The percentage of attempted look ahead tape mounts that fail. The valid format is an integer.

% GetPg Outside Pool The percentage of get-page requests that are not resolved from the buffer pool. The valid format is an integer (formatted to one decimal place) in the range 0.0 - 100.0. This attribute is for z/OS systems only.

% of Busy Tape Units The percentage of maximum allowable allocated tape units (MAXRTU) that are currently busy. The valid format is an integer.

% Qs with High Depth The percentage of monitored queues that belong to this queue manager that are marked as having too many messages (that is, their message depths exceed the high-depth threshold defined for each queue). The valid format is an integer (formatted to one decimal place) in the range 0.0 - 100.0.

% Rd Log Delayed The percentage of log-read requests that were delayed because your site's MAXALLC value (that is, maximum number of archive log data sets) was reached. The valid format is an integer (formatted to one decimal place) in the range 0.0 - 100.0. This attribute is for z/OS systems only.

Active Log Data set Name The name of the current active log data set, first copy. The valid format is an alphanumeric string of up to 44 case-sensitive characters.

Active Logs Available The number of active log data sets that are available for use; that is, the number of active log data sets that are not full. The valid format is an integer.

Alias Queues The number of alias queues that are monitored for this queue manager. The valid format is an integer.

Alter Date & Time The date and time that the queue manager definition is last altered. Standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Arch Log Read % The percentage of log-read requests that must be resolved from an archive log data set. The valid format is an integer (formatted to one decimal place) in the range 0.0 - 100.0. This attribute is for z/OS systems only.

Archive Delay Due to Max Tape The number of read log requests that are delayed because the maximum number of tape units that can be allocated for archive data sets is reached. This limiting value is determined by the MAXRTU value in the CSQ6LOGP system parameter macro. It can be modified by issuing the SET LOG command. The valid format is an integer.

Archive Delay Unavail Resource The number of read log requests that are delayed because of an unavailable resource that is not related to the MAXRTU limit, such as tape unit availability or WTOR delay. The valid format is an integer.

Archiving Quiesced Indicates that all user update activity is currently suspended to perform archive of the active log. This occurs if the ARCHIVE LOG MODE(QUIESCE) command is issued. Possible values are as follows:

- No = 0
- Yes = 1
- Unknown = 255

Auto-Defined Cluster Channels The number of automatically defined cluster-sender channels that are currently being monitored for this queue manager. The valid format is an integer.

Avg % In Use The average percentage of allocated pages that are in use across all page sets. The valid format is an integer (formatted to one decimal place) in the range 0.0 - 100.0. This attribute is for z/OS systems only.

Avg Extents The average number of DASD extents per page set for this queue manager. Valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

Avg Pages Allocated The average number of pages that are allocated per page set. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

Busy Archive Tapes The number of tape units that are currently busy actively processing an archive log data set. The valid format is an integer.

Checkpoints The number of checkpoints that are issued during the sampling interval. The valid format is an integer. This attribute is for z/OS systems only.

Close Hndl Per Sec The number of times per second WebSphere MQ closed an object (such as a queue) independently of a call to the MQCLOSE API routine. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

Cluster QMgr Auto Clussdr The current number of cluster queue manager entries for automatically defined cluster sender channels. The valid format is an integer.

Cluster QMgr Clusrcvr The current number of cluster queue manager entries for cluster receiver channels. Valid format is an integer.

Cluster QMgr Explicit Clussdr The current number of cluster queue manager entries for explicitly defined cluster sender channels. The valid format is an integer.

Cluster Queues The number of cluster queue definitions. The valid format is an integer.

Command Server Queue Name The name of the command server queue. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Current Channels The number of currently active channels that are monitored for this queue manager. The valid format is an integer.

Current Receivers The number of currently active receiver channels that are monitored for this queue manager. The valid format is an integer.

Current Requesters The number of currently active requester channels that are monitored for this queue manager. The valid format is an integer.

Current Senders The number of currently active sender channels that are monitored for this queue manager. The valid format is an integer.

Current Servers The number of currently active server channels that are monitored for this queue manager. The valid format is an integer.

DLQ Depth The number of messages that are currently stored in the dead-letter queue (DLQ) of this queue manager. The valid format is an integer.

DLQ Maximum The maximum number of messages that can be stored in the dead-letter queue (DLQ) of this queue manager. The valid format is an integer.

DLQ Name The name that is assigned to the dead-letter queue of this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Dynamic Perm Qs The number of monitored, permanent dynamic queues that are created for this queue manager. The valid format is an integer.

Dynamic Temp Qs The number of monitored temporary dynamic queues that are created for this queue manager. The valid format is an integer.

Event Count The total number of occurrences of all WebSphere MQ events that are reported to the event queue of this queue manager. Informational only.

Full Logs To Offload The number of full active logs that are waiting to be offloaded. Valid format is an integer.

Full Page Sets The number of page sets that are full. When a page set is full, all calls to MQPUT or MQPUT1 for queues associated with that page set fail. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

GetPg I/O % The percentage of get-page requests that resulted in I/O. The valid format is an integer (formatted to one decimal place) in the range 0.0 - 100.0. This attribute is for z/OS systems only.

High % In Use The highest percentage of allocated pages that are in use across all page sets. The valid format is an integer (formatted to one decimal place) in the range 0.0 - 100.0. This attribute is for z/OS systems only.

High Extents The highest number of DASD extents across all page sets for this queue manager. The valid format is an integer. This attribute is for z/OS systems only.

Host Jobname The name of the started task or batch job that is running this queue manager. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for z/OS systems only.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Inactive Channels The number of currently inactive channels that are monitored for this queue manager. The valid format is an integer.

Inactive Receivers The number of currently inactive receiver channels that are monitored for this queue manager. The valid format is an integer.

Inactive Requesters The number of currently inactive requester channels that are monitored for this queue manager. The valid format is an integer.

Inactive Senders The number of currently inactive sender channels monitored for this queue manager. The valid format is an integer.

Inactive Servers The number of currently inactive server channels that are monitored for this queue manager. The valid format is an integer.

In-Doubt Channels The number of monitored channel connections that are currently in doubt for this queue manager. A sender channel is in doubt when a logical unit of work (LUW) has been sent and the channel is waiting for an acknowledgment that the LUW has been successfully received (in other words, when a syncpoint has been requested but not yet performed). The valid format is an integer.

Interval Time The length of interval. Informational only.

Local Queues The number of local queues that are monitored for this queue manager. The valid format is an integer.

Log Write Buffer Pagein The number of times that a log write buffer needs to be paged in before it can be used. The valid format is an integer.

Log Write Threshold The number of times that a log write request is scheduled because the log write threshold is reached. This threshold is determined by the WRTHRS value in the CSQ6LOGP system parameter macro. It can be modified by issuing the SET LOG command. The valid format is an integer.

Logging Suspended Indicates whether logging is suspended. Logging is suspended if the SUSPEND QMGR LOG command is issued. All logging and update activity for the queue manager is suspended until the RESUME QMGR LOG command is issued. The valid format is an integer. Possible values are as follows:

- No = 0
- Yes = 1
- Unknown = 255

Look ahead Tape Mounts The number of look ahead tape mounts for archive data sets that are attempted. Valid format is an integer.

Low # Avail The lowest number of available (unused) buffers across all buffer pools that belong to this queue manager. The valid format is an integer. This attribute is for z/OS systems only.

Low % Avail The lowest percentage of available (unused) buffers across all buffer pools that belong to this queue manager. The valid format is an integer (formatted to one decimal place) in the range 0.0 - 100.0. This attribute is for z/OS systems only.

Message Security Indicates whether message security is active and thus whether message functions are allowed for this manager. A value of Y for Yes means

message functions are not allowed. A value of N for No means message functions are allowed for this manager. The valid format is an alphanumeric string of up to 4 case-sensitive characters.

Monitored Queues The number of active queues that are monitored for this queue manager. You specify which queues to monitor when customizing the WebSphere MQ Monitoring agent. The dead-letter queue is always monitored. Valid format is an integer.

MQCLOSE Per Sec The number of calls or starts per second of the WebSphere MQ API routine MQCLOSE for this queue manager. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

MQGET Per Sec The number of calls or starts per second of the WebSphere MQ API routine MQGET for this queue manager. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

MQINQ Per Sec The number of calls or starts per second of the WebSphere MQ API routine MQINQ for this queue manager. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

MQOPEN Per Sec The number of calls or starts per second of the WebSphere MQ API routine MQOPEN for this queue manager. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

MQPUT Per Sec The number of calls or starts per second of the WebSphere MQ API routine MQPUT for this queue manager. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

MQPUT1 Per Sec The number of calls or starts per second of the WebSphere MQ API routine MQPUT1 for this queue manager. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

MQSeries Release The release level of WebSphere MQ under which this queue manager is executing. The valid format is an alphanumeric string of up to 8 case-sensitive characters.

MQSET Per Sec The number of calls or starts per second of the WebSphere MQ API routine MQSET for this queue manager. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

Object Creates The object create rate of the data manager per second. Informational only.

Object Deletes The data manager object delete rate of the data manager per second. Informational only.

Object Gets The data manager object get rate of the data manager per second. Informational only.

Object Locates Data manager object locate rate per second. Informational only.

Object Puts The object put rate of the data manager per second. Informational only.

Offload Task Status The current status of the offload task. Possible values are Available, Busy Allocating Archive Data set, Busy Copying Active Log, and Busy Copying BSDS. The valid format is an integer.

Open Queues The number of monitored queues that are currently open for this queue manager. The valid format is an integer.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Predefined Queues The number of predefined queues that are monitored for this queue manager. Valid format is an integer.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QMgr Status The status of this queue manager. The following values are valid:

Table 1. Queue manager status

Status	Definition
Inactive = 0	The WebSphere MQ Monitoring agent is online, but the queue manager is not currently active.
Active = 1	The WebSphere MQ Monitoring agent is online and the queue manager is active.
Unknown = 3	The WebSphere MQ Monitoring agent is online, but the status of the queue manager is unknown.
QueueManager_Not_Available = 4	The WebSphere MQ Monitoring agent is online, but the queue manager is not available for connection.
CommandServer_Not_Responding = 5	The WebSphere MQ Monitoring agent is online, but is not receiving responses from the command server.
Dynamic_Queue_Allocation_Error = 6	The WebSphere MQ Monitoring agent is online, but is not able to dynamically allocate its reply-to queue.
Cluster_Repository_Unavailable = 7	The WebSphere MQ Monitoring agent is online, but the cluster repository is unavailable.
Standby = 8	The WebSphere MQ Monitoring agent is online, but the queue manager is now running as a standby instance and ready to become active if the existing active instance fails.

Table 1. Queue manager status (continued)

Status	Definition
Running_Elsewhere = 9	The WebSphere MQ Monitoring agent is online, but the queue manager is running elsewhere.

QMgr Subsys The subsystem ID that is associated with this queue manager. The valid format is an alphanumeric string of up to 4 characters. This attribute is for z/OS systems only.

QMgr Type The operating system where this queue manager is running. Valid values are as follows:

- MVS = M
- AIX = A
- OS2 = O
- NT = N
- HPUX = H
- OS400 = 4
- Solaris = S
- Guardian = G
- Windows = W
- Linux = L
- UNIX = U
- VMS = V
- NSK = K
- VSE = E
- n/a = R

QSG Name The name of the queue sharing group. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for QSG environment on z/OS systems only.

Queue Messages The total number of messages on all monitored queues. The valid format is an integer.

Read Log Per Min The number of read-log requests per minute. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

Remote Queues The number of remote queues that are monitored for this queue manager. The valid format is an integer.

Server Connections The total number of active server connections. Valid format is an integer.

Start Date & Time The time and date that this queue manager or channel is last started. This attribute is not applicable to remote queue managers. This information is available only for UNIX and Linux systems. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

StorClass Changes The storage class change rate of the data manager per second. Informational only.

Synch Writes The number of times that the synchronous page processor needs to be started because the synchronous write threshold is reached. The valid format is an integer. This attribute is for z/OS systems only.

Timeout Count The number of system command reply timeouts that occur during the most recent sampling cycle for the current queue manager. If the queue manager does not respond to an information request from the WebSphere MQ Monitoring agent within 30 seconds, the agent considers it a timeout and stops waiting for a response. In this case, data is missing from the last sample.

For a non z/OS queue manager, it is the number of consecutive timeouts, which indicates the number of samples missed. If this parameter is nonzero, there might be a serious performance or availability problem with this queue manager. The valid format is an integer.

Total Channels The total number of active channels and inactive channels. The valid format is an integer.

Transmit Queues The number of transmission queues that are monitored for this queue manager. The valid format is an integer.

Unavailable Page Sets The number of defined page sets that are not available for use. The valid format is an integer in the range 0 - 100. This attribute is for z/OS systems only.

Write Log Per Min The number of write-log requests per minute. The valid format is an integer (formatted to one decimal place). This attribute is for z/OS systems only.

Write Requests Suspended The number of times that a request to write data to buffers is suspended. The valid format is an integer.

Zero Bufr Waits The number of times that an application has to wait because no buffers are available in buffer pool of this queue manager. The valid format is an integer. This attribute is for z/OS systems only.

Zero Bufrs Count The number of times that a WebSphere MQ application cannot get an available buffer from the buffer pool of this queue manager. The valid format is an integer. This attribute is for z/OS systems only.

Message Data attributes

Use the Message Data attributes to view message parameters, including displacement, character data, converted data, and hexadecimal data. These attributes are informational only; they cannot be used to create situations.

Character Data The contents of the message in character form. This is the message data after it has been converted to UTF-8 format character data using the message CCSID. The message data is retrieved from the queue for conversion without using the MQGMO_CONVERT option.

Character Data (deprecated) The data at displacement in characters. Valid format is an alphanumeric string.

Character Data CCSID The CCSID of the character set that is used to encode the message contents.

For a complete list of CCSID values and their corresponding character sets see the IBM Web site.

Converted Data The data at displacement in converted characters. Valid format is an alphanumeric string.

Converted Data (deprecated) The contents of the message in character form. This is the message data after it has been converted to UTF-8 format character data using the message CCSID. The message data is retrieved from the queue for conversion using the MQGMO_CONVERT option.

Converted Data CCSID The CCSID of the character set that is used by the queue manager on which the message is stored.

This attribute is used to convert the message data for the Converted Data attribute when the message data is retrieved from the queue using the MQGMO_CONVERT option. For a complete list of CCSID values and their corresponding character sets see the IBM Web site.

Converted Status The status of the open or get command. The valid format is an integer of up to 4 digits. There are the following valid values:

- Unknown = -1
- Success = 0
- MQMD_Format_None = 12
- 2001-Alias_Base_Q_Type_Error = 2001
- 2002-Already_Connected = 2002
- 2003-Backed_Out = 2003
- 2004-Buffer_Error = 2004
- 2005-Buffer_Length_Error = 2005
- 2006-Char_Attr_Length_Error = 2006
- 2007-Char_Attrs_Error = 2007
- 2008-Char_Attrs_Too_Short = 2008
- 2009-Connection_Broken = 2009
- 2010-Data_Length_Error = 2010
- 2011-Dynamic_Q_Name_Error = 2011

- 2012-Environment_Error = 2012
- 2013-Expiry_Error = 2013
- 2014-Feedback_Error = 2014
- 2016-Get_Inhibited = 2016
- 2017-Handle_Not_Available = 2017
- 2018-Hconn_Error = 2018
- 2019-Hobj_Error = 2019
- 2020-Inhibit_Value_Error = 2020
- 2021-Int_Attr_Count_Error = 2021
- 2022-Int_Attr_Count_Too_Small = 2022
- 2023-Int_Attrs_Array_Error = 2023
- 2024-Syncpoint_Limit_Reached = 2024
- 2025-Max_Conns_Limit_Reached = 2025
- 2026-Md_Error = 2026
- 2027-Missing_Reply_To_Q = 2027
- 2029-Msg_Type_Error = 2029
- 2030-Msg_Too_Big_For_Q = 2030
- 2031-Msg_Too_Big_For_Q_Mgr = 2031
- 2033-No_Msg_Available = 2033
- 2034-No_Msg_Under_Cursor = 2034
- 2035-Not_Authorized = 2035
- 2036-Not_Open_For_Browse = 2036
- 2037-Not_Open_For_Input = 2037
- 2038-Not_Open_For_Inquire = 2038
- 2039-Not_Open_For_Output = 2039
- 2040-Not_Open_For_Set = 2040
- 2041-Object_Changed = 2041
- 2042-Object_In_Use = 2042
- 2043-Object_Type_Error = 2043
- 2044-Od_Error = 2044
- 2045-Option_Not_Valid_For_Type = 2045
- 2046-Options_Error = 2046
- 2047-Persistence_Error = 2047
- 2048-Persistent_Not_Allowed = 2048
- 2049-Priority_Exceeds_Maximum = 2049
- 2050-Priority_Error = 2050
- 2051-Put_Inhibited = 2051
- 2052-Q_Deleted = 2052
- 2053-Q_Full = 2053
- 2055-Q_Not_Empty = 2055
- 2056-Q_Space_Not_Available = 2056
- 2057-Q_Type_Error = 2057
- 2058-Q_Mgr_Name_Error = 2058
- 2059-Q_Mgr_Not_Available = 2059
- 2061-Report_Options_Error = 2061

- 2062-Second_Mark_Not_Allowed = 2062
- 2063-Security_Error = 2063
- 2065-Selector_Count_Error = 2065
- 2066-Selector_Limit_Exceeded = 2066
- 2067-Selector_Error = 2067
- 2068-Selector_Not_For_Type = 2068
- 2069-Signal_Outstanding = 2069
- 2070-Signal_Request_Accepted = 2070
- 2071-Storage_Not_Available = 2071
- 2072-Syncpoint_Not_Available = 2072
- 2075-Trigger_Control_Error = 2075
- 2076-Trigger_Depth_Error = 2076
- 2077-Trigger_Msg_Priority_Err = 2077
- 2078-Trigger_Type_Error = 2078
- 2079-Truncated_Msg_Accepted = 2079
- 2080-Truncated_Msg_Failed = 2080
- 2082-Unknown_Alias_Base_Q = 2082
- 2085-Unknown_Object_Name = 2085
- 2086-Unknown_Object_Q_Mgr = 2086
- 2087-Unknown_Remote_Q_Mgr = 2087
- 2090-Wait_Interval_Error = 2090
- 2091-Xmit_Q_Type_Error = 2091
- 2092-Xmit_Q_Usage_Error = 2092
- 2093-Not_Open_For_Pass_All = 2093
- 2094-Not_Open_For_Pass_Ident = 2094
- 2095-Not_Open_For_Set_All = 2095
- 2096-Not_Open_For_Set_Ident = 2096
- 2097-Context_Handle_Error = 2097
- 2098-Context_Not_Available = 2098
- 2099-Signal1_Error = 2099
- 2100-Object_Already_Exists = 2100
- 2101-Object_Damaged = 2101
- 2102-Resource_Problem = 2102
- 2103-Another_Q_Mgr_Connected = 2103
- 2104-Unknown_Report_Option = 2104
- 2105-Storage_Class_Error = 2105
- 2106-Cod_Not_Valid_For_Xcf_Q = 2106
- 2107-Xwait_Canceled = 2107
- 2108-Xwait_Error = 2108
- 2109-Suppressed_By_Exit = 2109
- 2110-Format_Error = 2110
- 2111-Source_Ccsid_Error = 2111
- 2112-Source_Integer_Enc_Error = 2112
- 2113-Source_Decimal_Enc_Error = 2113
- 2114-Source_Float_Enc_Error = 2114

- 2115-Target_Ccsid_Error = 2115
- 2116-Target_Integer_Enc_Error = 2116
- 2117-Target_Decimal_Enc_Error = 2117
- 2118-Target_Float_Enc_Error = 2118
- 2119-Not_Converted = 2119
- 2120-Converted_Msg_Too_Big = 2120
- 2120-Truncated = 2120
- 2121-No_External_Participants = 2121
- 2122-Participant_Not_Available = 2122
- 2123-Outcome_Mixed = 2123
- 2124-Outcome_Pending = 2124
- 2125-Bridge_Started = 2125
- 2126-Bridge_Stopped = 2126
- 2127-Adapter_Storage_Shortage = 2127
- 2128-Uow_In_Progress = 2128
- 2129-Adapter_Conn_Load_Error = 2129
- 2130-Adapter_Serv_Load_Error = 2130
- 2131-Adapter_Defs_Error = 2131
- 2132-Adapter_Defs_Load_Error = 2132
- 2133-Adapter_Conv_Load_Error = 2133
- 2134-Bo_Error = 2134
- 2135-Dh_Error = 2135
- 2136-Multiple_Reasons = 2136
- 2137-Open_Failed = 2137
- 2138-Adapter_Disc_Load_Error = 2138
- 2139-Cno_Error = 2139
- 2140-Cics_Wait_Failed = 2140
- 2141-Dlh_Error = 2141
- 2142-Header_Error = 2142
- 2143-Source_Length_Error = 2143
- 2144-Target_Length_Error = 2144
- 2145-Source_Buffer_Error = 2145
- 2146-Target_Buffer_Error = 2146
- 2148-Iih_Error = 2148
- 2149-Pcf_Error = 2149
- 2150-Dbcs_Error = 2150
- 2152-Object_Name_Error = 2152
- 2153-Object_Q_Mgr_Name_Error = 2153
- 2154-Recs_Present_Error = 2154
- 2155-Object_Records_Error = 2155
- 2156-Response_Records_Error = 2156
- 2157-Asid_Mismatch = 2157
- 2158-Pmo_Record_Flags_Error = 2158
- 2159-Put_Msg_Records_Error = 2159
- 2160-Conn_Id_In_Use = 2160

- 2161-Q_Mgr_Quiescing = 2161
- 2162-Q_Mgr_Stopping = 2162
- 2163-Duplicate_Recov_Coord = 2163
- 2173-Pmo_Error = 2173
- 2182-API_Exit_Not_Found = 2182
- 2183-API_Exit_Load_Error = 2183
- 2184-Remote_Q_Name_Error = 2184
- 2185-Inconsistent_Persistence = 2185
- 2186-Gmo_Error = 2186
- 2191-Tmc_Error = 2191
- 2192-Pageset_Full = 2192
- 2193-Pageset_Error = 2193
- 2194-Name_Not_Valid_For_Type = 2194
- 2195-Unexpected_Error = 2195
- 2196-Unknown_Xmit_Q = 2196
- 2197-Unknown_Def_Xmit_Q = 2197
- 2198-Def_Xmit_Q_Type_Error = 2198
- 2199-Def_Xmit_Q_Usage_Error = 2199
- 2201-Name_In_Use = 2201
- 2202-Connection_Quiescing = 2202
- 2203-Connection_Stopping = 2203
- 2204-Adapter_Not_Available = 2204
- 2206-Msg_Id_Error = 2206
- 2207-Correl_Id_Error = 2207
- 2208-File_System_Error = 2208
- 2209-No_Msg_Locked = 2209
- 2216-File_Not_Audited = 2216
- 2217-Connection_Not_Authorized = 2217
- 2218-Msg_Too_Big_For_Channel = 2218
- 2219-Call_In_Progress = 2219
- 2220-Rmh_Error = 2220
- 2222-Q_Mgr_Active = 2222
- 2223-Q_Mgr_Not_Active = 2223
- 2224-Q_Depth_High = 2224
- 2225-Q_Depth_Low = 2225
- 2226-Q_Service_Interval_High = 2226
- 2227-Q_Service_Interval_Ok = 2227
- 2233-Channel_Auto_Def_Ok = 2233
- 2234-Channel_Auto_Def_Error = 2234
- 2235-Cfh_Error = 2235
- 2236-Cfil_Error = 2236
- 2237-Cfin_Error = 2237
- 2238-Cfsl_Error = 2238
- 2239-Cfst_Error = 2239
- 2241-Incomplete_Group = 2241

- 2242-Incomplete_Msg = 2242
- 2243-Inconsistent_Ccsids = 2243
- 2244-Inconsistent_Encodings = 2244
- 2245-Inconsistent_Uow = 2245
- 2246-Invalid_Msg_Under_Cursor = 2246
- 2247-Match_Options_Error = 2247
- 2248-Mde_Error = 2248
- 2249-Msg_Flags_Error = 2249
- 2250-Msg_Seq_Number_Error = 2250
- 2251-Offset_Error = 2251
- 2252-Original_Length_Error = 2252
- 2253-Segment_Length_Zero = 2253
- 2255-Uow_Not_Available = 2255
- 2256-Wrong_Gmo_Version = 2256
- 2257-Wrong_Md_Version = 2257
- 2258-Group_Id_Error = 2258
- 2259-Inconsistent_Browse = 2259
- 2260-Xqh_Error = 2260
- 2261-Src_Env_Error = 2261
- 2262-Src_Name_Error = 2262
- 2263-Dest_Env_Error = 2263
- 2264-Dest_Name_Error = 2264
- 2265-Tm_Error = 2265
- 2280-Hconfig_Error = 2280
- 2281-Function_Error = 2281
- 2282-Channel_Started = 2282
- 2283-Channel_Stopped = 2283
- 2284-Channel_Conv_Error = 2284
- 2285-Service_Not_Available = 2285
- 2286-Initialization_Failed = 2286
- 2287-Termination_Failed = 2287
- 2288-Unknown_Q_Name = 2288
- 2289-Service_Error = 2289
- 2290-Q_Already_Exists = 2290
- 2291-User_Id_Not_Available = 2291
- 2292-Unknown_Entity = 2292
- 2293-Unknown_Auth_Entity = 2293
- 2294-Unknown_Ref_Object = 2294
- 2295-Channel_Activated = 2295
- 2296-Channel_Not_Activated = 2296
- 3001-MQCFH_Type_Error = 3001
- 3002-MQCFH_Struct_Length_Error = 3002
- 3003-MQCHF_Version_Error = 3003
- 3004-MQCFH_Msg_Seq_Error = 3004
- 3005-MQCFH_Control_error = 3005

- 3006-MQCFH_Parm_Count_Error = 3006
- 3007-MQCFH_Command_Error = 3007
- 3008-Command_Failed = 3008
- 3009-MQCFIN_Struct_Length_Error = 3009
- 3010-MQCFST_Struct_Length_Error = 3010
- 3011-MQCFST_String_Length_Error = 3011
- 3012-Force_value_Error = 3012
- 3013-Structure_Type_Error = 3012
- 3014-MQCFIN_Parm_ID_Error = 3014
- 3015-MQCFST_Parm_ID_Error = 3015
- 3016-Msg_Length_Error = 3016
- 3017-MQCFIN_Duplicate_Parm = 3017
- 3018-MQCFST_Duplicate_Parm = 3018
- 3019-Parm_Count_Too_Small = 3019
- 3020-Parm_Count_Too_Big = 3020
- 3021-Q_Already_In_Cell = 3021
- 3022-Q_Type_Error = 3022
- 3023-MD_Format_Error = 3023
- 3025-Replace_Value_Error = 3025
- 3026-MQCFIL_Duplicate_Value = 3026
- 3027-MQCFIL_Count_Error = 3027
- 3028-MQCFIL_Length_Error = 3028
- 3029-Quiesce_Value_Error = 3029
- 3030-Msg_Seq_Number_Error = 3030
- 3031-Ping_Data_Count_Error = 3031
- 3032-Ping_Data_Compare_Error = 3032
- 3034-Channel_Type_Error = 3034
- 3035-Parm_Sequence_Error = 3035
- 3036-Xmit_Protocol_Type_Error = 3036
- 3037-Batch_Size_Error = 3037
- 3038-Disc_Int_Error = 3038
- 3039-Short_Retry_Error = 3039
- 3040-Short_Timer_Error = 3040
- 3041-Long_Retry_Error = 3041
- 3042-Long_Timer_Error = 3042
- 3043-Seg_Number_Wrap_Error = 3043
- 3044-Max_Msg_Length_Error = 3044
- 3045-Put_Auth_Error = 3045
- 3046-Purge_Value_Error = 3046
- 3047-MQCFIL_Parm_ID_Error = 3047
- 3048-Msg_Truncated = 3048
- 3049-CCSID_Error = 3049
- 3050-Encoding_Error = 3050
- 3052-Data_Conv_Value_Error = 3052
- 3053-InDoubt_Value_Error = 3053

- 3054-Escape_Type_Error = 3054
- 3062-Channel_Table_Error = 3062
- 3063-MCA_Type_Error = 3063
- 3064-Chl_Inst_Type_Error = 3064
- 3065-Chl_Status_Not_Found = 3065
- 3066-MQCFSL_Duplicate_Parm = 3066
- 3067-MQCFSL_Total_Length_Error = 3067
- 4001-Object_Already_Exist = 4001
- 4002-Object_Wrong_Type = 4002
- 4003-Like_Object_Wrong_Type = 4003
- 4004-Object_Open = 4004
- 4005-Attr_Value_Error = 4005
- 4006-Unknown_Q_Mgr = 4006
- 4007-Q_Wrong_Type = 4007
- 4008-Object_Name_Error = 4008
- 4009-Allocate_Failed = 4009
- 4010-Host_Not_Available = 4010
- 4011-Configuration_Error = 4011
- 4012-Connection_Refused = 4012
- 4013-Entry_Error = 4013
- 4014-Send_Failed = 4014
- 4015-Receive_Data_Error = 4015
- 4016-Receive_Failed = 4016
- 4017-Connection_Closed = 4017
- 4018-No_Storage = 4018
- 4019-No_Comms_Manager = 4019
- 4020-Listener_Not_Started = 4020
- 4024-Bind_Failed = 4024
- 4025-Channel_InDoubt = 4025
- 4026-MQCONN_Failed = 4026
- 4027-MQOPEN_Failed = 4027
- 4028-MQGET_Failed = 4028
- 4029-MQPUT_Failed = 4029
- 4030-PING_Error = 4030
- 4031-Channel_In_Use = 4031
- 4032-Channel_Not_Found = 4032
- 4033-Unknown_Remote_Channel = 4033
- 4034-Remote_QM_Unavailable = 4034
- 4035-Remote_QM_Terminating = 4035
- 4036-MQINQ_Failed = 4036
- 4037-Not_Xmit_Q = 4037
- 4038-Channel_Disabled = 4038
- 4039-User_Exit_Not_Available = 4039
- 4040-Commit_Failed = 4040
- 4042-Channel_Already_Exists = 4042

- 4043-Data_Too_Large = 4043
- 4044-Channel_Name_Error = 4044
- 4045-Xmit_Q_Name_Error = 4045
- 4047-MCA_Name_Error = 4047
- 4048-Send_Exit_Name_Error = 4048
- 4049-Sec_Exit_Name_Error = 4049
- 4050-Msg_Exit_Name_Error = 4050
- 4051-Rcv_Exit_Name_Error = 4051
- 4052-Xmit_Q_Name_Wrong_Type = 4052
- 4053-MCA_Name_Wrong_Type = 4053
- 4054-Disc_Int_Wrong_Type = 4054
- 4055-Short_Retry_Wrong_Type = 4055
- 4056-Short_Timer_Wrong_Type = 4056
- 4057-Long_Retry_Wrong_Type = 4057
- 4058-Long_Timer_Wrong_Type = 4058
- 4059-Put_Auth_Wrong_Type = 4059
- 4061-Missing_Conn_Name = 4061
- 4062-Conn_Name_Error = 4062
- 4063-MQSET_Failed = 4063
- 4064-Channel_Not_Active = 4064
- 4065-Terminated_By_Sec_Exit = 4065
- 4067-Dynamic_Q_Scope_Error = 4067
- 4068-Cell_Dir_Not_Available = 4068
- 4069-MR_Count_Error = 4069
- 4070-MR_Count_Wrong_Type = 4070
- 4071-MR_Exit_Name_Error = 4071
- 4072-MR_Exit_Name_Wrong_Type = 4072
- 4073-MR_Interval_Error = 4073
- 4074-MR_Interval_Wrong_Type = 4074
- 4075-NPM_Speed_Error = 4075
- 4076-NPM_Speed_Wrong_Type = 4076
- 4077-HB_Interval_Error = 4077
- 4078-HB_Interval_Wrong_Type = 4078
- 4079-CHAD_Error = 4079
- 4080-CHAD_Wrong_Type = 4080
- 4081-CHAD_Event_Error = 4081
- 4082-CHAD_Event_Wrong_Type = 4082
- 4083-CHAD_Exit_Error = 4083
- 4084-CHAD_Exit_Wrong_Type = 4084
- 4085-Suppressed_By_Exit = 4085
- 4086-Batch_Int_Error = 4086
- 4087-Batch_Int_Wrong_Type = 4087
- Insufficient_Storage = 9005
- Agent_Timeout_Occurred = 9009
- Not_Allowed_By_COMMAND_Option = 9010

- Failed_Due_to_QMGR_Quiescing = 9011
- Unknown_Reason_Code = 9012
- Command_Accepted_by_MVS = 9013
- QMGR_Not_Active = 9014
- Remote_QMGR_Not_Supported = 9015
- Syntax_Error = 9016
- Command_Failed = 9017
- Not_Allowed_by_Security = 9018
- Not_Supported_by_Platform = 9019

Correlation ID The correlation identifier. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Disp The displacement within the message. The valid format is an alphanumeric string of up to 4 characters.

Hexadecimal Data The data at displacement in hexadecimal characters. The valid format is an alphanumeric string of up to 36 characters.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Message ID The identifier that is associated with the message. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Message Tag Cyclic redundancy check (CRC) for message descriptor (MQMD) in hexadecimal characters. The valid format is an alphanumeric string of up to 8 characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Name The name of the queue that is specified in the MQOPEN call (MQOD_ObjectName) of the application. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Status The status of the open or get command. The valid format is an integer of up to four digits.

Valid values are as follows:

- OK = 0,
- (KMQW000W)2001-Alias_Base_Q_Type_Error = 2001,

- (KMQW000W)2004-Buffer_Error = 2004,
- (KMQW000W)2005-Buffer_Length_Error = 2005,
- (KMQW000W)2009-Connection_Broken = 2009,
- (KMQW000W)2010-Data_Length_Error = 2010,
- (KMQW000W)2011-Dynamic_Q_Name_Error = 2011,
- (KMQW000W)2016-Get_Inhibited = 2016,
- (KMQW000W)2017-Handle_Not_Available = 2017,
- (KMQW000W)2018-Hconn_Error = 2018,
- (KMQW000W)2019-Hobj_Error = 2019,
- (KMQW000W)2024-Syncpoint_Limit_Reached = 2024,
- (KMQW000W)2026-MD_Error = 2026,
- (KMQW000W)2033-No_Msg_Available = 2033,
- (KMQW000W)2034-No_Msg_Under_Cursor = 2034,
- (KMQW000W)2035-Not_Authorized = 2035,
- (KMQW000W)2036-Not_Open_For_Browse = 2036,
- (KMQW000W)2037-Not_Open_For_Input = 2037,
- (KMQW000W)2041-Object_Changed = 2041,
- (KMQW000W)2042-Object_In_Use = 2042,
- (KMQW000W)2043-Object_Type_Error = 2043,
- (KMQW000W)2044-OD_Error = 2044,
- (KMQW000W)2045-Option_Not_Valid_For_Type = 2045,
- (KMQW000W)2046-Options_Error = 2046,
- (KMQW000W)2052-Q_Deleted = 2052,
- (KMQW000W)2057-Q_Type_Error = 2057,
- (KMQW000W)2058-Q_Mgr_Name_Error = 2058,
- (KMQW000W)2059-Q_Mgr_Not_Available = 2059,
- (KMQW000W)2062-Second_Mark_Not_Allowed = 2062,
- (KMQW000W)2063-Security_Error = 2063,
- (KMQW000W)2069-Signal_Outstanding = 2069,
- (KMQW000W)2070-Signal_Request_Accepted = 2070,
- (KMQW000W)2071-Storage_Not_Available = 2071,
- (KMQW000W)2079-Truncated_Msg_Accepted = 2079,
- (KMQW000W)2080-Truncated_Msg_Failed = 2080,
- (KMQW000W)2082-Unknown_Alias_Base_Q = 2082,
- (KMQW000W)2085-Unknown_Object_Name = 2085,
- (KMQW000W)2086-Unknown_Object_Q_Mgr = 2086,
- (KMQW000W)2087-Unknown_Remote_Q_Mgr = 2087,
- (KMQW000W)2091-Xmit_Q_Type_Error = 2091,
- (KMQW000W)2092-Xmit_Q_Usage_Error = 2092,
- (KMQW000W)2099-Signal1_Error = 2099,
- (KMQW000W)2100-Object_Already_Exists = 2100,
- (KMQW000W)2101-Object_Damaged = 2101,
- (KMQW000W)2102-Resource_Problem = 2102,
- (KMQW000W)2109-Suppressed_By_Exit = 2109,
- (KMQW000W)2110-Format_Error = 2110,

- (KMQW000W)2111-Source_CCSID_Error = 2111,
- (KMQW000W)2112-Source_Integer_Enc_Error = 2112,
- (KMQW000W)2113-Source_Decimal_Enc_Error = 2113,
- (KMQW000W)2114-Source_Float_Enc_Error = 2114,
- (KMQW000W)2115-Target_CCSID_Error = 2115,
- (KMQW000W)2116-Target_Integer_Enc_Error = 2116,
- (KMQW000W)2117-Target_Decimal_Enc_Error = 2117,
- (KMQW000W)2118-Target_Float_Enc_Error = 2118,
- (KMQW000W)2119-Not_Converted = 2119,
- (KMQW000W)2120-Converted_Msg_Too_Big = 2120,
- (KMQW000W)2130-Adapter_Serv_Load_Error = 2130,
- (KMQW000W)2133-Adapter_Conv_Load_Error = 2133,
- (KMQW000W)2136-Multiple_Reasons = 2136,
- (KMQW000W)2140-CICS_Wait_Failed = 2140,
- (KMQW000W)2152-Object_Name_Error = 2152,
- (KMQW000W)2153-Object_Q_Mgr_Name_Error = 2153,
- (KMQW000W)2154-Recs_Present_Error = 2154,
- (KMQW000W)2155-Object_Records_Error = 2155,
- (KMQW000W)2156-Response_Records_Error = 2156,
- (KMQW000W)2157-ASID_Mismatch = 2157,
- (KMQW000W)2161-Q_Mgr_Quiescing = 2161,
- (KMQW000W)2162-Q_Mgr_Stopping = 2162,
- (KMQW000W)2183-API_Exit_Load_Error = 2183,
- (KMQW000W)2184-Remote_Q_Name_Error = 2184,
- (KMQW000W)2186-GMO_Error = 2186,
- (KMQW000W)2192-Pageset_Full = 2192,
- (KMQW000W)2193-Pageset_Error = 2193,
- (KMQW000W)2194-Name_Not_Valid_For_Type = 2194,
- (KMQW000W)2195-Unexpected_Error = 2195,
- (KMQW000W)2196-Unknown_Xmit_Q = 2196,
- (KMQW000W)2197-Unknown_Def_Xmit_Q = 2197,
- (KMQW000W)2198-Def_Xmit_Q_Type_Error = 2198,
- (KMQW000W)2199-Def_Xmit_Q_Usage_Error = 2199,
- (KMQW000W)2201-Name_In_Use = 2201,
- (KMQW000W)2202-Connection_Quiescing = 2202,
- (KMQW000W)2203-Connection_Stopping = 2203,
- (KMQW000W)2204-Adapter_Not_Available = 2204,
- (KMQW000W)2209-No_Msg_Locked = 2209,
- (KMQW000W)2217-Connection_Not_Authorized = 2217,
- (KMQW000W)2219-Call_In_Progress = 2219,
- (KMQW000W)2241-Incomplete_Group = 2241,
- (KMQW000W)2242-Incomplete_Msg = 2242,
- (KMQW000W)2243-Inconsistent_CCSIDs = 2243,
- (KMQW000W)2244-Inconsistent_Encodings = 2244,
- (KMQW000W)2245-Inconsistent_UOW = 2245,

- (KMQW000W)2246-Invalid_Msg_Under_Cursor = 2246,
- (KMQW000W)2247-Match_Options_Error = 2247,
- (KMQW000W)2255-UOW_Not_Available = 2255,
- (KMQW000W)2256-Wrong_GMO_Version = 2256,
- (KMQW000W)2257-Wrong_MD_Version = 2257,
- (KMQW000W)2259-Inconsistent_Browse = 2259,
- (KMQW002E)Unsupported_CCSID_Found = 9002,
- (KMQW008E)Not_Allowed_By_MSGACCESS = 9008,
- (KMQW009E)Agent_Timeout_Occurred = 9009

Remember: If you do not specify the Format field of the MQMD, you get a warning: MQMD_format_None, which indicates the WebSphere MQ Monitoring agent skips the message conversion process if the target CCSID is not identical to the source CCSID.

Message Details attributes

Use the Message Details attributes to view message parameters, including name, description, and value. These attributes are informational only; they cannot be used to create situations.

Correlation ID The correlation identifier. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Message ID The identifier that is associated with the message. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Message Tag Cyclic redundancy check (CRC) for message descriptor (MQMD) in hexadecimal characters. The valid format is an alphanumeric string of up to 8 characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Parameter Description The parameter name of detail for the event. The valid format is an integer.

The following values are from the Message Descriptor (MQMD) which is always present:

- Report = 1,
- MsgType = 2,
- Expiry = 3,

- Feedback = 4,
- Encoding = 5,
- CodedCharSetId = 6,
- Format = 7,
- Priority = 8,
- Persistence = 9,
- MsgId = 10,
- CorrelId = 11,
- BackoutCount = 12,
- ReplyToQ = 13,
- ReplyToQMgr = 14,
- UserIdentifier = 15,
- AccountingToken = 16,
- ApplIdentityData = 17,
- PutApplType = 18,
- PutApplName = 19,
- PutDate = 20,
- PutTime = 21,
- ApplOriginData = 22

The following values are from the Dead Letter Header (MQDLH):

- DLH_Reason = 23,
- DLH_DestQName = 24,
- DLH_DestQMgrName = 25,
- DLH_Encoding = 26,
- DLH_CodedCharSetId = 27,
- DLH_Format = 28,
- DLH_PutApplType = 29,
- DLH_PutApplName = 30,
- DLH_PutDate = 31,
- DLH_PutTime = 32.

The following extensions to the MQMD which are found in either a Version 2 MQMD or an MQMDE:

- MDE_Encoding = 33,
- MDE_CodedCharSetId = 34,
- MDE_Format = 35,
- MDE_Flags = 36,
- MDE_GroupId = 37,
- MDE_MsgSeqNumber = 38,
- MDE_Offset = 39,
- MDE_MsgFlags = 40,
- MDE_OriginalLength = 41

The following values are from the Transmission Queue Header (MQXQH):

- XQH_RemoteQName = 42,

- XQH_RemoteQMgrName = 43.

The following values are from the embedded MsgDesc that is contained within the Transmission Queue Header (MQXQH):

- XQH_Encoding = 44,
- XQH_CodedCharSetid = 45,
- XQH_Format = 46,
- XQH_Msgid = 47,
- XQH_CorrelId = 48,
- XQH_BackoutCount = 49,
- XQH_PutApplType = 50,
- XQH_PutApplName = 51,
- XQH_PutDate = 52,
- XQH_PutTime = 53,
- XQH_ApplOriginData = 54

The following values are from the Distribution Header (MQDH) and the subsequent, if they are present, Object Records (MQOR) and Put-Message Records (MQPMR):

- DH_Encoding = 55,
- DH_CodedCharSetId = 56,
- DH_Format = 57,
- DH_Flags = 58,
- DH_PutMsgRecFields = 59,
- DH_RecsPresent = 60,
- DH_ObjectRecOffset = 61,
- DH_PutMsgRecOffset = 62,
- OR_ObjectName = 63,
- OR_ObjectQMgrName = 64,
- PMR_MsgId = 65,
- PMR_CorrelID = 66,
- PMR_GroupID = 67,
- PMR_Feedback = 68,
- PMR_AccountingToken = 69

The following values are from the Message Reference Header (MQRMH):

- RMH_Encoding = 70,
- RMH_CodedCharSetId = 71,
- RMH_Format = 72,
- RMH_Flags = 73,
- RMH_ObjectType = 74,
- RMH_ObjectInstanceId = 75,
- RMH_SrcEnvLength = 76,
- RMH_SrcEnvOffset = 77,
- RMH_SrcNameLength = 78,
- RMH_SrcNameOffset = 79,
- RMH_DestEnvLength = 80,

- RMH_DestEnvOffset = 81,
- RMH_DestNameLength = 82,
- RMH_DestNameOffset = 83,
- RMH_DataLogicalLength = 84,
- RMH_DataLogicalOffset = 85,
- RMH_DataLogicalOffset2 = 86.

Parameter Type The type of the parameter. The valid format is an alphanumeric string of up to 22 characters.

Parameter Value The value of the parameter. The valid format is an alphanumeric string of up to 48 characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Name The name of the queue that is specified in the MQOPEN call (MQOD_ObjectName) of the application. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Status The status of the open or get. The valid format is an integer. Valid values are as follows:

- OK = 0,
- (KMQW000W)2001-Alias_Base_Q_Type_Error = 2001,
- (KMQW000W)2004-Buffer_Error = 2004,
- (KMQW000W)2005-Buffer_Length_Error = 2005,
- (KMQW000W)2009-Connection_Broken = 2009,
- (KMQW000W)2010-Data_Length_Error = 2010,
- (KMQW000W)2011-Dynamic_Q_Name_Error = 2011,
- (KMQW000W)2016-Get_Inhibited = 2016,
- (KMQW000W)2017-Handle_Not_Available = 2017,
- (KMQW000W)2018-Hconn_Error = 2018,
- (KMQW000W)2019-Hobj_Error = 2019,
- (KMQW000W)2024-Syncpoint_Limit_Reached = 2024,
- (KMQW000W)2026-MD_Error = 2026,
- (KMQW000W)2033-No_Msg_Available = 2033,
- (KMQW000W)2034-No_Msg_Under_Cursor = 2034,
- (KMQW000W)2035-Not_Authorized = 2035,
- (KMQW000W)2036-Not_Open_For_Browse = 2036,
- (KMQW000W)2037-Not_Open_For_Input = 2037,
- (KMQW000W)2041-Object_Changed = 2041,
- (KMQW000W)2042-Object_In_Use = 2042,
- (KMQW000W)2043-Object_Type_Error = 2043,
- (KMQW000W)2044-OD_Error = 2044,
- (KMQW000W)2045-Option_Not_Valid_For_Type = 2045,
- (KMQW000W)2046-Options_Error = 2046,
- (KMQW000W)2052-Q_Deleted = 2052,
- (KMQW000W)2057-Q_Type_Error = 2057,

- (KMQW000W)2058-Q_Mgr_Name_Error = 2058,
- (KMQW000W)2059-Q_Mgr_Not_Available = 2059,
- (KMQW000W)2062-Second_Mark_Not_Allowed = 2062,
- (KMQW000W)2063-Security_Error = 2063,
- (KMQW000W)2069-Signal_Outstanding = 2069,
- (KMQW000W)2070-Signal_Request_Accepted = 2070,
- (KMQW000W)2071-Storage_Not_Available = 2071,
- (KMQW000W)2079-Truncated_Msg_Accepted = 2079,
- (KMQW000W)2080-Truncated_Msg_Failed = 2080,
- (KMQW000W)2082-Unknown_Alias_Base_Q = 2082,
- (KMQW000W)2085-Unknown_Object_Name = 2085,
- (KMQW000W)2086-Unknown_Object_Q_Mgr = 2086,
- (KMQW000W)2087-Unknown_Remote_Q_Mgr = 2087,
- (KMQW000W)2091-Xmit_Q_Type_Error = 2091,
- (KMQW000W)2092-Xmit_Q_Usage_Error = 2092,
- (KMQW000W)2099-Signal1_Error = 2099,
- (KMQW000W)2100-Object_Already_Exists = 2100,
- (KMQW000W)2101-Object_Damaged = 2101,
- (KMQW000W)2102-Resource_Problem = 2102,
- (KMQW000W)2109-Suppressed_By_Exit = 2109,
- (KMQW000W)2110-Format_Error = 2110,
- (KMQW000W)2111-Source_CCSID_Error = 2111,
- (KMQW000W)2112-Source_Integer_Enc_Error = 2112,
- (KMQW000W)2113-Source_Decimal_Enc_Error = 2113,
- (KMQW000W)2114-Source_Float_Enc_Error = 2114,
- (KMQW000W)2115-Target_CCSID_Error = 2115,
- (KMQW000W)2116-Target_Integer_Enc_Error = 2116,
- (KMQW000W)2117-Target_Decimal_Enc_Error = 2117,
- (KMQW000W)2118-Target_Float_Enc_Error = 2118,
- (KMQW000W)2119-Not_Converted = 2119,
- (KMQW000W)2120-Converted_Msg_Too_Big = 2120,
- (KMQW000W)2130-Adapter_Serv_Load_Error = 2130,
- (KMQW000W)2133-Adapter_Conv_Load_Error = 2133,
- (KMQW000W)2136-Multiple_Reasons = 2136,
- (KMQW000W)2140-CICS_Wait_Failed = 2140,
- (KMQW000W)2152-Object_Name_Error = 2152,
- (KMQW000W)2153-Object_Q_Mgr_Name_Error = 2153,
- (KMQW000W)2154-Recs_Present_Error = 2154,
- (KMQW000W)2155-Object_Records_Error = 2155,
- (KMQW000W)2156-Response_Records_Error = 2156,
- (KMQW000W)2157-ASID_Mismatch = 2157,
- (KMQW000W)2161-Q_Mgr_Quiescing = 2161,
- (KMQW000W)2162-Q_Mgr_Stopping = 2162,
- (KMQW000W)2183-API_Exit_Load_Error = 2183,
- (KMQW000W)2184-Remote_Q_Name_Error = 2184,

- (KMQW000W)2186-GMO_Error = 2186,
- (KMQW000W)2192-Pageset_Full = 2192,
- (KMQW000W)2193-Pageset_Error = 2193,
- (KMQW000W)2194-Name_Not_Valid_For_Type = 2194,
- (KMQW000W)2195-Unexpected_Error = 2195,
- (KMQW000W)2196-Unknown_Xmit_Q = 2196,
- (KMQW000W)2197-Unknown_Def_Xmit_Q = 2197,
- (KMQW000W)2198-Def_Xmit_Q_Type_Error = 2198,
- (KMQW000W)2199-Def_Xmit_Q_Usage_Error = 2199,
- (KMQW000W)2201-Name_In_Use = 2 201,
- (KMQW000W)2202-Connection_Quiescing = 2202,
- (KMQW000W)2203-Connection_Stopping = 2203,
- (KMQW000W)2204-Adapter_Not_Available = 2204,
- (KMQW000W)2209-No_Msg_Locked = 2209,
- (KMQW000W)2217-Connection_Not_Authorized = 2217,
- (KMQW000W)2219-Call_In_Progress = 2219,
- (KMQW000W)2241-Incomplete_Group = 2241,
- (KMQW000W)2242-Incomplete_Msg = 2242,
- (KMQW000W)2243-Inconsistent_CCSIDs = 2243,
- (KMQW000W)2244-Inconsistent_Encodings = 2244,
- (KMQW000W)2245-Inconsistent_UOW = 2245,
- (KMQW000W)2246-Invalid_Msg_Under_Cursor = 2246,
- (KMQW000W)2247-Match_Options_Error = 2247,
- (KMQW000W)2255-UOW_Not_Available = 2255,
- (KMQW000W)2256-Wrong_GMO_Version = 2256,
- (KMQW000W)2257-Wrong_MD_Version = 2257,
- (KMQW000W)2259-Inconsistent_Browse = 2259,
- (KMQW002E)Unsupported_CCSID_Found = 9002,
- (KMQW008E)Not_Allowed_By_MSGACCESS = 9008,
- (KMQW009E)Agent_Timeout_Occurred = 9009

Message Statistics attributes

Use the Message Statistics attributes to create situations that are associated with message statistics for a particular queue of interest. Note that the Queue Name attribute must be provided in queries to this attribute group and it must specify an individual queue name. No wildcards are allowed. See also the description of the Grouping Mechanism attribute that follows. Because of the overhead of collecting message statistics data, it must only be collected for those queues that you want closely monitored. Message Statistics is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

Many of the message statistics are calculated using the put-date-and-time of the message in the queue. If the queue has messages with put-date-and-times that do not reflect accurately when the message is put into the input queue, the statistics are correspondingly inaccurate. Put-date-and-times are not accurate indicators when origin context is preserved or set for a message during the put by an application to the queue. This commonly occurs when an application is a message

mover that moves messages from one queue to another, or when any application passes or sets origin context for a message.

% Delayed The percentage of Total Messages that are Delayed Messages.

Authorization userid The user ID of the user that issues the WebSphere MQ request. The valid format is an alphanumeric string of up to 16 case-sensitive characters. Informational.

Average Msg(Secs) The average number of seconds (with two decimal places) that messages matching the Message Group Identifier are on the queue.

Delayed Messages The count of messages matching the Message Group Identifier for which the current date and time minus the message put date and time exceeds the Latency Threshold value. The valid format is an integer.

Grouping Mechanism An enumerated value that indicates how to ascertain the Message Group Identifier. This can be given in queries to the attribute group to tell the agent how to group the messages in the queue. The grouping mechanism can be Correlation ID, Application Name, Group ID, or Queue. Queue is the default, which results in one row being returned giving the message statistics for the whole queue. The valid format is an integer. Valid values are as follows:

- Queue = 0,
- Correlation_ID = 1,
- Application_Name = 2,
- Group_ID = 3

High Priority Msg(Secs) The number of seconds (with two decimal places) that the highest priority message that matches the Message Group Identifier is on the queue (note that if there is more than one of the highest priority, the oldest such message is used for this time value).

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Largest Message Size The size of the largest message on the queue. The message size is a return attribute when messages are browsed for other data. The valid format is an integer.

Latency Threshold The number of seconds (with two decimal places) that a message can exist on the queue before it is determined to be delayed on the queue. This can be given in queries to the attribute group to tell the agent how to calculate Delayed Messages. The default is either the threshold given for a greater-than comparison to the Oldest Message Time attribute when available in the query, or if not available, a value of 120 seconds.

Message Group Identifier A character string that identifies how messages are grouped within a workspace; this can be the correlation ID, put application name, or group ID from the MQMD. This identifier is blank when the default grouping mechanism of Queue is used. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Message Group Identifier(Hex) A hexadecimal character representation of the Message Group Identifier. It is possible to chose to group by a hexadecimal

correlation ID or group ID; however this form of the identifier is not selected for display by default in the product-provided workspaces. The valid format is an alphanumeric string of up to 96 case-sensitive characters.

Newest Msg(Secs) The number of seconds (with two decimal places) that the newest, most recent message matching the Message Group Identifier has been on the queue.

Oldest Msg(Secs) The number of seconds (with two decimal places) that the oldest (or most delayed) message matching the Message Group Identifier has been on the queue.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Priority 0 Messages The count of messages that match the Message Group Identifier for which the message priority given in the MQMD is 0.

Priority 1 Messages The count of messages that match the Message Group Identifier for which the message priority given in the MQMD is 1.

Priority 2 Messages The count of messages that match the Message Group Identifier for which the message priority given in the MQMD is 2.

Priority 3 Messages The count of messages that match the Message Group Identifier for which the message priority given in the MQMD is 3.

Priority 4 Messages The count of messages that match the Message Group Identifier for which the message priority given in the MQMD is 4.

Priority 5 Messages The count of messages that match the Message Group Identifier for which the message priority given in the MQMD is 5.

Priority 6 Messages The count of messages that match the Message Group Identifier for which the message priority given in the MQMD is 6.

Priority 7 Messages The count of messages that match the Message Group Identifier for which the message priority given in the MQMD is 7.

Priority 8 Messages The count of messages that match the Message Group Identifier for which the message priority given in the MQMD is 8.

Priority 9 Messages The count of messages that match the Message Group Identifier for which the message priority given in the MQMD is 9.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Name The name of a queue that is managed by the selected queue manager. This attribute is required to be given in queries to this attribute group. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Request Type One of the following request types: Current or Recent History. The valid format is an integer. Valid Values are Current = 0 and Recent_History = 1.

Sample Date & Time The date and time of the sample. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Total Messages The count of messages that are browsed that match the Message Group Identifier on the queue during the collection sample. The valid format is an integer.

Message Summary attributes

Use the Message Summary attributes to detect problems with messages. This group provides the backout count (which if high can indicate a problem), the correlation and message IDs, the message expiration time, the message length, message type (which can be request, reply, report, or datagram), persistence (which indicates whether the message is recoverable), priority (which can be used for selective retrieval), date and time the message was created, and the reply-to queue and queue manager names. These attributes are informational only; they cannot be used to create situations.

If multiple headers are generated, subsequent headers are prefixed with the WebSphere MQ ID of the associated header. For example, subsequent dead letter queue headers are prefixed with DLH and subsequent transmit queue headers are prefixed with XQH. For more information, see the *WebSphere MQ Application Programming Reference* manual.

Accounting Token The accounting token of the message. The valid format is an alphanumeric string of up to 32 case-sensitive characters.

Appl ID The application name (on z/OS, the application identifier) of the application that put the message on the queue. The valid format is an alphanumeric string of up to 12 case-sensitive characters.

Appl Origin The application origin data of the message. The valid format is an alphanumeric string of up to 4 case-sensitive characters.

Appl Type The application type of the application that put the message on the queue. The valid format is an integer. Valid values are as follows:

- Unknown = -1,
- NoContext = 0,
- CICS = 1,
- MVS = 2,
- IMS = 3,
- OS2 = 4,
- DOS = 5,
- UNIX = 6,
- QMGR = 7,
- OS400 = 8,
- WINDOWS = 9,
- CICS_VSE = 10,
- WINDOWS_NT = 11,
- VMS = 12,
- GUARDIAN = 13,
- VOS = 14,
- IMS_BRIDGE = 19,
- XCF = 20,
- CICS_BRIDGE = 21,
- NOTES_AGENT = 22,
- USER = 25,
- BROKER = 26,
- QMGR_PUBLISH = 27,
- JAVA = 28,
- DQM = 29,
- CHINIT = 30,
- WLM = 31,
- BATCH = 32,
- RRS_BATCH = 33,
- SIB = 34,
- SYSTEMEXT = 35,
- SYSTEM = 101 (z/OS systems only),
- USER = 65536

Application Identity Data The application identity data of the message. The valid format is an alphanumeric string of up to 32 case-sensitive characters.

Backout Count The backout count of the message. A high value might indicate a problem. The valid format is an integer.

Coded CharSetID The coded character set identifier, CCSID, of the message. The valid format is an integer.

Correlation ID The correlation identifier of the message, in hexadecimal character format. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Correlation ID (Char) The correlation identifier of the message. The valid format is an alphanumeric string of up to 24 characters.

Dest QMgr The destination queue manager of the message. The valid format is an alphanumeric string of up to 48 characters.

Dest Queue The destination queue of the message. The valid format is an alphanumeric string of up to 48 characters.

DLQ Appl ID The application name (or on z/OS, the application identifier) of the application that put the message on the dead-letter queue. The valid format is an alphanumeric string of up to 28 characters.

DLQ Appl Type The application type of the application that put the message on the dead-letter queue. The valid format is an integer. Valid values are as follows:

- Unknown = -1,
- NoContext = 0,
- CICS = 1,
- MVS = 2,
- IMS = 3,
- OS2 = 4,
- DOS = 5,
- UNIX = 6,
- QMGR = 7,
- OS400 = 8,
- WINDOWS = 9,
- CICS_VSE = 10,
- WINDOWS_NT = 11,
- VMS = 12,
- GUARDIAN = 13,
- VOS = 14,
- IMS_BRIDGE = 19,
- XCF = 20,
- CICS_BRIDGE = 21,
- NOTES_AGENT = 22,
- SYSTEMEXT = 35,
- USER = 65536

DLQ Put Date & Time The date and time the message is put on the dead-letter queue. The valid format is the standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C	Century (0 for 20th, 1 for 21st)
YY	Year
MM	Month
DD	Day
HH	Hour
MM	Minute

SS Second

mmm Millisecond

Encoding The encoding value of the message comparing with Origin Encoding. The valid format is an integer.

Expire (Secs) The expiration of the message, in seconds. The valid format is an integer.

Feedback Code The feedback code of the message. The valid format is an integer.

Format Name The format name of the message. The valid format is an alphanumeric string of up to 8 case-sensitive characters.

Group ID The group identifier for segmented or group messages. The valid format is an alphanumeric string of up to 48 characters.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Message ID The message identifier of the message. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Message Tag Cyclic redundancy check (CRC) for message descriptor (MQMD) in hexadecimal characters. The valid format is an alphanumeric string of up to 8 characters.

Msg Length The length of the message. The valid format is an integer.

Msg Type The message type (can be request, reply, report, or datagram). The valid format is an integer. Valid values are as follows:

- Request = 1,
- Reply = 2,
- Report = 4,
- Datagram = 8,
- Appl = 65536

Origin CharSetID The coded character set identifier, CCSID, of the original message. The valid format is an integer.

Origin Encoding The encoding value of the original message. The valid format is an integer.

Origin Format The format name of the original message. The valid format is an alphanumeric string of up to 8 case-sensitive characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Persistence Indicates whether the message is persistent. Valid values are No = 0 and Yes = 1. This indicates whether the message is recoverable.

Priority The priority of the message. The valid format is an integer.

Put Date & Time The date and time that the message is put on the queue. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Name The name of the queue that is specified in the MQOPEN call (MQOD_ObjectName) of the application. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Reason Code The reason code for the message. This indicates why the message is undeliverable. The valid format is an integer. Valid values are as follows:

- None = 0,
- 1-System_First = 1,
- (KMQW000W)256-Quit = 256,
- (KMQW000W)258-Expiration = 258,
- (KMQW000W)259-Coa = 259,
- (KMQW000W)260-Cod = 260,
- (KMQW000W)262-Channel_Completed = 262,
- (KMQW000W)263-Channel_Fail_Retry = 263,
- (KMQW000W)264-Channel_Fail = 264,
- (KMQW000W)265-Appl_Cannot_Started = 265,
- (KMQW000W)266-Trigger_Msg_Error = 266,
- (KMQW000W)267-Appl_Type_Error = 267,
- (KMQW000W)268-Stopped_By_Msg_Exit = 268,
- (KMQW000W)269-Activity = 269,
- (KMQW000W)271-Xmit_Q_Msg_Error = 271,
- (KMQW000W)275-Pan = 275,
- (KMQW000W)276-Nan = 276,

- (KMQW000W)277-Stopped_By_Chad_Exit = 277,
- (KMQW000W)279-Stopped_By_Pubsub_Exit = 279,
- (KMQW000W)280-Not_A_Repository_Msg = 280,
- (KMQW000W)281-Bind_Open_Clusrcvr_Del = 281,
- (KMQW000W)282-Max_Activities = 282,
- (KMQW000W)283-Not_Forwarded = 283,
- (KMQW000W)284-Not_Delivered = 284,
- (KMQW000W)285-Unsupported_Forwarding = 285
- (KMQW000W)286-Unsupported_Delivery = 286,
- (KMQW000W)291-Data_Length_Zero = 291,
- (KMQW000W)292-Data_Length_Negative = 292,
- (KMQW000W)293-Data_Length_Too_Big = 293,
- (KMQW000W)294-Buffer_Overflow = 294,
- (KMQW000W)295-Length_Off_By_One = 295,
- (KMQW000W)296-Iih_Error = 296,
- (KMQW000W)298-Not_Authorized_For_Ims = 298,
- (KMQW000W)300-Ims_Error = 300,
- (KMQW000W)301-Ims_First = 301,
- (KMQW000W)399-Ims_Last = 399,
- (KMQW000W)401-Cics_Internal_Error = 401,
- (KMQW000W)402-Cics_Not_Authorized = 402,
- (KMQW000W)403-Cics_Bridge_Failure = 403,
- (KMQW000W)404-Cics_Correl_Id_Error = 404,
- (KMQW000W)405-Cics_Ccsid_Error = 405,
- (KMQW000W)406-Cics-Encoding_Error = 406,
- (KMQW000W)407-Cics_Cih_Error = 407,
- (KMQW000W)408-Cics_Uow_Error = 408,
- (KMQW000W)409-Cics_Commarea_Error = 409,
- (KMQW000W)410-Cics_Appl_Not_Started = 410,
- (KMQW000W)411-Cics_Appl_Abended = 411,
- (KMQW000W)412-Cics_Dlq_Error = 412,
- (KMQW000W)413-Cics_Uow_Backded_Out = 413,
- (KMQW000W)900-Mqrc_Appl_First = 900,
- (KMQW000W)999-Mqrc_Appl_Last = 999,
- (KMQW000W)2001-Alias_Base_Q_Type_Error=2001,
- (KMQW000W)2002-Already_Connected=2002,
- (KMQW000W)2003-Backded_Out = 2003,
- (KMQW000W)2004-Buffer_Error = 2004,
- (KMQW000W)2005-Buffer_Length_Error = 2005
- (KMQW000W)2006-Char_Attr_Length_Error = 2006,
- (KMQW000W)2007-Char_Attrs_Error = 2007,
- (KMQW000W)2008-Char_Attrs_Too_Short = 2008,
- (KMQW000W)2009-Connection_Broken = 2009,
- (KMQW000W)2010-Data_Length_Error = 2010,
- (KMQW000W)2011-Dynamic_Q_Name_Error = 2011,

- (KMQW000W)2012-Environment_Error = 2012,
- (KMQW000W)2013-Expiry_Error = 2013,
- (KMQW000W)2014-Feedback_Error = 2014,
- (KMQW000W)2016-Get_Inhibited = 2016,
- (KMQW000W)2017-Handle_Not_Available = 2017,
- (KMQW000W)2018-Hconn_Error = 2018,
- (KMQW000W)2019-Hobj_Error = 2019,
- (KMQW000W)2020-Inhibit_Value_Error = 2020,
- (KMQW000W)2021-Int_Attr_Count_Error = 2021,
- (KMQW000W)2022-Int_Attr_Count_Too_Small = 2022,
- (KMQW000W)2023-Int_Attrs_Array_Error = 2023,
- (KMQW000W)2024-Syncpoint_Limit_Reached = 2024,
- (KMQW000W)2025-Max_Conns_Limit_Reached = 2025,
- (KMQW000W)2026-Md_Error = 2026,
- (KMQW000W)2027-Missing_Reply_To_Q = 2027,
- (KMQW000W)2029-Msg_Type_Error = 2029,
- (KMQW000W)2030-Msg_Too_Big_For_Q = 2030,
- (KMQW000W)2031-Msg_Too_Big_For_Q_Mgr = 2031,
- (KMQW000W)2033-No_Msg_Available = 2033,
- (KMQW000W)2034-No_Msg_Under_Cursor = 2034,
- (KMQW000W)2035-Not_Authorized = 2035,
- (KMQW000W)2036-Not_Open_For_Browse = 2036,
- (KMQW000W)2037-Not_Open_For_Input = 2037,
- (KMQW000W)2038-Not_Open_For_Inquire = 2038,
- (KMQW000W)2039-Not_Open_For_Output = 2039,
- (KMQW000W)2040-Not_Open_For_Set = 2040,
- (KMQW000W)2041-Object_Changed = 2041,
- (KMQW000W)2042-Object_In_Use = 2042,
- (KMQW000W)2043-Object_Type_Error = 2043,
- (KMQW000W)2044-Od_Error = 2044,
- (KMQW000W)2045-Option_Not_Valid_For_Type = 2045,
- (KMQW000W)2046-Options_Error = 2046,
- (KMQW000W)2047-Persistence_Error = 2047,
- (KMQW000W)2048-Persistent_Not_Allowed = 2048,
- (KMQW000W)2049-Priority_Exceeds_Maximum = 2049,
- (KMQW000W)2050-Priority_Error = 2050,
- (KMQW000W)2051-Put_Inhibited = 2051,
- (KMQW000W)2052-Q_Deleted = 2052,
- (KMQW000W)2053-Q_Full = 2053,
- (KMQW000W)2056-Q_Space_Not_Available = 2056,
- (KMQW000W)2057-Q_Type_Error = 2057,
- (KMQW000W)2058-Q_Mgr_Name_Error = 2058,
- (KMQW000W)2059-Q_Mgr_Not_Available = 2059,
- (KMQW000W)2061-Report_Options_Error = 2061,
- (KMQW000W)2062-Second_Mark_Not_Allowed = 2062,

- (KMQW000W)2063-Security_Error = 2063,
- (KMQW000W)2065-Selector_Count_Error = 2065,
- (KMQW000W)2066-Selector_Limit_Exceeded = 2066,
- (KMQW000W)2067-Selector_Error = 2067,
- (KMQW000W)2068-Selector_Not_For_Type = 2068,
- (KMQW000W)2069-Signal_Outstanding = 2069,
- (KMQW000W)2070-Signal_Request_Accepted = 2070,
- (KMQW000W)2071-Storage_Not_Available = 2071,
- (KMQW000W)2072-Syncpoint_Not_Available = 2072,
- (KMQW000W)2075-Trigger_Control_Error = 2075,
- (KMQW000W)2076-Trigger_Depth_Error = 2076,
- (KMQW000W)2077-Trigger_Msg_Priority_Err = 2077,
- (KMQW000W)2078-Trigger_Type_Error = 2078,
- (KMQW000W)2079-Truncated_Msg_Accepted = 2079,
- (KMQW000W)2080-Truncated_Msg_Failed = 2080,
- (KMQW000W)2082-Unknown_Alias_Base_Q = 2082,
- (KMQW000W)2085-Unknown_Object_Name = 2085,
- (KMQW000W)2086-Unknown_Object_Q_Mgr = 2086,
- (KMQW000W)2087-Unknown_Remote_Q_Mgr = 2087,
- (KMQW000W)2090-Wait_Interval_Error = 2090,
- (KMQW000W)2091-Xmit_Q_Type_Error = 2091,
- (KMQW000W)2092-Xmit_Q_Usage_Error = 2092,
- (KMQW000W)2093-Not_Open_For_Pass_All = 2093,
- (KMQW000W)2094-Not_Open_For_Pass_Ident = 2094,
- (KMQW000W)2095-Not_Open_For_Set_All = 2095,
- (KMQW000W)2096-Not_Open_For_Set_Ident = 2096,
- (KMQW000W)2097-Context_Handle_Error = 2097,
- (KMQW000W)2098-Context_Not_Available = 2098,
- (KMQW000W)2099-Signal1_Error = 2099,
- (KMQW000W)2100-Object_Already_Exists = 2100,
- (KMQW000W)2101-Object_Damaged = 2101,
- (KMQW000W)2102-Resource_Problem = 2102,
- (KMQW000W)2103-Another_Q_Mgr_Connected = 2103,
- (KMQW000W)2104-Unknown_Report_Option = 2104,
- (KMQW000W)2105-Storage_Class_Error = 2105,
- (KMQW000W)2106-Cod_Not_Valid_For_Xcf_Q = 2106,
- (KMQW000W)2107-Xwait_Canceled = 2107,
- (KMQW000W)2108-Xwait_Error = 2108,
- (KMQW000W)2109-Suppressed_By_Exit = 2109,
- (KMQW000W)2110-Format_Error = 2110,
- (KMQW000W)2111-Source_Ccsid_Error = 2111,
- (KMQW000W)2112-Source_Integer_Enc_Error = 2112,
- (KMQW000W)2113-Source_Decimal_Enc_Error = 2113,
- (KMQW000W)2114-Source_Float_Enc_Error = 2114,
- (KMQW000W)2115-Target_Ccsid_Error = 2115,

- (KMQW000W)2116-Target_Integer_Enc_Error = 2116,
- (KMQW000W)2117-Target_Decimal_Enc_Error = 2117,
- (KMQW000W)2118-Target_Float_Enc_Error = 2118,
- (KMQW000W)2119-Not_Converted = 2119,
- (KMQW000W)2120-Converted_Msg_Too_Big = 2120,
- (KMQW000W)2120-Truncated = 2120,
- (KMQW000W)2121-No_External_Participants = 2121,
- (KMQW000W)2122-Participant_Not_Available = 2122 ,
- (KMQW000W)2123-Outcome_Mixed = 2123,
- (KMQW000W)2124-Outcome_Pending = 2124,
- (KMQW000W)2125-Bridge_Started = 2125,
- (KMQW000W)2126-Bridge_Stopped = 2126,
- (KMQW000W)2127-Adapter_Storage_Shortage = 2127,
- (KMQW000W)2128-Uow_In_Progress = 2128,
- (KMQW000W)2129-Adapter_Conn_Load_Error = 2129,
- (KMQW000W)2130-Adapter_Serv_Load_Error = 2130,
- (KMQW000W)2131-Adapter_Defs_Error = 2131,
- (KMQW000W)2132-Adapter_Defs_Load_Error = 2132,
- (KMQW000W)2133-Adapter_Conv_Load_Error = 2133,
- (KMQW000W)2134-Bo_Error = 2134,
- (KMQW000W)2135-Dh_Error = 2135,
- (KMQW000W)2136-Multiple_Reasons = 2136,
- (KMQW000W)2137-Open_Failed = 2137,
- (KMQW000W)2138-Adapter_Disc_Load_Error = 2138,
- (KMQW000W)2139-Cno_Error = 2139,
- (KMQW000W)2140-Cics_Wait_Failed = 2140,
- (KMQW000W)2141-Dlh_Error = 2141,
- (KMQW000W)2142-Header_Error = 2142,
- (KMQW000W)2143-Source_Length_Error = 2143,
- (KMQW000W)2144-Target_Length_Error = 2144,
- (KMQW000W)2145-Source_Buffer_Error = 2145,
- (KMQW000W)2146-Target_Buffer_Error = 2146,
- (KMQW000W)2148-Iih_Error = 2148,
- (KMQW000W)2149-Pcf_Error = 2149,
- (KMQW000W)2150-DBCS_Error = 2150,
- (KMQW000W)2152-Object_Name_Error = 2152,
- (KMQW000W)2153-Object_Q_Mgr_Name_Error = 2153,
- (KMQW000W)2154-Recs_Present_Error = 2154,
- (KMQW000W)2155-Object_Records_Error = 2155,
- (KMQW000W)2156-Response_Records_Error = 2156,
- (KMQW000W)2157-Asid_Mismatch = 2157,
- (KMQW000W)2158-Pmo_Record_Flags_Error = 2158,
- (KMQW000W)2159-Put_Msg_Records_Error = 2159,
- (KMQW000W)2160-Conn_Id_In_Use = 2160,
- (KMQW000W)2161-Q_Mgr_Quiescing = 2161,

- (KMQW000W)2162-Q_Mgr_Stopping = 2162,
- (KMQW000W)2163-Duplicate_Recov_Coord = 2163,
- (KMQW000W)2173-Pmo_Error = 2173,
- (KMQW000W)2182-API_Exit_Not_Found = 2182,
- (KMQW000W)2183-API_Exit_Load_Error = 2183,
- (KMQW000W)2184-Remote_Q_Name_Error = 2184,
- (KMQW000W)2185-Inconsistent_Persistence = 2185,
- (KMQW000W)2186-Gmo_Error = 2186,
- (KMQW000W)2187-Cics_Bridge_Restriction = 2187,
- (KMQW000W)2188-Stopped_By_Cluster_Exit = 2188,
- (KMQW000W)2189-Cluster_Resolution_Error = 2189,
- (KMQW000W)2190-Converted_String_Too_Big = 2190,
- (KMQW000W)2191-Tmc_Error = 2191,
- (KMQW000W)2192-Pageset_Full = 2192,
- (KMQW000W)2192-Storage_Medium_Full = 2192,
- (KMQW000W)2193-Pageset_Error = 2193,
- (KMQW000W)2194-Name_Not_Valid_For_Type = 2194,
- (KMQW000W)2195-Unexpected_Error = 2195,
- (KMQW000W)2196-Unknown_Xmit_Q = 2196,
- (KMQW000W)2197-Unknown_Def_Xmit_Q = 2197,
- (KMQW000W)2198-Def_Xmit_Q_Type_Error = 2198,
- (KMQW000W)2199-Def_Xmit_Q_Usage_Error = 2199,
- (KMQW000W)2201-Name_In_Use = 2201,
- (KMQW000W)2202-Connection_Quiescing = 2202,
- (KMQW000W)2203-Connection_Stopping = 2203,
- (KMQW000W)2204-Adapter_Not_Available = 2204,
- (KMQW000W)2206-Msg_Id_Error = 2206,
- (KMQW000W)2207-Correl_Id_Error = 2207,
- (KMQW000W)2208-File_System_Error = 2208,
- (KMQW000W)2209-No_Msg_Locked = 2209,
- (KMQW000W)2210-Soap_Dotnet_Error = 2210,
- (KMQW000W)2211-Soap_Axis_Error = 2211,
- (KMQW000W)2212-Soap_Url_Error = 2212,
- (KMQW000W)2216-File_Not_Audited = 2216,
- (KMQW000W)2217-Connection_Not_Authorized = 2217,
- (KMQW000W)2218-Msg_Too_Big_For_Channel = 2218,
- (KMQW000W)2219-Call_In_Progress = 2219,
- (KMQW000W)2220-Rmh_Error = 2220,
- (KMQW000W)2222-Q_Mgr_Active = 2222,
- (KMQW000W)2223-Q_Mgr_Not_Active = 2223,
- (KMQW000W)2224-Q_Depth_High = 2224,
- (KMQW000W)2225-Q_Depth_Low = 2225,
- (KMQW000W)2226-Q_Service_Interval_High = 2226,
- (KMQW000W)2227-Q_Service_Interval_Ok = 2227,
- (KMQW000W)2228-Rfh_Header_Field_Error = 2228,

- (KMQW000W)2229-Ras_Property_Error = 2229,
- (KMQW000W)2232-Unit_Of_Work_Not_Started = 2232,
- (KMQW000W)2233-Channel_Auto_Def_Ok = 2233,
- (KMQW000W)2234-Channel_Auto_Def_Error = 2234,
- (KMQW000W)2235-Cfh_Error = 2235,
- (KMQW000W)2236-Cfil_Error = 2236,
- (KMQW000W)2237-Cfin_Error = 2237,
- (KMQW000W)2238-Cfsl_Error = 2238,
- (KMQW000W)2239-Cfst_Error = 2239,
- (KMQW000W)2241-Incomplete_Group = 2241,
- (KMQW000W)2242-Incomplete_Msg = 2242,
- (KMQW000W)2243-Inconsistent_Ccsids = 2243,
- (KMQW000W)2244-Inconsistent_Encodings = 2244,
- (KMQW000W)2245-Inconsistent_Uow = 2245,
- (KMQW000W)2246-Invalid_Msg_Under_Cursor = 2246,
- (KMQW000W)2247-Match_Options_Error = 2247,
- (KMQW000W)2248-Mde_Error = 2248,
- (KMQW000W)2249-Msg_Flags_Error = 2249,
- (KMQW000W)2250-Msg_Seq_Number_Error = 2250,
- (KMQW000W)2251-Offset_Error = 2251,
- (KMQW000W)2252-Original_Length_Error = 2252,
- (KMQW000W)2253-Segment_Length_Zero = 2253,
- (KMQW000W)2255-Uow_Not_Available = 2255,
- (KMQW000W)2256-Wrong_Gmo_Version = 2256,
- (KMQW000W)2257-Wrong_Md_Version = 2257,
- (KMQW000W)2258-Group_Id_Error = 2258,
- (KMQW000W)2259-Inconsistent_Browse = 2259,
- (KMQW000W)2260-Xqh_Error = 2260,
- (KMQW000W)2261-Src_Env_Error = 2261,
- (KMQW000W)2262-Src_Name_Error = 2262,
- (KMQW000W)2263-Dest_Env_Error = 2263,
- (KMQW000W)2264-Dest_Name_Error = 2264,
- (KMQW000W)2265-Tm_Error = 2265,
- (KMQW000W)2266-Cluster_Exit_Error = 2266,
- (KMQW000W)2267-Cluster_Exit_Load_Error = 2267,
- (KMQW000W)2268-Cluster_Put_Inhibited = 2268,
- (KMQW000W)2269-Cluster_Resource_Error = 2269,
- (KMQW000W)2270-No_Destinations_Available = 2270,
- (KMQW000W)2271-Conn_Tag_In_Use = 2271,
- (KMQW000W)2272-Partially_Converted = 2272,
- (KMQW000W)2273-Connection_Error = 2273,
- (KMQW000W)2274-Option_Environment_Error = 2274,
- (KMQW000W)2277-Cd_Error = 2277,
- (KMQW000W)2278-Client_Conn_Error = 2278,
- (KMQW000W)2279-Channel_Stopped_By_User = 2279,

- (KMQW000W)2280-Hconfig_Error = 2280,
- (KMQW000W)2281-Function_Error = 2281,
- (KMQW000W)2282-Channel_Started = 2282,
- (KMQW000W)2283-Channel_Stopped = 2283,
- (KMQW000W)2284-Channel_Conv_Error = 2284,
- (KMQW000W)2285-Service_Not_Available = 2285,
- (KMQW000W)2286-Initialization_Failed = 2286,
- (KMQW000W)2287-Termination_Failed = 2287,
- (KMQW000W)2288-Unknown_Q_Name = 2288,
- (KMQW000W)2289-Service_Error = 2289,
- (KMQW000W)2290-Q_Already_Exists = 2290,
- (KMQW000W)2291-User_Id_Not_Available = 2291,
- (KMQW000W)2292-Unknown_Entity = 2292,
- (KMQW000W)2293-Unknown_Auth_Entity = 2293,
- (KMQW000W)2294-Unknown_Ref_Object = 2294,
- (KMQW000W)2295-Channel_Activated = 2295,
- (KMQW000W)2296-Channel_Not_Activated = 2296,
- (KMQW000W)2297-Uow_Canceled = 2297,
- (KMQW000W)2298-Function_Not_Supported = 2298,
- (KMQW000W)2299-Selector_Type_Error = 2299,
- (KMQW000W)2300-Command_Type_Error = 2300,
- (KMQW000W)2301-Multiple_Instance_Error = 2301,
- (KMQW000W)2302-System_Item_Not_Alterable = 2302,
- (KMQW000W)2303-Bag_Conversion_Error = 2303,
- (KMQW000W)2304-Selector_Out_Of_Range = 2304,
- (KMQW000W)2305-Selector_Not_Unique = 2305,
- (KMQW000W)2306-Index_Not_Present = 2306,
- (KMQW000W)2307-String_Error = 2307,
- (KMQW000W)2308-Encoding_Not_Supported = 2308,
- (KMQW000W)2309-Selector_Not_Present = 2309,
- (KMQW000W)2310-Out_Selector_Error = 2310,
- (KMQW000W)2311-String_Truncated = 2311,
- (KMQW000W)2312-Selector_Wrong_Type = 2312,
- (KMQW000W)2313-Inconsistent_Item_Type = 2313,
- (KMQW000W)2314-Index_Error = 2314,
- (KMQW000W)2315-System_Bag_Not_Alterable = 2315,
- (KMQW000W)2316-Item_Count_Error = 2316,
- (KMQW000W)2317-Format_Not_Supported = 2317,
- (KMQW000W)2318-Selector_Not_Supported = 2318,
- (KMQW000W)2319-Item_Value_Error = 2319,
- (KMQW000W)2320-Hbag_Error = 2320,
- (KMQW000W)2321-Parameter_Missing = 2321,
- (KMQW000W)2322-Cmd_Server_Not_Available = 2322,
- (KMQW000W)2323-String_Length_Error = 2323,
- (KMQW000W)2324-Inquiry_Command_Error = 2324,

- (KMQW000W)2325-Nested_Bag_Not_Supported = 2325,
- (KMQW000W)2326-Bag_Wrong_Type = 2326,
- (KMQW000W)2327-Item_Type_Error = 2327,
- (KMQW000W)2328-System_Bag_Not_Deletable = 2328,
- (KMQW000W)2329-System_Item_Not_Deletable = 2329,
- (KMQW000W)2330-Coded_Char_Set_Id_Error = 2330,
- (KMQW000W)2331-Msg_Token_Error = 2331,
- (KMQW000W)2332-Missing_Wih = 2332,
- (KMQW000W)2333-Wih_Error = 2333,
- (KMQW000W)2334-Rfh_Error = 2334,
- (KMQW000W)2335-Rfh_String_Error = 2335,
- (KMQW000W)2336-Rfh_Command_Error = 2336,
- (KMQW000W)2337-Rfh_Parm_Error = 2337,
- (KMQW000W)2338-Rfh_Duplicate_Parm = 2338,
- (KMQW000W)2339-Rfh_Parm_Missing = 2339,
- (KMQW000W)2340-Char_Conversion_Error = 2340,
- (KMQW000W)2341-Ucs2_Conversion_Error = 2341,
- (KMQW000W)2342-Db2_Not_Available = 2342,
- (KMQW000W)2343-Object_Not_Unique = 2343,
- (KMQW000W)2344-Conn_Tag_Not_Released = 2344,
- (KMQW000W)2345-Cf_Not_Available = 2345,
- (KMQW000W)2346-Cf_Struc_In_Use = 2346,
- (KMQW000W)2347-Cf_Struc_List_Hdr_In_Use = 2347,
- (KMQW000W)2348-Cf_Struc_Auth_Failed = 2348,
- (KMQW000W)2349-Cf_Struc_Error = 2349,
- (KMQW000W)2350-Conn_Tag_Not_Usable = 2350,
- (KMQW000W)2351-Global_Uow_Conflict = 2351,
- (KMQW000W)2352-Local_Uow_Conflict = 2352,
- (KMQW000W)2353-Handle_In_Use_For_Uow = 2353,
- (KMQW000W)2354-Uow_Enlistment_Error = 2354,
- (KMQW000W)2355-Uow_Mix_Not_Supported = 2355,
- (KMQW000W)2356-Wxp_Error = 2356,
- (KMQW000W)2357-Current_Record_Error = 2357,
- (KMQW000W)2358-Next_Offset_Error = 2358,
- (KMQW000W)2359-No_Record_Available = 2359,
- (KMQW000W)2360-Object_Level_Incompatible = 2360,
- (KMQW000W)2361-Next_Record_Error = 2361,
- (KMQW000W)2362-Backout_Threshold_Reached = 2362,
- (KMQW000W)2363-Msg_Not_Matched = 2363,
- (KMQW000W)2364-Jms_Format_Error = 2364,
- (KMQW000W)2365-Segments_Not_Supported = 2365,
- (KMQW000W)2366-Wrong_Cf_Level = 2366,
- (KMQW000W)2367-Config_Create_Object = 2367,
- (KMQW000W)2368-Config_Change_Object = 2368,
- (KMQW000W)2369-Config_Delete_Object = 2369,

- (KMQW000W)2370-Config_Refresh_Object = 2370,
- (KMQW000W)2371-Channel_Ssl_Error = 2371,
- (KMQW000W)2373-Cf_Struc_Failed = 2373,
- (KMQW000W)2374-API_Exit_Error = 2374,
- (KMQW000W)2375-API_Exit_Init_Error = 2375,
- (KMQW000W)2376-API_Exit_Term_Error = 2376,
- (KMQW000W)2377-Exit_Reason_Error = 2377,
- (KMQW000W)2378-Reserved_Value_Error = 2378,
- (KMQW000W)2379-No_Data_Available = 2379,
- (KMQW000W)2380-Sco_Error = 2380,
- (KMQW000W)2381-Key_Repository_Error = 2381,
- (KMQW000W)2382-Crypto_Hardware_Error = 2382,
- (KMQW000W)2383-Auth_Info_Rec_Count_Error = 2383,
- (KMQW000W)2384-Auth_Info_Rec_Error = 2384,
- (KMQW000W)2385-Air_Error = 2385,
- (KMQW000W)2386-Auth_Info_Type_Error = 2386,
- (KMQW000W)2387-Auth_Info_Conn_Name_Error = 2387,
- (KMQW000W)2388-Ldap_User_Name_Error = 2388,
- (KMQW000W)2389-Ldap_User_Name_Length_Err = 2389,
- (KMQW000W)2390-Ldap_Password_Error = 2390,
- (KMQW000W)2391-Ssl_Already_Initialized = 2391,
- (KMQW000W)2392-Ssl_Config_Error = 2392,
- (KMQW000W)2393-Ssl_Initialization_Error = 2393,
- (KMQW000W)2394-Q_Index_Type_Error = 2394,
- (KMQW000W)2395-Cfbs_Error = 2395,
- (KMQW000W)2396-Ssl_Not_Allowed = 2396,
- (KMQW000W)2397-Jsse_Error = 2397,
- (KMQW000W)2398-Ssl_Peer_Name_Mismatch = 2398,
- (KMQW000W)2399-Ssl_Peer_Name_Error = 2399,
- (KMQW000W)2400-Unsupported_Cipher_Suite = 2400,
- (KMQW000W)2401-Ssl_Certificate_Revoked = 2401,
- (KMQW000W)2402-Ssl_Cert_Store_Error = 2402,
- (KMQW000W)2406-Client_Exit_Load_Error = 2406,
- (KMQW000W)2407-Client_Exit_Error = 2407,
- (KMQW000W)2409-Ssl_Key_Reset_Error = 2409,
- (KMQW000W)2410-Unknown_Component_Name = 2410,
- (KMQW000W)2411-Logger_Status = 2411,
- (KMQW000W)2412-Command_Mqsc = 2412,
- (KMQW000W)2413-Command_Pcf = 2413,
- (KMQW000W)2414-Cfif_Error = 2414,
- (KMQW000W)2415-Cfsf_Error = 2415,
- (KMQW000W)2416-Cfgr_Error = 2416,
- (KMQW000W)2417-Msg_Not_Allowed_In_Group = 2417,
- (KMQW000W)2418-Filter_Operator_Error = 2418,
- (KMQW000W)2419-Nested_Selector_Error = 2419,

- (KMQW000W)2420-Eph_Error = 2420,
- (KMQW000W)2421-Rfh_Format_Error = 2421,
- (KMQW000W)2422-Cfbf_Error = 2422,
- (KMQW000W)2423-Client_Channel_Conflict = 2423,
- (KMQW000W)6100-Reopen_Excl_Input_Error = 6100,
- (KMQW000W)6101-Reopen_Inquire_Error = 6101,
- (KMQW000W)6102-Reopen_Saved_Context_Err = 6102,
- (KMQW000W)6103-Reopen_Temporary_Q_Error = 6103,
- (KMQW000W)6104-Attribute_Locked = 6104,
- (KMQW000W)6105-Cursor_Not_Valid = 6105,
- (KMQW000W)6106-Encoding_Error = 6106,
- (KMQW000W)6107-Struc_Id_Error = 6107,
- (KMQW000W)6108-Null_Pointer = 6108,
- (KMQW000W)6109-No_Connection_Reference = 6109,
- (KMQW000W)6110-No_Buffer = 6110,
- (KMQW000W)6111-Binary_Data_Length_Error = 6111,
- (KMQW000W)6112-Buffer_Not_Automatic = 6112,
- (KMQW000W)6113-Insufficient_Buffer = 6113,
- (KMQW000W)6114-Insufficient_Data = 6114,
- (KMQW000W)6115-Data_Truncated = 6115,
- (KMQW000W)6116-Zero_Length = 6116,
- (KMQW000W)6117-Negative_Length = 6117,
- (KMQW000W)6118-Negative_Offset = 6118,
- (KMQW000W)6119-Inconsistent_Format = 6119,
- (KMQW000W)6120-Inconsistent_Object_State = 6120,
- (KMQW000W)6121-Context_Object_Not_Valid = 6121,
- (KMQW000W)6122-Context_Open_Error = 6122,
- (KMQW000W)6123-Struc_Length_Error = 6123,
- (KMQW000W)6124-Not_Connected = 6124,
- (KMQW000W)6125-Not_Open = 6125,
- (KMQW000W)6126-Distribution_List_Empty = 6126,
- (KMQW000W)6127-Inconsistent_Open_Options = 6127,
- (KMQW000W)6128-Wrong_Version = 6128,
- (KMQW000W)6129-Reference_Error = 6129,
- (KMQW000W)65535-System_Last = 65535,
- (KMQW000W)65536-Mqfb_Appl_First = 65536,
- (KMQW000W)99999999-Mqfb_Appl_Last = 99999999

Reply to QMgr The name of the reply-to queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Reply to Queue The name of the reply-to queue. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Report Options The report options. The valid format is an integer.

Segmented or Group Message Indicates whether the message is a Segmented or Group message, or both. Valid values include No = 0, Segment = 1, Group = 2, Group_Segment = 3.

Status The status of the open or get. The valid format is an integer of up to 4 digits. Valid values are as follows:

- OK = 0,
- (KMQW000W)2001-Alias_Base_Q_Type_Error = 2001,
- (KMQW000W)2004-Buffer_Error = 2004,
- (KMQW000W)2005-Buffer_Length_Error = 2005,
- (KMQW000W)2009-Connection_Broken = 2009,
- (KMQW000W)2010-Data_Length_Error = 2010,
- (KMQW000W)2011-Dynamic_Q_Name_Error = 2011,
- (KMQW000W)2016-Get_Inhibited = 2016,
- (KMQW000W)2017-Handle_Not_Available = 2017,
- (KMQW000W)2018-Hconn_Error = 2018,
- (KMQW000W)2019-Hobj_Error = 2019,
- (KMQW000W)2024-Syncpoint_Limit_Reached = 2024,
- (KMQW000W)2026-MD_Error = 2026,
- (KMQW000W)2033-No_Msg_Available = 2033,
- (KMQW000W)2034-No_Msg_Under_Cursor = 2034,
- (KMQW000W)2035-Not_Authorized = 2035,
- (KMQW000W)2036-Not_Open_For_Browse = 2036,
- (KMQW000W)2037-Not_Open_For_Input = 2037,
- (KMQW000W)2041-Object_Changed = 2041,
- (KMQW000W)2042-Object_In_Use = 2042,
- (KMQW000W)2043-Object_Type_Error = 2043,
- (KMQW000W)2044-OD_Error = 2044,
- (KMQW000W)2045-Option_Not_Valid_For_Type = 2045,
- (KMQW000W)2046-Options_Error = 2046,
- (KMQW000W)2052-Q_Deleted = 2052,
- (KMQW000W)2057-Q_Type_Error = 2057,
- (KMQW000W)2058-Q_Mgr_Name_Error = 2058,
- (KMQW000W)2059-Q_Mgr_Not_Available = 2059,
- (KMQW000W)2062-Second_Mark_Not_Allowed = 2062,
- (KMQW000W)2063-Security_Error = 2063,
- (KMQW000W)2069-Signal_Outstanding = 2069,
- (KMQW000W)2070-Signal_Request_Accepted = 2070,
- (KMQW000W)2071-Storage_Not_Available = 2071,
- (KMQW000W)2079-Truncated_Msg_Accepted = 2079,
- (KMQW000W)2080-Truncated_Msg_Failed = 2080,
- (KMQW000W)2082-Unknown_Alias_Base_Q = 2082,
- (KMQW000W)2085-Unknown_Object_Name = 2085,
- (KMQW000W)2086-Unknown_Object_Q_Mgr = 2086,
- (KMQW000W)2087-Unknown_Remote_Q_Mgr = 2087,
- (KMQW000W)2091-Xmit_Q_Type_Error = 2091,

- (KMQW000W)2092-Xmit_Q_Usage_Error = 2092,
- (KMQW000W)2099-Signal1_Error = 2099,
- (KMQW000W)2100-Object_Already_Exists = 2100,
- (KMQW000W)2101-Object_Damaged = 2101,
- (KMQW000W)2102-Resource_Problem = 2102,
- (KMQW000W)2109-Suppressed_By_Exit = 2109,
- (KMQW000W)2110-Format_Error = 2110,
- (KMQW000W)2111-Source_CCSID_Error = 2111,
- (KMQW000W)2112-Source_Integer_Enc_Error = 2112,
- (KMQW000W)2113-Source_Decimal_Enc_Error = 2113,
- (KMQW000W)2114-Source_Float_Enc_Error = 2114,
- (KMQW000W)2115-Target_CCSID_Error = 2115,
- (KMQW000W)2116-Target_Integer_Enc_Error = 2116,
- (KMQW000W)2117-Target_Decimal_Enc_Error = 2117,
- (KMQW000W)2118-Target_Float_Enc_Error = 2118,
- (KMQW000W)2119-Not_Converted = 2119,
- (KMQW000W)2120-Converted_Msg_Too_Big = 2120,
- (KMQW000W)2130-Adapter_Serv_Load_Error = 2130,
- (KMQW000W)2133-Adapter_Conv_Load_Error = 2133,
- (KMQW000W)2136-Multiple_Reasons = 2136,
- (KMQW000W)2140-CICS_Wait_Failed = 2140,
- (KMQW000W)2152-Object_Name_Error = 2152,
- (KMQW000W)2153-Object_Q_Mgr_Name_Error = 2153,
- (KMQW000W)2154-Recs_Present_Error = 2154,
- (KMQW000W)2155-Object_Records_Error = 2155,
- (KMQW000W)2156-Response_Records_Error = 2156,
- (KMQW000W)2157-ASID_Mismatch = 2157,
- (KMQW000W)2161-Q_Mgr_Quiescing = 2161,
- (KMQW000W)2162-Q_Mgr_Stopping = 2162,
- (KMQW000W)2183-API_Exit_Load_Error = 2183,
- (KMQW000W)2184-Remote_Q_Name_Error = 2184,
- (KMQW000W)2186-GMO_Error = 2186,
- (KMQW000W)2192-Pageset_Full = 2192,
- (KMQW000W)2193-Pageset_Error = 2193,
- (KMQW000W)2194-Name_Not_Valid_For_Type = 2194,
- (KMQW000W)2195-Unexpected_Error = 2195,
- (KMQW000W)2196-Unknown_Xmit_Q = 2196,
- (KMQW000W)2197-Unknown_Def_Xmit_Q = 2197,
- (KMQW000W)2198-Def_Xmit_Q_Type_Error = 2198,
- (KMQW000W)2199-Def_Xmit_Q_Usage_Error = 2199,
- (KMQW000W)2201-Name_In_Use = 2201,
- (KMQW000W)2202-Connection_Quiescing = 2202,
- (KMQW000W)2203-Connection_Stopping = 2203,
- (KMQW000W)2204-Adapter_Not_Available = 2204,
- (KMQW000W)2209-No_Msg_Locked = 2209,

- (KMQW000W)2217-Connection_Not_Authorized = 2217,
- (KMQW000W)2219-Call_In_Progress = 2219,
- (KMQW000W)2241-Incomplete_Group = 2241,
- (KMQW000W)2242-Incomplete_Msg = 2242,
- (KMQW000W)2243-Inconsistent_CCSIDs = 2243,
- (KMQW000W)2244-Inconsistent_Encodings = 2244,
- (KMQW000W)2245-Inconsistent_UOW = 2245,
- (KMQW000W)2246-Invalid_Msg_Under_Cursor = 2246,
- (KMQW000W)2247-Match_Options_Error = 2247,
- (KMQW000W)2255-UOW_Not_Available = 2255,
- (KMQW000W)2256-Wrong_GMO_Version = 2256,
- (KMQW000W)2257-Wrong_MD_Version = 2257,
- (KMQW000W)2259-Inconsistent_Browse = 2259,
- (KMQW002E)Unsupported_CCSID_Found = 9002,
- (KMQW005E)Insufficient_Storage = 9005,
- (KMQW008E)Not_Allowed_By_MSGACCESS = 9008,
- (KMQW009E)Agent_Timeout_Occurred = 9009

User Identifier The user identifier that is used for MQ requests that must be authenticated to the terminal user. The valid format is an alphanumeric string of up to 12 case-sensitive characters.

MQ Action Log attributes

Use the MQ Action Log attributes to view an audit trail of actions performed by end users. The actions include actions performed by issuing Take Action commands and message manipulation actions.

Action Type Type of action. The valid format is an integer. Valid values are as follows:

- Unknown = -1
- MQ_Command = 1
- Retry_Message = 2
- Forward_Message = 3
- Delete_Message = 4

Command Content of the Take Action command or message manipulation request. The valid format is an alphanumeric string of up to 1024 case-sensitive characters.

Correlation ID Correlation ID of the message. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Host Name Name of the system on which the queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Log Date & Time Date and time that the action is written to log. Standard 16-character date and time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

Message ID Message ID of the message. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Message Tag Cyclic redundancy check (CRC) for MQMD (Message Descriptor) in hexadecimal characters. The valid format is an alphanumeric string of up to 8 case-sensitive characters.

MQ Reason Code Reason code of the Take Action command or message manipulation. The valid format is an integer. Valid values are as follows:

- n/a = -1
- MQ_Command_Successful = 0
- 2001-Alias_Base_Q_Type_Error = 2001
- 2002-Already_Connected = 2002
- 2003-Backed_Out = 2003
- 2004-Buffer_Error = 2004
- 2005-Buffer_Length_Error = 2005
- 2006-Char_Attr_Length_Error = 2006
- 2007-Char_Attrs_Error = 2007
- 2008-Char_Attrs_Too_Short = 2008
- 2009-Connection_Broken = 2009
- 2010-Data_Length_Error = 2010
- 2011-Dynamic_Q_Name_Error = 2011
- 2012-Environment_Error = 2012
- 2013-Expiry_Error = 2013
- 2014-Feedback_Error = 2014
- 2016-Get_Inhibited = 2016
- 2017-Handle_Not_Available = 2017
- 2018-Hconn_Error = 2018
- 2019-Hobj_Error = 2019
- 2020-Inhibit_Value_Error = 2020
- 2021-Int_Attr_Count_Error = 2021
- 2022-Int_Attr_Count_Too_Small = 2022
- 2023-Int_Attrs_Array_Error = 2023
- 2024-Syncpoint_Limit_Reached = 2024
- 2025-Max_Conns_Limit_Reached = 2025
- 2026-Md_Error = 2026
- 2027-Missing_Reply_To_Q = 2027
- 2029-Msg_Type_Error = 2029
- 2030-Msg_Too_Big_For_Q = 2030
- 2031-Msg_Too_Big_For_Q_Mgr = 2031
- 2033-No_Msg_Available = 2033
- 2034-No_Msg_Under_Cursor = 2034
- 2035-Not_Authorized = 2035
- 2036-Not_Open_For_Browse = 2036
- 2037-Not_Open_For_Input = 2037
- 2038-Not_Open_For_Inquire = 2038
- 2039-Not_Open_For_Output = 2039
- 2040-Not_Open_For_Set = 2040
- 2041-Object_Changed = 2041

- 2042-Object_In_Use = 2042
- 2043-Object_Type_Error = 2043
- 2044-Od_Error = 2044
- 2045-Option_Not_Valid_For_Type = 2045
- 2046-Options_Error = 2046
- 2047-Persistence_Error = 2047
- 2048-Persistent_Not_Allowed = 2048
- 2049-Priority_Exceeds_Maximum = 2049
- 2050-Priority_Error = 2050
- 2051-Put_Inhibited = 2051
- 2052-Q_Deleted = 2052
- 2053-Q_Full = 2053
- 2055-Q_Not_Empty = 2055
- 2056-Q_Space_Not_Available = 2056
- 2057-Q_Type_Error = 2057
- 2058-Q_Mgr_Name_Error = 2058
- 2059-Q_Mgr_Not_Available = 2059
- 2061-Report_Options_Error = 2061
- 2062-Second_Mark_Not_Allowed = 2062
- 2063-Security_Error = 2063
- 2065-Selector_Count_Error = 2065
- 2066-Selector_Limit_Exceeded = 2066
- 2067-Selector_Error = 2067
- 2068-Selector_Not_For_Type = 2068
- 2069-Signal_Outstanding = 2069
- 2070-Signal_Request_Accepted = 2070
- 2071-Storage_Not_Available = 2071
- 2072-Syncpoint_Not_Available = 2072
- 2075-Trigger_Control_Error = 2075
- 2076-Trigger_Depth_Error = 2076
- 2077-Trigger_Msg_Priority_Err = 2077
- 2078-Trigger_Type_Error = 2078
- 2079-Truncated_Msg_Accepted = 2079
- 2080-Truncated_Msg_Failed = 2080
- 2082-Unknown_Alias_Base_Q = 2082
- 2085-Unknown_Object_Name = 2085
- 2086-Unknown_Object_Q_Mgr = 2086
- 2087-Unknown_Remote_Q_Mgr = 2087
- 2090-Wait_Interval_Error = 2090
- 2091-Xmit_Q_Type_Error = 2091
- 2092-Xmit_Q_Usage_Error = 2092
- 2093-Not_Open_For_Pass_All = 2093
- 2094-Not_Open_For_Pass_Ident = 2094
- 2095-Not_Open_For_Set_All = 2095
- 2096-Not_Open_For_Set_Ident = 2096

- 2097-Context_Handle_Error = 2097
- 2098-Context_Not_Available = 2098
- 2099-Signal1_Error = 2099
- 2100-Object_Already_Exists = 2100
- 2101-Object_Damaged = 2101
- 2102-Resource_Problem = 2102
- 2103-Another_Q_Mgr_Connected = 2103
- 2104-Unknown_Report_Option = 2104
- 2105-Storage_Class_Error = 2105
- 2106-Cod_Not_Valid_For_Xcf_Q = 2106
- 2107-Xwait_Canceled = 2107
- 2108-Xwait_Error = 2108
- 2109-Suppressed_By_Exit = 2109
- 2110-Format_Error = 2110
- 2111-Source_Ccsid_Error = 2111
- 2112-Source_Integer_Enc_Error = 2112
- 2113-Source_Decimal_Enc_Error = 2113
- 2114-Source_Float_Enc_Error = 2114
- 2115-Target_Ccsid_Error = 2115
- 2116-Target_Integer_Enc_Error = 2116
- 2117-Target_Decimal_Enc_Error = 2117
- 2118-Target_Float_Enc_Error = 2118
- 2119-Not_Converted = 2119
- 2120-Converted_Msg_Too_Big = 2120
- 2120-Truncated = 2120
- 2121-No_External_Participants = 2121
- 2122-Participant_Not_Available = 2122
- 2123-Outcome_Mixed = 2123
- 2124-Outcome_Pending = 2124
- 2125-Bridge_Started = 2125
- 2126-Bridge_Stopped = 2126
- 2127-Adapter_Storage_Shortage = 2127
- 2128-Uow_In_Progress = 2128
- 2129-Adapter_Conn_Load_Error = 2129
- 2130-Adapter_Serv_Load_Error = 2130
- 2131-Adapter_Defs_Error = 2131
- 2132-Adapter_Defs_Load_Error = 2132
- 2133-Adapter_Conv_Load_Error = 2133
- 2134-Bo_Error = 2134
- 2135-Dh_Error = 2135
- 2136-Multiple_Reasons = 2136
- 2137-Open_Failed = 2137
- 2138-Adapter_Disc_Load_Error = 2138
- 2139-Cno_Error = 2139
- 2140-Cics_Wait_Failed = 2140

- 2141-Dlh_Error = 2141
- 2142-Header_Error = 2142
- 2143-Source_Length_Error = 2143
- 2144-Target_Length_Error = 2144
- 2145-Source_Buffer_Error = 2145
- 2146-Target_Buffer_Error = 2146
- 2148-Iih_Error = 2148
- 2149-Pcf_Error = 2149
- 2150-Dbcs_Error = 2150
- 2152-Object_Name_Error = 2152
- 2153-Object_Q_Mgr_Name_Error = 2153
- 2154-Recs_Present_Error = 2154
- 2155-Object_Records_Error = 2155
- 2156-Response_Records_Error = 2156
- 2157-Asid_Mismatch = 2157
- 2158-Pmo_Record_Flags_Error = 2158
- 2159-Put_Msg_Records_Error = 2159
- 2160-Conn_Id_In_Use = 2160
- 2161-Q_Mgr_Quiescing = 2161
- 2162-Q_Mgr_Stopping = 2162
- 2163-Duplicate_Recov_Coord = 2163
- 2173-Pmo_Error = 2173
- 2182-API_Exit_Not_Found = 2182
- 2183-API_Exit_Load_Error = 2183
- 2184-Remote_Q_Name_Error = 2184
- 2185-Inconsistent_Persistence = 2185
- 2186-Gmo_Error = 2186
- 2191-Tmc_Error = 2191
- 2192-Pageset_Full = 2192
- 2193-Pageset_Error = 2193
- 2194-Name_Not_Valid_For_Type = 2194
- 2195-Unexpected_Error = 2195
- 2196-Unknown_Xmit_Q = 2196
- 2197-Unknown_Def_Xmit_Q = 2197
- 2198-Def_Xmit_Q_Type_Error = 2198
- 2199-Def_Xmit_Q_Usage_Error = 2199
- 2201-Name_In_Use = 2201
- 2202-Connection_Quiescing = 2202
- 2203-Connection_Stopping = 2203
- 2204-Adapter_Not_Available = 2204
- 2206-Msg_Id_Error = 2206
- 2207-Correl_Id_Error = 2207
- 2208-File_System_Error = 2208
- 2209-No_Msg_Locked = 2209
- 2216-File_Not_Audited = 2216

- 2217-Connection_Not_Authorized = 2217
- 2218-Msg_Too_Big_For_Channel = 2218
- 2219-Call_In_Progress = 2219
- 2220-Rmh_Error = 2220
- 2222-Q_Mgr_Active = 2222
- 2223-Q_Mgr_Not_Active = 2223
- 2224-Q_Depth_High = 2224
- 2225-Q_Depth_Low = 2225
- 2226-Q_Service_Interval_High = 2226
- 2227-Q_Service_Interval_Ok = 2227
- 2233-Channel_Auto_Def_Ok = 2233
- 2234-Channel_Auto_Def_Error = 2234
- 2235-Cfh_Error = 2235
- 2236-Cfil_Error = 2236
- 2237-Cfin_Error = 2237
- 2238-Cfsl_Error = 2238
- 2239-Cfst_Error = 2239
- 2241-Incomplete_Group = 2241
- 2242-Incomplete_Msg = 2242
- 2243-Inconsistent_Ccsids = 2243
- 2244-Inconsistent_Encodings = 2244
- 2245-Inconsistent_Uow = 2245
- 2246-Invalid_Msg_Under_Cursor = 2246
- 2247-Match_Options_Error = 2247
- 2248-Mde_Error = 2248
- 2249-Msg_Flags_Error = 2249
- 2250-Msg_Seq_Number_Error = 2250
- 2251-Offset_Error = 2251
- 2252-Original_Length_Error = 2252
- 2253-Segment_Length_Zero = 2253
- 2255-Uow_Not_Available = 2255
- 2256-Wrong_Gmo_Version = 2256
- 2257-Wrong_Md_Version = 2257
- 2258-Group_Id_Error = 2258
- 2259-Inconsistent_Browse = 2259
- 2260-Xqh_Error = 2260
- 2261-Src_Env_Error = 2261
- 2262-Src_Name_Error = 2262
- 2263-Dest_Env_Error = 2263
- 2264-Dest_Name_Error = 2264
- 2265-Tm_Error = 2265
- 2280-Hconfig_Error = 2280
- 2281-Function_Error = 2281
- 2282-Channel_Started = 2282
- 2283-Channel_Stopped = 2283

- 2284-Channel_Conv_Error = 2284
- 2285-Service_Not_Available = 2285
- 2286-Initialization_Failed = 2286
- 2287-Termination_Failed = 2287
- 2288-Unknown_Q_Name = 2288
- 2289-Service_Error = 2289
- 2290-Q_Already_Exists = 2290
- 2291-User_Id_Not_Available = 2291
- 2292-Unknown_Entity = 2292
- 2293-Unknown_Auth_Entity = 2293
- 2294-Unknown_Ref_Object = 2294
- 2295-Channel_Activated = 2295
- 2296-Channel_Not_Activated = 2296
- 3001-MQCFH_Type_Error = 3001
- 3002-MQCFH_Struct_Length_Error = 3002
- 3003-MQCHF_Version_Error = 3003
- 3004-MQCFH_Msg_Seq_Error = 3004
- 3005-MQCFH_Control_error = 3005
- 3006-MQCFH_Parm_Count_Error = 3006
- 3007-MQCFH_Command_Error = 3007
- 3008-Command_Failed = 3008
- 3009-MQCFIN_Struct_Length_Error = 3009
- 3010-MQCFST_Struct_Length_Error = 3010
- 3011-MQCFST_String_Length_Error = 3011
- 3012-Force_value_Error = 3012
- 3013-Structure_Type_Error = 3013
- 3014-MQCFIN_Parm_ID_Error = 3014
- 3015-MQCFST_Parm_ID_Error = 3015
- 3016-Msg_Length_Error = 3016
- 3017-MQCFIN_Duplicate_Parm = 3017
- 3018-MQCFST_Duplicate_Parm = 3018
- 3019-Parm_Count_Too_Small = 3019
- 3020-Parm_Count_Too_Big = 3020
- 3021-Q_Already_In_Cell = 3021
- 3022-Q_Type_Error = 3022
- 3023-MD_Format_Error = 3023
- 3025-Replace_Value_Error = 3025
- 3026-MQCFIL_Duplicate_Value = 3026
- 3027-MQCFIL_Count_Error = 3027
- 3028-MQCFIL_Length_Error = 3028
- 3029-Quiesce_Value_Error = 3029
- 3030-Msg_Seq_Number_Error = 3030
- 3031-Ping_Data_Count_Error = 3031
- 3032-Ping_Data_Compare_Error = 3032
- 3034-Channel_Type_Error = 3034

- 3035-Parm_Sequence_Error = 3035
- 3036-Xmit_Protocol_Type_Error = 3036
- 3037-Batch_Size_Error = 3037
- 3038-Disc_Int_Error = 3038
- 3039-Short_Retry_Error = 3039
- 3040-Short_Timer_Error = 3040
- 3041-Long_Retry_Error = 3041
- 3042-Long_Timer_Error = 3042
- 3043-Seq_Number_Wrap_Error = 3043
- 3044-Max_Msg_Length_Error = 3044
- 3045-Put_Auth_Error = 3045
- 3046-Purge_Value_Error = 3046
- 3047-MQCFIL_Parm_ID_Error = 3047
- 3048-Msg_Truncated = 3048
- 3049-CCSID_Error = 3049
- 3050-Encoding_Error = 3050
- 3052-Data_Conv_Value_Error = 3052
- 3053-InDoubt_Value_Error = 3053
- 3054-Escape_Type_Error = 3054
- 3062-Channel_Table_Error = 3062
- 3063-MCA_Type_Error = 3063
- 3064-Chl_Inst_Type_Error = 3064
- 3065-Chl_Status_Not_Found = 3065
- 3066-MQCFSL_Duplicate_Parm = 3066
- 3067-MQCFSL_Total_Length_Error = 3067
- 4001-Object_Already_Exist = 4001
- 4002-Object_Wrong_Type = 4002
- 4003-Like_Object_Wrong_Type = 4003
- 4004-Object_Open = 4004
- 4005-Attr_Value_Error = 4005
- 4006-Unknown_Q_Mgr = 4006
- 4007-Q_Wrong_Type = 4007
- 4008-Object_Name_Error = 4008
- 4009-Allocate_Failed = 4009
- 4010-Host_Not_Available = 4010
- 4011-Configuration_Error = 4011
- 4012-Connection_Refused = 4012
- 4013-Entry_Error = 4013
- 4014-Send_Failed = 4014
- 4015-Receive_Data_Error = 4015
- 4016-Receive_Failed = 4016
- 4017-Connection_Closed = 4017
- 4018-No_Storage = 4018
- 4019-No_Comms_Manager = 4019
- 4020-Listener_Not_Started = 4020

- 4024-Bind_Failed = 4024
- 4025-Channel_InDoubt = 4025
- 4026-MQCONN_Failed = 4026
- 4027-MQOPEN_Failed = 4027
- 4028-MQGET_Failed = 4028
- 4029-MQPUT_Failed = 4029
- 4030-PING_Error = 4030
- 4031-Channel_In_Use = 4031
- 4032-Channel_Not_Found = 4032
- 4033-Unknown_Remote_Channel = 4033
- 4034-Remote_QM_Unavailable = 4034
- 4035-Remote_QM_Terminating = 4035
- 4036-MQINQ_Failed = 4036
- 4037-Not_Xmit_Q = 4037
- 4038-Channel_Disabled = 4038
- 4039-User_Exit_Not_Available = 4039
- 4040-Commit_Failed = 4040
- 4042-Channel_Already_Exists = 4042
- 4043-Data_Too_Large = 4043
- 4044-Channel_Name_Error = 4044
- 4045-Xmit_Q_Name_Error = 4045
- 4047-MCA_Name_Error = 4047
- 4048-Send_Exit_Name_Error = 4048
- 4049-Sec_Exit_Name_Error = 4049
- 4050-Msg_Exit_Name_Error = 4050
- 4051-Rcv_Exit_Name_Error = 4051
- 4052-Xmit_Q_Name_Wrong_Type = 4052
- 4053-MCA_Name_Wrong_Type = 4053
- 4054-Disc_Int_Wrong_Type = 4054
- 4055-Short_Retry_Wrong_Type = 4055
- 4056-Short_Timer_Wrong_Type = 4056
- 4057-Long_Retry_Wrong_Type = 4057
- 4058-Long_Timer_Wrong_Type = 4058
- 4059-Put_Auth_Wrong_Type = 4059
- 4061-Missing_Conn_Name = 4061
- 4062-Conn_Name_Error = 4062
- 4063-MQSET_Failed = 4063
- 4064-Channel_Not_Active = 4064
- 4065-Terminated_By_Sec_Exit = 4065
- 4067-Dynamic_Q_Scope_Error = 4067
- 4068-Cell_Dir_Not_Available = 4068
- 4069-MR_Count_Error = 4069
- 4070-MR_Count_Wrong_Type = 4070
- 4071-MR_Exit_Name_Error = 4071
- 4072-MR_Exit_Name_Wrong_Type = 4072

- 4073-MR_Interval_Error = 4073
- 4074-MR_Interval_Wrong_Type = 4074
- 4075-NPM_Speed_Error = 4075
- 4076-NPM_Speed_Wrong_Type = 4076
- 4077-HB_Interval_Error = 4077
- 4078-HB_Interval_Wrong_Type = 4078
- 4079-CHAD_Error = 4079
- 4080-CHAD_Wrong_Type = 4080
- 4081-CHAD_Event_Error = 4081
- 4082-CHAD_Event_Wrong_Type = 4082
- 4083-CHAD_Exit_Error = 4083
- 4084-CHAD_Exit_Wrong_Type = 4084
- 4085-Suppressed_By_Exit = 4085
- 4086-Batch_Int_Error = 4086
- 4087-Batch_Int_Wrong_Type = 4087
- Msg_Put_On_Xmit_Q_Successful = 9001
- Unsupported_CCSID_Found = 9002
- Insufficient_Storage = 9005
- Msg_Missing_DLQ_Header = 9006
- Truncated_Msg_Not_Retried = 9007
- Not_Allowed_By_MSGACCESS_Option = 9008
- Agent_Timeout_Occurred = 9009
- Not_Allowed_By_COMMAND_Option = 9010
- Failed_Due_to_QMGR_Quiescing = 9011
- Unknown_Reason_Code = 9012
- Command_Accepted_by_MVS = 9013
- QMGR_Not_Active = 9014
- Remote_QMGR_Not_Supported = 9015
- Syntax_Error = 9016
- Command_Failed = 9017
- Not_Allowed_by_Security = 9018
- Not_Supported_by_Platform = 9019

Origin Node Name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Name Name of the queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Source Queue Name Source queue name of the message. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Target QMgr Name Target queue manager name of the message. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Target Queue Name Target queue name of the message. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

User ID ID of the user that has issued the Take Action command or performed the message manipulation action. The valid format is an alphanumeric string of up to 10 case-sensitive characters.

MQ Channel Statistics attributes (distributed systems only)

Use the MQ Channel Statistics attributes to create situations for monitoring concerned attributes of channels. The MQ Channel Statistics attributes provide the information that is related to the activity of a channel during a configured interval.

The MQ Channel Statistics attributes are available on distributed systems only.

Avg Batch Size Average size of batches that are processed by the channel. The valid format is an integer.

Channel Name The name of this channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Channel Type Type of the channel. Valid values are as follows:

- Unknown = -1,
- Sender = 1,
- Server = 2,
- Receiver = 3,
- Requester = 4,
- All = 5,
- ClusRcvr = 8,
- ClusSdr = 9.

Command Level Queue manager command level. The valid format is an integer.

Connection Name Connection name of remote queue manager. The valid format is an alphanumeric string of up to 264 case-sensitive characters.

Exit Time Avg Average recorded time that is spent running a user exit in recording interval. The valid format is an integer.

Exit Time Max Longest recorded time that is spent running a user exit in recording interval. Valid format is an integer.

Exit Time Min Shortest recorded time that is spent running a user exit in recording interval. The valid format is an integer.

Full Batch Count Number of complete batches that are processed by the channel. The valid format is an integer.

Full Batch Rate Rate per second of complete batches that are processed by the channel. Valid format is a floating point number.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Incomplete Batch Count Number of incomplete batches that are processed by the channel. The valid format is an integer.

Incomplete Batch Rate Rate per second of incomplete batches that are processed by the channel. The valid format is a floating point number.

Interval End Date & Time Date and time of the end of the monitoring period. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Interval Start Date & Time Date and time of the start of the monitoring period. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Interval Time Seconds of interval time. The valid format is an integer.

Msg Count Number of nonpersistent messages that are sent or received. The valid format is an integer.

Msg Rate Rate per second of nonpersistent messages that are sent or received. The valid format is a floating point number.

Net Time Avg Average latency of messages that are retrieved from the queue. The valid format is an integer.

Net Time Max Longest recorded channel round trip that is measured in recording interval. The valid format is an integer.

Net Time Min Shortest recorded channel round trip that is measured in the recording interval. Valid format is an integer.

Object Count Number of queues that are accessed in the interval. The valid format is an integer.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Put Retry Count Number of times for a message that enters a retry loop because of failure. Valid format is an integer.

Put Retry Rate Rate per second of times for a message that enters a retry loop because of failure. The valid format is a floating point number.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Query Type Type of a SQL query. Valid values are as follows: Current = 0, Recent = 1, Historical = 2.

Remote QMgr Name of the remote queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Sample Handle Handle for a sample data record. The valid format is an integer.

Total Byte Rate Rate per second of bytes that are sent or received for nonpersistent message. The valid format is a floating point number.

Total Bytes Number of bytes that are sent or received for nonpersistent message. The valid format is an integer.

Total Bytes (Deprecated) Number of bytes that are sent or received for nonpersistent message. Valid format is an alphanumeric string of up to 20 case-sensitive characters.

MQ Queue Statistics attributes (distributed systems only)

Use the MQ Queue Statistics attributes to create situations for monitoring concerned attributes of queues. The MQ Queue Statistics attributes provide the information that is related to the activity of a queue during a configured interval.

The MQ Queue Statistics attributes are available on distributed systems only.

Browse Byte Rate Rate per second of bytes that are got nondestructively. The valid format is a floating point number.

Browse Bytes Total number of bytes that are got nondestructively. The valid format is an integer.

Browse Bytes (Deprecated) Total number of bytes that are got nondestructively. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Browse Count Count of non-destructive gets for messages. The valid format is an integer.

Browse Fail Count Number of unsuccessful non-destructive gets. Valid format is an integer.

Browse Fail Rate Rate per second of unsuccessful non-destructive gets. The valid format is a floating point number.

Browse Rate Rate per second of non-destructive gets for messages. The valid format is a floating point number.

Create Date & Time Date and time that the queue is created. Standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Expired Msg Count Number of messages that are discarded because of expiration. The valid format is an integer.

Expired Msg Rate Rate per second of messages that are discarded because of expiration. The valid format is a floating point number.

Generated Msgs Count The number of generated messages. Generated messages include the following ones:

- Trigger messages
- Queue Depth Low Events

- Queue Depth Hi Events

Get Byte Rate Rate per second of bytes that are got destructively. The valid format is a floating point number.

Get Bytes Total number of bytes that are got destructively. The valid format is an integer.

Get Bytes (Deprecated) Total number of bytes that are got destructively. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Get Count Count of gets. The valid format is an integer.

Get Fail Count Number of unsuccessful destructive gets. The valid format is an integer.

Get Fail Rate Rate per second of unsuccessful destructive gets. The valid format is a floating point number.

Get Rate Rate per second of destructive gets. The valid format is a floating point number.

Host Name The name of the system where this queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Interval End Date & Time Date and time of the end of the monitoring period. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Interval Start Date & Time Date and time of the start of the monitoring period. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Interval Time Seconds of interval time. The valid format is an integer.

MQCB Created Altered Count The number of successful MQCB requests that are created or altered.

MQCB Fail Count The number of unsuccessful MQCB requests.

MQCB Removed Count The number of successful MQCB requests that are removed.

MQCB Resumed Count The number of successful MQCB requests that are resumed.

MQCB Suspended Count The number of successful MQCB requests that are suspended.

Non-Queued Msg Count Number of messages that bypass the queue and are transferred to a waiting application. The valid format is an integer.

Non-Queued Msg Rate Rate per second of messages that bypass the queue and are transferred to a waiting application. The valid format is a floating point number.

NPM Browse Bytes The number of bytes that are read in non-destructive get requests for nonpersistent messages.

NPM Browse Count The number of successful non-destructive get requests for nonpersistent messages.

NPM Get Bytes The number of bytes that are read in destructive put requests for nonpersistent messages.

NPM Get Count The number of successful destructive get requests for nonpersistent messages.

NPM Put Bytes The number of bytes that are written in put requests for nonpersistent messages.

NPM Put Count The number of nonpersistent messages that are successfully put to the queue, with exception of MQPUT1 requests.

NPM Put1 Count The number of nonpersistent messages that are successfully put to the queue using MQPUT1 calls.

NPM Queue Time Avg(ms) The average latency, in microseconds, of nonpersistent messages destructively retrieved from the queue during the monitoring period.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

PM Browse Bytes The number of bytes that are read in non-destructive get requests for persistent messages.

PM Browse Count The number of successful non-destructive get requests for persistent messages.

PM Get Bytes The number of bytes that are read in destructive put requests for persistent messages.

PM Get Count The number of successful destructive get requests for persistent messages.

PM Put Bytes The number of bytes that are written in put requests for persistent messages.

PM Put Count The number of persistent messages that are successfully put to the queue, with exception of MQPUT1 requests.

PM Put1 Count The number of persistent messages that are successfully put to the queue using MQPUT1 calls.

PM Queue Time Avg(ms) The average latency, in microseconds, of persistent messages destructively retrieved from the queue during the monitoring period.

Purge Count Number of messages that are purged. The valid format is an integer.

Purge Rate Rate per second of messages that are purged. The valid format is a floating point number.

Put Byte Rate Rate per second of bytes that are put for messages. The valid format is a floating point number.

Put Bytes Total number of bytes that are put for messages. The valid format is an integer.

Put Bytes (Deprecated) Total number of bytes that are put for messages. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Put Count Count of puts. The valid format is an integer.

Put Fail Count Number of unsuccessful attempts to put a message. Valid format is an integer.

Put Fail Rate Rate per second of unsuccessful attempts to put a message. The valid format is a floating point number.

Put Rate Rate per second of messages that are successfully put to a queue. Valid format is a floating point number.

Put1 Count Count of messages that are put by the MQPUT1 call. The valid format is an integer.

Put1 Fail Count Number of unsuccessful attempts to put a message using MQPUT1 calls. The valid format is an integer.

Put1 Fail Rate Rate per second of unsuccessful attempts to put a message using MQPUT1 calls. The valid format is a floating point number.

Put1 Rate Rate per second of messages that are put to queue by the MQPUT1 call. The valid format is a floating point number.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Query Type Type of a SQL query. Valid values are as follows: Current = 0, Recent = 1, Historical = 2.

Queue Def Type Queue definition type. Valid values are as follows:

- Unknown = -1
- Predefined = 1
- PermanentDynamic = 2
- TemporaryDynamic = 3
- SharedDynamic = 4

Queue Max Depth Maximum queue depth during the monitoring period. The valid format is an integer.

Queue Min Depth Minimum queue depth during the monitoring period. Valid format is an integer.

Queue Name Name of the queue. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Time Avg(ms) Average latency of messages that are retrieved from the queue. The valid format is an integer.

Queue Time Avg(ms) (Deprecated) Average latency of messages that are retrieved from the queue. The valid format is an integer.

Queue Type Type of the queue. Valid values are as follows:

- Unknown = -1
- Local = 1
- Model = 2
- Alias = 3
- Remote = 6
- Cluster = 7

Sample Handle Handle for a sample data record. The valid format is an integer.

MQI Call Statistics Details attributes (distributed systems only)

Use MQI Call Statistics Details attributes to view the detailed information of MQI Call statistics. These attributes are informational only; they cannot be used to create situations.

The MQI Call Statistics Details attributes are available on distributed systems only.

Auth Info Object Count Number of authentication information objects that are operated. The valid format is an integer.

Auth Info Object Rate Rate per second of authentication information objects that are operated. The valid format is a floating point number.

Channel Object Count Number of channel objects that are operated. Valid format is an integer.

Channel Object Rate Rate per second of channel objects that are operated. The valid format is a floating point number.

Interval End Date & Time Date and time of the end of the monitoring period. Standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Interval Start Date & Time Date and time of the start of the monitoring period. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Interval Time Seconds of interval time. The valid format is an integer.

Listener Object Count Number of listener objects that are operated. The valid format is an integer.

Listener Object Rate Rate per second of listener objects that are operated. The valid format is a floating point number.

MQI Call Metric Metric for MQI call. Valid values are as follows:

- Sample_No_Longer_Available = -1,
- Opens = 0,
- Open_Failures = 1,
- Closes = 2,
- Close_Failures = 3,
- Inquires = 4,
- Inquire_Failures = 5,

- Sets = 6,
- Set_Failures = 7

Namelist Object Count Number of namelist objects that are operated. The valid format is an integer.

Namelist Object Rate Rate per second of namelist objects that are operated. The valid format is a floating point number.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 32 case-sensitive characters.

Process Object Count Number of process objects that are operated. The valid format is an integer.

Process Object Rate Rate per second of process objects that are operated. The valid format is a floating point number.

QMgr Name The name that are assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QManager Object Count Number of queue manager objects that are operated. The valid format is an integer.

QManager Object Rate Rate per second of queue manager objects that are operated. The valid format is a floating point number.

Queue Object Count Number of queue objects that are operated. The valid format is an integer.

Queue Object Rate Rate per second of queue objects that are operated. Valid format is a floating point number.

Sample Handle Handle for a sample data record. The valid format is an integer.

Sample Type Type of a sample data record. Valid values are as follows: n/a = -1, Application_Accounting = 0, MQI_Statistics = 1.

Service Object Count Number of service objects that are operated. The valid format is an integer.

Service Object Rate Rate per second of service objects that are operated. The valid format is a floating point number.

Topic Object Count Number of topic objects that are operated. The valid format is an integer.

Topic Object Rate Rate per second of topic objects that are operated. The valid format is a floating point number.

MQI Message Statistics Details attributes (distributed systems only)

Use MQI Message Statistics Details attributes to view the detailed information of MQI Message statistics. These attributes are informational only; they cannot be used to create situations.

The MQI Message Statistics Details attributes are available on distributed systems only.

Interval End Date & Time Date and time of the end of the monitoring period. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Interval Start Date & Time Date and time of the start of the monitoring period. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Interval Time Seconds of interval time. The valid format is an integer.

MQI Msg Metric Metric for MQI message. Valid values are as follows:

- Sample_No_Longer_Available = -1,
- Puts = 0,
- Put1s = 1,
- Gets = 2,
- Browses = 3,
- Put_Bytes = 4,
- Get_Bytes = 5,
- Browse_Bytes = 6,
- Put_Minimum_Bytes = 7,

- Put_Maximum_Bytes = 8,
- Get_Minimum_Bytes = 9,
- Get_Maximum_Bytes = 10,
- Browse_Minimum_Bytes = 11,
- Browse_Maximum_Bytes = 12,
- Queue_Time_Average = 13,
- Queue_Time_Minimum = 14,
- Queue_Time_Maximum = 15

Nonpersistent Msg Count Number of nonpersistent messages for operation. The valid format is an integer.

Nonpersistent Msg Count (Deprecated) Number of nonpersistent messages for operation. The valid format is an integer.

Nonpersistent Msg Rate Rate per second of nonpersistent messages for operation. The valid format is a floating point number.

Origin Node Name of the managed system node for the queue manager.

Persistent Msg Count Number of persistent messages for operation. The valid format is an integer.

Persistent Msg Count (Deprecated) Number of persistent messages for operation. The valid format is an integer.

Persistent Msg Rate Rate per second of persistent messages for operation. The valid format is a floating point number.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Sample Handle Handle for a sample data record. The valid format is an integer.

Sample Type Type of sample for query type. Valid values are as follows:

- n/a = -1
- Application_Accounting = 0,
- MQI_Statistics = 1,
- Queue_Accounting = 2,
- Queue_Statistics = 3

MQI Statistics attributes (distributed systems only)

Use the MQI Statistics attributes to create situations for monitoring concerned attributes of MQI requests. The MQI Statistics attributes provide the information related to the number of MQI requests issued during a configured interval.

The MQI Statistics attributes are available on distributed systems only.

Backout Count Number of backouts that are processed, including implicit backouts. The valid format is an integer.

Backout Rate Rate per second of backouts that are processed, including implicit backouts. The valid format is a floating point number.

Browse Byte Rate Rate per second of bytes that are got nondestructively. The valid format is a floating point number.

Browse Bytes Total number of bytes that are got nondestructively. The valid format is an integer.

Browse Bytes (Deprecated) Total number of bytes that are got nondestructively. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Browse Count Count of non-destructive gets for messages. The valid format is an integer.

Browse Fail Count Number of unsuccessful non-destructive gets. The valid format is an integer.

Browse Fail Rate Rate per second of unsuccessful non-destructive gets. The valid format is a floating point number.

Browse Rate Rate per second of non-destructive gets for messages. The valid format is a floating point number.

Close Count Count of objects that are closed. Valid format is an integer.

Close Fail Count Count of objects that are closed with failure. The valid format is an integer.

Close Fail Rate Rate per second of unsuccessful attempts to close queue objects. The valid format is a floating point number.

Close Rate Rate per second of objects that are closed. The valid format is a floating point number.

Command Level Queue manager command level. Valid format is an integer.

Commit Count Number of successful transactions. The valid format is an integer.

Commit Fail Count Number of unsuccessful attempts to complete a transaction. The valid format is an integer.

Commit Fail Rate Rate per second of unsuccessful attempts to complete a transaction. The valid format is a floating point number.

Commit Rate Rate per second of successful transactions. The valid format is a floating point number.

Connection Fail Count Number of unsuccessful connection attempts. The valid format is an integer.

Connection Fail Rate Rate per second of unsuccessful connection attempts. The valid format is a floating point number.

Connection Rate Rate per second of successful connections to the queue manager. The valid format is a floating point number.

Connection Count Number of successful connections to the queue manager. Valid format is an integer.

Expired Msg Count Number of messages that are discarded because of expiration. The valid format is an integer.

Expired Msg Rate Rate per second of messages that are discarded because of expiration. Valid format is a floating point number.

Get Byte Rate Rate per second of bytes that are got destructively. Valid format is a floating point number.

Get Bytes Total number of bytes that are got destructively. The valid format is an integer.

Get Bytes (Deprecated) Total number of bytes that are got destructively. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Get Count Count of gets. The valid format is an integer.

Get Fail Count Number of unsuccessful destructive gets. The valid format is an integer.

Get Fail Rate Date per second of unsuccessful destructive gets. The valid format is a floating point number.

Get Rate Rate per second of destructive gets. The valid format is a floating point number.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Implicit Disconnect Count Number of implicit disconnections from the queue manager. The valid format is an integer.

Implicit Disconnect Rate Rate per second of implicit disconnections from the queue manager. The valid format is a floating point number.

Inquire Count Count of successful inquiries for objects. The valid format is an integer.

Inquire Fail Count Number of unsuccessful attempts to inquire objects. The valid format is an integer.

Inquire Fail Rate Rate per second of unsuccessful attempts to inquire objects. The valid format is a floating point number.

Inquire Rate Rate per second of successful inquires for objects. The valid format is a floating point number.

Interval End Date & Time Date and time of the end of the monitoring period. The valid format is the standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Interval Start Date & Time Date and time of the start of the monitoring period. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Interval Time Seconds of interval time. The valid format is an integer.

Max Concurrent Connections Maximum number of concurrent connections in the recording interval. The valid format is an integer.

Normal Disconnect Count Number of normal disconnections from the queue manager. The valid format is an integer.

Normal Disconnect Rate Rate per second of normal disconnections from the queue manager. The valid format is a floating point number.

Open Count Count of objects that are opened. Valid format is an integer.

Open Fail Count Count of objects that are opened with failure. The valid format is an integer.

Open Fail Rate Rate per second of unsuccessful attempts to open objects. The valid format is a floating point number.

Open Rate Rate per second of objects that are opened. The valid format is a floating point number.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Purge Count Number of messages that are purged. The valid format is an integer.

Purge Rate Rate per second of messages that are purged. The valid format is a floating point number.

Put Byte Rate Rate per second of bytes that are put for messages. The valid format is a floating point number.

Put Bytes Total number of bytes that are put for messages. The valid format is an integer.

Put Bytes (Deprecated) Total number of bytes that are put for messages. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Put Count Count of puts. The valid format is an integer.

Put Fail Count Number of unsuccessful attempts to put a message. Valid format is an integer.

Put Fail Rate Rate per second of unsuccessful attempts to put a message. The valid format is a floating point number.

Put Rate Rate per second of messages that are successfully put to a queue. Valid format is a floating point number.

Put1 Count Count of messages that are put by the MQPUT1 call. The valid format is an integer.

Put1 Fail Count Number of unsuccessful attempts to put a message using MQPUT1 calls. The valid format is an integer.

Put1 Fail Rate Rate per second of unsuccessful attempts to put a message using MQPUT1 calls. The valid format is a floating point number.

Put1 Rate Rate per second of messages that are put to queue by the MQPUT1 call. The valid format is a floating point number.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Query Type Type of a SQL query. Valid values are as follows: Current = 0, Recent = 1, Historical = 2.

Queue Manager Disconnect Count Number of QMgr disconnections from the queue manager. The valid format is an integer.

Queue Manager Disconnect Rate Rate per second of QMgr disconnections from the queue manager. The valid format is a floating point number.

Sample Handle Handle for a sample data record. The valid format is an integer.

Set Count Count of successful MQSET calls. The valid format is an integer.

Set Fail Count Count of unsuccessful MQSET calls. The valid format is an integer.

Set Fail Rate Rate per second of unsuccessful MQSET calls. The valid format is a floating point number.

Set Rate Rate per second of successful MQSET calls. The valid format is a floating point number.

MQSeries Events attributes

Use the MQSeries Events attributes to create situations that alert you when a WebSphere MQ event occurs; these are pure events. WebSphere MQ events are messages written by WebSphere MQ to one of four SYSTEM event queues in response to errors, warnings, or other significant occurrences within a queue manager. For example, if an application tries to add a message to a queue with an MQPUT request and that request fails because the queue is full, the application receives an error, and WebSphere MQ writes a Queue_Full error to the appropriate event queue. MQSeries Events is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

Appl ID The application identifier that is associated with the event or message. On z/OS systems, this is the JOBNAME; in CICS it is the VTAM Application ID; in IMS it is the IMS subsystem ID. The valid format is an alphanumeric string of up to 28 case-sensitive characters.

Appl Type The application type associated with the event or message. The valid format is an integer. Valid values are as follows:

- n/a = -2,
- Unknown = -1,
- NoContext = 0,
- CICS = 1,
- MVS = 2,
- IMS = 3,
- OS2 = 4,
- DOS = 5,
- UNIX = 6,
- QMGR = 7,
- OS400 = 8,
- WINDOWS = 9,
- CICS_VSE = 10,
- WINDOWS_NT = 11,
- VMS = 12,
- GUARDIAN = 13,
- VOS = 14,
- IMS_BRIDGE = 19,
- XCF = 20,
- CICS_BRIDGE = 21,
- NOTES_AGENT = 22,
- USER = 25,
- CHINIT = 30,

- BATCH = 32,
- RRS_BATCH = 33,
- SYSTEMEXT=35,
- USER = 65536

Event The description of the outstanding WebSphere MQ event (for example, Channel_Stopped). The valid format is an integer. Valid values are as follows:

- Alias_Base_Queue_Type_Error = 2001,
- Get_Inhibited = 2016,
- Not_Authorized = 2035,
- Put_Inhibited = 2051,
- Queue_Full = 2053,
- Queue_Type_Error = 2057,
- Unknown_Alias_Base_Queue = 2082,
- Unknown_Object_Name = 2085,
- Unknown_Remote_Queue_Manager = 2087,
- Transmission_Queue_Type_Error = 2091,
- Transmission_Queue_Usage_Error = 2092,
- Bridge_Started = 2125,
- Bridge_Stopped = 2126,
- Remote_Queue_Name_Error = 2184,
- Unknown_Transmission_Queue = 2196,
- Unknown_Default_Xmit_Queue = 2197,
- Default_Xmit_Queue_Type_Error = 2198,
- Default_Xmit_Queue_Usage_Error = 2199,
- Queue_Manager_Active = 2222,
- Queue_Manager_Not_Active = 2223,
- Queue_Depth_High = 2224,
- Queue_Depth_Low = 2225,
- Queue_Service_Interval_High = 2226,
- Queue_Service_Interval_OK = 2227,
- Channel_Auto_Definition_OK = 2233,
- Channel_Auto_Definition_Error = 2234,
- Channel_Stopped_By_User = 2279,
- Channel_Started = 2282,
- Channel_Stopped = 2283,
- Channel_Conversion_Error = 2284,
- Channel_Activated = 2295,
- Channel_Not_Activated = 2296,
- Configuration_Create_Object = 2367,
- Configuration_Change_Object = 2368,
- Configuration_Delete_Object = 2369,
- Configuration_Refresh_Object = 2370,
- Channel_SSL_Error = 2371,
- Logger = 2411,

- Command_MQSC = 2412,
- Command_PCF = 2413,
- Queue_Not_Full = 1002053

Event Date & Time The time and date the event was posted to the WebSphere MQ event queue. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Event Host Name The name of the host system on which this event occurred, which is not necessarily the host system reporting the event. If this is a z/OS system, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Event QMgr Name The name of the queue manager on which this event occurred, which is not necessarily the queue manager reporting the event. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Event Qualifier This describes the condition that generated the event. The valid format is an integer. Valid values are as follows:

- n/a = 0,
- Connection_Not_Authorized = 1,
- Open_Not_Authorized = 2,
- Close_Not_Authorized = 3,
- Command_Not_Authorized = 4,
- Queue_Manager_Stopping = 5,
- Queue_Manager_Quiescing = 6,
- Channel_Stopped_OK = 7,
- Channel_Stopped_Error = 8,
- Channel_Stopped_Retry = 9,
- Channel_Stopped_Disabled = 10,
- Bridge_Stopped_OK = 11,
- Bridge_Stopped_Error = 12,
- SSL_Handshake_Error = 13,
- SSL_Cipher_Spec_Error = 14,
- SSL_Client_Auth_Error = 15,
- SSL_Peer_Name_Error = 16,
- Sub_Not_Authorized=17,
- Sub_Dest_Not_Authorized=18,

- COMMAND_NONE = 1000,
- Change_Queue_Manager = 1001,
- Inquire_Queue_Manager = 1002,
- Change_Process = 1003,
- Copy_Process = 1004,
- Create_Process = 1005,
- Delete_Process = 1006,
- Inquire_Process = 1007,
- Change_Queue = 1008,
- Clear_Queue = 1009,
- Copy_Queue = 1010,
- Create_Queue = 1011,
- Delete_Queue = 1012,
- Inquire_Queue = 1013,
- Refresh_Queue_Manager = 1016,
- Reset_Queue_Stats = 1017,
- Inquire_Queue_Names = 1018,
- Inquire_Process_Names = 1019 ,
- Inquire_Channel_Names = 1020,
- Change_Channel = 1021,
- Copy_Channel = 1022,
- Create_Channel = 1023 ,
- Delete_Channel = 1024,
- Inquire_Channel = 1025 ,
- Ping_Channel = 1026 ,
- Reset_Channel = 1027,
- Start_Channel = 1028,
- Stop_Channel = 1029,
- Start_Channel_Initiator = 1030,
- Start_Channel_Listener = 1031,
- Change_Namelist = 1032,
- Copy_Namelist = 1033,
- Create_Namelist = 1034,
- Delete_Namelist = 1035 ,
- Inquire_Namelist = 1036 ,
- Inquire_Namelist_Names = 1037,
- Escape = 1038,
- Resolve_Channel = 1039,
- Ping_Queue_Manager = 1040,
- Inquire_Queue_Status = 1041,
- Inquire_Channel_Status = 1042,
- Config_Event = 1043,
- Queue_Manager_Event = 1044,
- Performance_Event = 1045,
- Channel_Event = 1046 ,

- Delete_Publication = 1060,
- Deregister_Publisher = 1061,
- Deregister_Subscriber = 1062,
- Publish = 1063,
- Register_Publisher = 1064,
- Register_Subscriber = 1065,
- Request_Update = 1066,
- Broker_Internal = 1067,
- Activity_Message = 1069,
- Inquire_Cluster_Queue_Manager = 1070,
- Resume_Queue_Manager_Cluster = 1071,
- Suspend_Queue_Manager_Cluster = 1072,
- Refresh_Cluster = 1073,
- Reset_Cluster = 1074,
- Trace_Route = 1075,
- Refresh_Security = 1078,
- Change_Authentication_Information = 1079,
- Copy_Authentication_Information = 1080,
- Create_Authentication_Information = 1081,
- Delete_Authentication_Information = 1082,
- Inquire_Authentication_Information = 1083,
- Inquire_Authentication_Information_Names = 1084,
- Inquire_Connection = 1085,
- Stop_Connection = 1086,
- Inquire_Authority_Records = 1087,
- Inquire_Entity_Auth = 1088,
- Delete_Authority_Records = 1089,
- Set_Authority_Records = 1090,
- Logger_Event = 1091,
- Reset_Queue_Manager = 1092,
- Change_Listener = 1093,
- Copy_Listener = 1094,
- Create_Listener = 1095,
- Delete_Listener = 1096,
- Inquire_Listener = 1097,
- Inquire_Listener_Status = 1098,
- Command_Event = 1099,
- Change_Security = 1100,
- Change_CF_Structure = 1101,
- Change_Storage_Class = 1102,
- Change_Trace = 1103,
- Archive_Log = 1104,
- Backup_CF_Structure = 1105,
- Create_Buffer_Pool = 1106,
- Create_Page_Set = 1107,

- Create_CF_Structure = 1108,
- Create_Storage_Class = 1109,
- Copy_CF_Structure = 1110,
- Copy_Storage_Class = 1111,
- Delete_CF_Structure = 1112,
- Delete_Storage_Class = 1113,
- Inquire_Archive = 1114,
- Inquire_CF_Structure = 1115,
- Inquire_CF_Structure_Status = 1116,
- Inquire_Command_Server = 1117,
- Inquire_Channel_Init = 1118,
- Inquire_QSG = 1119,
- Inquire_Log = 1120,
- Inquire_Security = 1121,
- Inquire_Storage_Class = 1122,
- Inquire_System = 1123,
- Inquire_Thread = 1124,
- Inquire_Trace = 1125,
- Inquire_Usage = 1126,
- Move_Queue = 1127,
- Recover_BSDS = 1128,
- Recover_CF_Structure = 1129,
- Reset_Tpipe = 1130,
- Resolve_Indoubt = 1131,
- Resume_Queue_Manager = 1132,
- Reverify_Security = 1133,
- Set_Archive = 1134,
- Set_Log = 1136,
- Set_System = 1137,
- Start_Command_Server = 1138,
- Start_Queue_Manager = 1139,
- Start_Trace = 1140,
- Stop_Channel_Init = 1141,
- Stop_Channel_Listener = 1142,
- Stop_Command_Server = 1143,
- Stop_Queue_Manager = 1144 ,
- Stop_Trace = 1145,
- Suspend_Queue_Manager = 1146,
- Inquire_CF_Structure_Names = 1147,
- Inquire_Storage_Class_Names = 1148,
- Change_Service = 1149,
- Copy_Service = 1150,
- Create_Service = 1151,
- Delete_Service = 1152,
- Inquire_Service = 1153,

- Inquire_Service_Status = 1154,
- Start_Service = 1155,
- Stop_Service = 1156,
- Delete_Buffer_Pool = 1157,
- Delete_Page_Set = 1158,
- Change_Buffer_Pool = 1159,
- Change_Page_Set = 1160,
- Inquire_Queue_Manager_Status = 1161,
- Create_Log = 1162,
- Statistics_MQI = 1164,
- Statistics_Queue = 1165,
- Statistics_Channel = 1166,
- Accounting_MQI = 1167,
- Accounting_Queue = 1168,
- Inquire_Authority_Service = 1169,
- Change_Topic = 1170,
- Copy_Topic = 1171,
- Create_Topic = 1172,
- Delete_Topic = 1173,
- Inquire_Topic = 1174,
- Inquire_Topic_Names = 1175,
- Inquire_Subscription = 1176,
- Create_Subscription = 1177,
- Change_Subscription = 1178,
- Delete_Subscription = 1179,
- Clear_Subscription = 1180,
- Copy_Subscription = 1181,
- Inquire_SBStatus = 1182,
- Inquire_Topic_Status = 1183,
- Clear_Topic_String = 1184,
- Inquire_PUBSUB_Status = 1185.
- Attributes_Before_Change = 1000001,
- Attributes_After_Change = 1000002.

Event User ID The user ID that issued the command or call that generated the event. This attribute is not displayed on the portal by default.

Internal EventID The internal ID assigned to the event. The valid format is an alphanumeric string of up to 8 characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Reporting Host Name The name of the system reporting this event (which is not necessarily the host system on which the event occurred). On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Reporting QMgr Name The name assigned to the queue manager reporting this event (which is not necessarily the queue manager on which the event occurred). The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Resource Name (Deprecated) The name of the WebSphere MQ resource (channel or queue) on which the event occurred. The valid format is an alphanumeric string of up to 48 case-sensitive characters. This attribute has been deprecated.

Resource Name The name of the WebSphere MQ resource (channel or queue) on which the event occurred. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Namelist attributes

Use the Namelist attributes to view data associated with namelists. This group includes namelist name, count, and description.

Alter Date & Time The date and time the namelist definition was last altered. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Description (Deprecated) The namelist description. The valid format is an alphanumeric string of up to 64 characters.

Description The namelist description. The valid format is an alphanumeric string of up to 256 characters.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Name Count The number of names in the namelist. The valid format is an integer.

Namelist Name The name of the namelist. The valid format is an alphanumeric string of up to 48 characters.

Names The names in the namelist, separated by blanks. The valid format is an alphanumeric string of up to 1024 characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form of *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form of *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form of *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

QMgr Name The name assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Object Attribute Details attributes

Use the Object Attribute Details attribute group to view attribute details for a topic or subscription. These attributes are informational only; they cannot be used to create situations.

Origin Node Name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system or SMF ID.

QMgr Name Name of the queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Host Name Name of the system on which the queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Attribute Unique ID The name of the application subscription.

Attribute Name The attribute name. Possible values are as follows:

- 1 = topic string
- 2 = subscription name
- 3 = user data
- 4 = selector

Attribute Value The attribute value. The valid format is a string of up to 10240 UTF-8 characters.

Attribute Type Identifies the source of the object. Possible values are as follows:

- 1 = topic
- 2 = subscription

Topic Name A symbol that is used to link to Topic String Details from Topic Definitions only.

Topic String The topic string, which comprises the tree node names that make up the topic. For example, /news/ibm/hursley/.

Remember: if the topic string exceeds 512 characters in length, it is truncated.

Publish Subscribe Status attributes

The Publish Subscribe Status attributes provide status information about the publish-subscribe engine.

Host Name Name of the system where the queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Origin Node Name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system or SMF ID.

Pub Sub Type The type of the publish-subscribe engine. Possible values are as follows:

- 1 = Local
- 2 = Parent
- 3 = Child

Pub Sub Status The status of the publish-subscribe engine. Possible values are as follows:

- 0 = Inactive
- 1 = Starting
- 2 = Stopping
- 3 = Active
- 4 = Compat*
- 5 = Error
- 6 = Refused

When the publish-subscribe engine has a status of Compat, the engine is running and publish/subscribe facilities available using MQI. However, the queued publish-subscribe interface is not running.

QMgr Name Name of the queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Accounting attributes (distributed systems only)

Use the Queue Accounting attributes to create situations for monitoring concerned attributes of MQI requests for a certain queue. The Queue Accounting attributes provide the information related to the number of MQI requests that are executed using connections to a queue manager, with respect to specific queues.

The Queue Accounting attributes are available on distributed systems only.

Application Name Name of the application. The valid format is an alphanumeric string of up to 28 case-sensitive characters.

Browse Byte Rate Rate per second of bytes that are got nondestructively. The valid format is a floating point number.

Browse Bytes Total number of bytes that are got nondestructively. Valid format is an integer.

Browse Bytes (Deprecated) Total number of bytes that are got nondestructively. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Browse Count Count of non-destructive gets for messages. The valid format is an integer.

Browse Fail Count Number of unsuccessful non-destructive gets. Valid format is an integer.

Browse Fail Rate Rate per second of unsuccessful non-destructive gets. The valid format is a floating point number.

Browse Max Bytes Number of bytes of the largest message that is browsed from queue. Valid format is an integer.

Browse Min Bytes Number of bytes of the smallest message that is browsed from queue. Valid format is an integer.

Browse Rate Rate per second of unsuccessful non-destructive gets. The valid format is a floating point number.

Close Count Count of objects that are closed. The valid format is an integer.

Close Date & Time Date and time of the final close of the queue in this recording interval. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Close Rate Rate per second of times that this queue is closed by application in this interval. The valid format is a floating point number.

Connection ID Connection identifier for the WebSphere MQ connection. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Create Date & Time Date and time that the queue is created. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Generated Msg Count Number of messages that are generated. The valid format is an integer.

Generated Msg Rate Rate per second of messages that are generated. Valid format is a floating point number.

Get Bytes Total number of bytes that are got destructively. The valid format is an integer.

Get Bytes (Deprecated) Total number of bytes that are got destructively. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Get Byte Rate Rate per second of bytes that are got destructively. Valid format is a floating point number.

Get Count Count of gets. The valid format is an integer.

Get Fail Count Number of unsuccessful destructive gets. The valid format is an integer.

Get Fail Rate Rate per second of unsuccessful destructive gets. The valid format is a floating point number.

Get Max Bytes Number of the largest message that is retrieved from the queue. The valid format is an integer.

Get Min Bytes Number of the smallest message that is retrieved from the queue. The valid format is an integer.

Get Rate Rate per second of destructive gets. Valid format is a floating point number.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Interval End Date & Time Date and time of the end of the monitoring period. Standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day

HH Hour
MM Minute
SS Second
mmm Millisecond

Interval Start Date & Time Date and time of the start of the monitoring period. The valid format is the standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Interval Time Seconds of interval time. The valid format is an integer.

Open Count Count of objects that are opened. Valid format is an integer.

Open Date & Time Date and time of the queue that is first opened in this recording interval. Standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Open Rate Rate per second of objects that are opened. The valid format is a floating point number.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Process ID OS process identifier of the application. The valid format is an integer.

Put Bytes Total number of bytes that are put for messages. The valid format is an integer.

Put Bytes (Deprecated) Total number of bytes that are put for messages. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Put Byte Rate Rate per second of bytes that are put for messages. The valid format is a floating point number.

Put Count Count of puts. The valid format is an integer.

Put Fail Count Number of unsuccessful attempts to put a message. Valid format is an integer.

Put Fail Rate Rate per second of unsuccessful attempts to put a message. The valid format is a floating point number.

Put Max Bytes Size of the largest message that is placed on the queue. The valid format is an integer.

Put Min Bytes Size of the smallest message that is placed on the queue. The valid format is an integer.

Put Rate Rate per second of messages that are successfully put to a queue. The valid format is a floating point number.

Put1 Count Count of messages that are put by the MQPUT1 call. The valid format is an integer.

Put1 Fail Count Number of unsuccessful attempts to put a message using MQPUT1 calls. The valid format is an integer.

Put1 Fail Rate Rate per second of unsuccessful attempts to put a message using MQPUT1 calls. The valid format is a floating point number.

Put1 Rate Rate per second of messages that are put to queue by the MQPUT1 call. The valid format is a floating point number.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Query Type Type of a SQL query. Valid values are as follows:

- Current = 0
- Recent = 1
- Historical = 2

Queue Def Type Queue definition type. Valid values are as follows:

- Unknown = -1
- Predefined = 1
- PermanentDynamic = 2
- TemporaryDynamic = 3
- SharedDynamic = 4

Queue Name Name of the queue. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Time Avg Average time that a message remains on queue. The valid format is an integer.

Queue Time Avg (Deprecated) Average time that a message remains on queue. The valid format is an integer.

Queue Time Max The longest time that a message remains on queue. The valid format is an integer.

Queue Time Max (Deprecated) The longest time that a message remains on queue. The valid format is an integer.

Queue Time Min The shortest time that a message remains on queue. The valid format is an integer.

Queue Time Min (Deprecated) The shortest time that a message remains on queue. The valid format is an integer.

Queue Type The type of the queue. Valid values are as follows:

- Unknown = -1
- Local = 1
- Model = 2
- Alias = 3
- Remote = 6
- Cluster = 7

Sample Handle The handle for a sample data record. The valid format is an integer.

Sequence Number The sequence number. The valid format is an integer.

Thread ID WebSphere MQ thread identifier of the connection in the application. The valid format is an integer.

User ID The user identifier context of the application. The valid format is an alphanumeric string of up to 12 case-sensitive characters.

Queue Data attributes

The Queue Data attributes provide detailed information about a cluster queue.

% Full Current depth full percentage with one decimal place.

Alter Date & Time The date and time that the queue definition is last altered.

CF Struct Name The name of the Coupling Facility application structure for this queue. The valid format is an alphanumeric string of up to 12 uppercase characters. This attribute is for QSG environment on z/OS systems only.

Cluster The name of the cluster to which the queue belongs. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster Channel Name The generic name of the cluster-sender channels that use this queue as a transmission queue. This attribute specifies which cluster-sender channels send messages to a cluster-receiver channel from this cluster transmission queue. The valid format is an alphanumeric string of up to 20 case-sensitive characters. This attribute is for distributed systems only.

Cluster Date & Time The date and time that the cluster queue definition is made available.

Cluster Namelist The name of the namelist that specifies a list of clusters to which the queue belongs. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster Queue Type Type of the cluster queue. Valid values are as follows:

- Local = 1
- Alias = 2
- Remote = 3
- Qmgr = 4
- n/a = 255

Creation Date & Time The date and time that this WebSphere MQ object (for example, a channel or queue) is created.

Current Depth Current depth of the queue. On z/OS systems it is zero for queues defined with a disposition of group and for queues with a disposition of shared if the CF structure that they use is unavailable or has failed.

Default Persist The default persistence that is assigned to this queue when it is defined. Messages of a persistent queue are logged and are therefore recoverable after queue manager or system failure; messages of a nonpersistent queue are not recoverable. Valid values are No = 0 and Yes = 1.

Default Priority The default priority that is assigned to this queue when it is defined. When messages are retrieved from a queue, they can be selected by priority, so that higher-priority messages are retrieved before messages that have reached the queue earlier. The valid format is an integer with a range from 0 - 9.

Definition Type The definition type for the queue. Valid values are as follows:

- Predefined = 1
- PermDyn = 2
- TempDyn = 3
- n/a = -1

Get Status Indicates whether gets are enabled for the queue. Valid values are Enabled = 0, Disabled = 1, and n/a = -1.

High Depth Threshold % The queue depth threshold at which a high depth event is triggered, represented as a percentage to one decimal place.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Host QMgr The queue manager that hosts the cluster queue. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Input Opens Number of handles that are open for input. On z/OS systems it is zero for queues defined with a disposition of group and for queues with a disposition of shared. Only the handles for the queue managers sending back the information are returned, not for the whole group. The valid value is an integer.

Max Depth Maximum depth of the queue. The valid value is an integer.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Output Opens Number of handles that are open for output. On z/OS systems it is zero for queues defined with a disposition of group and for queues with a disposition of shared. Only the handles for the queue managers sending back the information are returned, not for the whole group. Valid value is an integer.

Put Status Indicates whether the current queue is enabled for puts (that is, whether applications may call WebSphere MQ API routines MQPUT or MQPUT1 for this queue). Valid values are Enabled = 0, Disabled = 1, and n/a = -1.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QSG Disp The disposition of this queue sharing group. This attribute is for QSG environment on z/OS systems only. Valid values are as follows:

- Qmgr = 0
- Copy = 1
- Shared = 2
- Group = 3
- Unknown = 255

QSG Name The name of the queue sharing group. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for QSG environment on z/OS systems only.

Queue Description Text description of the particular queue and its applications. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Queue Name The name of a queue that is managed by the selected queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Type Type of the queue. Valid values are as follows:

- Local = 1
- Model = 2

- Alias = 3
- Remote = 6
- Cluster = 7

Queue Usage Usage of the queue. Valid values are Normal, XmitQ, and n/a.

Remote QMgr Name of the queue manager that manages the remote queue if the queue type is Remote, blank if the queue type is Alias. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Target Object/ Remote Queue Name of the queue/topic that the alias queue is associated with if the queue type is Alias, name of the remote queue that the queue is associated with if the queue type is Remote. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Total Opens Total number of open operations that are performed for a queue. Valid value is an integer.

Trigger Control Indicates whether triggers are active. Valid values are Off = 0, On = 1, and n/a = -1.

Trigger Depth Depth of the trigger. The valid format is an integer.

Trigger Priority Threshold message priority for triggers. The valid format is an integer.

Trigger Type Type of trigger. Valid values are None = 0, First = 1, Every = 2, Depth = 3, and n/a = -1.

Queue Definitions attributes

Use the Queue Definitions attributes to create situations that query queue definitions for an individual queue. This attribute group provides queue definition information for each monitored queue within a queue manager. For example, you can create a situation to detect deleted queues or queues with a particular queue type. Queue Definitions is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

Alter Date & Time The date and time that the channel definition is last altered. The valid format is the standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

CF Struct Name The name of the Coupling Facility application structure for this queue. The valid format is an alphanumeric string of up to 12 uppercase characters. This attribute is for QSG environment on z/OS systems only.

Cluster The name of the cluster to which the queue belongs. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster Channel Name The generic name of the cluster-sender channels that use this queue as a transmission queue. This attribute specifies which cluster-sender channels send messages to a cluster-receiver channel from this cluster transmission queue. The valid format is an alphanumeric string of up to 20 case-sensitive characters. This attribute is for distributed systems only.

Cluster Date & Time The date and time that the cluster queue definition is made available. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Cluster Namelist The name of the namelist that specifies a list of clusters to which the queue belongs. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster Queue Type Type of the cluster queue. Valid values are as follows:

- Local = 1
- Alias = 2
- Remote = 3
- Qmgr = 4
- n/a = 255

Creation Date & Time The date and time that this WebSphere MQ object (for example, a channel or queue) is created. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Cur Defn Indicates whether the queue or channel is currently defined on the monitored queue manager. Valid values are No = 0 and Yes = 1.

Default Persist The default persistence that is assigned to this queue when it is defined. Messages of a persistent queue are logged and are therefore recoverable after queue manager or system failure; messages of a nonpersistent queue are not recoverable. Valid values are No = 0 and Yes = 1.

Default Priority The default priority that is assigned to this queue when it is defined. When messages are retrieved from a queue, they can be selected by priority, so that higher-priority messages are retrieved before messages that may have reached the queue earlier. The valid format is an integer with a range from 0 - 9.

Definition Type The definition type for the queue. Valid values are as follows:

- Predefined = 1
- PermDyn = 2
- TempDyn = 3
- n/a = -1

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Host QMgr The queue manager that hosts the cluster queue. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Put Status Indicates whether the current queue is enabled for puts (that is, whether applications may call WebSphere MQ API routines MQPUT or MQPUT1 for this queue). Valid values are Enabled = 0, Disabled = 1, and n/a = -1.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QSG Disp The disposition of this queue sharing group. This attribute is for QSG environment on z/OS systems only. Valid values are as follows:

- Qmgr = 0
- Copy = 1
- Shared = 2
- Group = 3
- Unknown = 255

QSG Name The name of the queue sharing group. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for QSG environment on z/OS systems only.

Queue Description Text description of the particular queue and its applications. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Queue Description (Deprecated) Text description of the particular queue and its applications. The valid format is an alphanumeric string of up to 64 case-sensitive characters.

Queue Name The name of a queue that is managed by the selected queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Type Type of the queue. Valid values are as follows:

- Local = 1
- Model = 2
- Alias = 3
- Remote = 6
- Cluster = 7

Queue Usage The queue usage, either Normal, XmitQ (for a transmission queue), or n/a. Valid values are Normal = 0, XmitQ = 1, and n/a = -1.

Remote QMgr Name of the queue manager that manages the remote queue if the queue type is Remote, blank if the queue type is Alias. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Target Object/ Remote Queue Name of the queue/topic that the alias queue is associated with if the queue type is Alias, name of the remote queue that the queue is associated with if the queue type is Remote. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Definition Details attributes

Use the Queue Definition Details attributes to view monitored queue parameters, including name, description, and value. These attributes are informational only; they cannot be used to create situations.

Cluster The name of the cluster to which the queue belongs. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Host QMgr The name of the queue manager that hosts the cluster queue. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Parameter Description The description of the parameter. The valid format is an integer.

Valid values are as follows:

- Queue name = 1
- Description = 2
- Type of queue = 3
- Usage normal or xmit = 4
- Type of definition = 5
- Default msg persistence = 6
- Default msg priority = 7
- Msgs can be added = 8
- Msgs can be retrieved = 9
- Maximum message length = 10
- Maximum number of msgs = 11
- High event threshold = 12
- Low event threshold = 13
- Queue full events = 14
- Service interval events = 15
- Service interval in ms. = 16
- Trigger msgs used or not = 17
- Conditions for trigger = 18
- Queue depth trigger = 19
- Message priority trigger = 20
- Trigger message data = 21
- Initiation Q for trigger = 22
- Process name for trigger = 23
- Default input share opt = 24
- Msg delivery sequence = 25
- Multiple appl get msgs = 26
- Hours to retain queue = 27
- Storage class name = 28
- Backout count hardening = 29
- Backout threshold = 30
- Backout requeue name = 31
- Remote queue manager = 32
- Remote queue name = 33
- Transmission queue name = 34
- Base queue being aliased = 35
- Queue depth high events = 36
- Queue depth low events = 37
- Scope of Q definition = 38

- Distribution lists = 39
- Index type = 40
- Cluster name = 41
- Cluster namelist = 42
- Cluster host queue manager = 43
- Cluster queue type = 44
- Default message binding = 45
- Internal queue manager name = 46
- Queue Sharing Group Disposition = 47
- Coupling Facility Structure = 48
- Non-persistent msg reliability level = 49
- Accounting queue level = 50
- Monitoring queue level = 51
- Statistics queue level = 52
- Cluster workload priority = 53
- Cluster workload rank = 54
- Cluster workload use queue = 55
- Tpipe names = 56
- Alias resolves object type = 57
- Default read ahead value = 58
- Default put response type = 59
- Property control = 60
- Cluster channel name = 61
- Custom attribute = 62

Parameter Name The name of the defined parameter. The valid format is an integer.

Valid values are as follows:

- QNAME = 1
- DESCR = 2
- QTYPE = 3
- USAGE = 4
- DEFTYPE = 5
- DEFPSIST = 6
- DEFPRTY = 7
- PUT = 8
- GET = 9
- MAXMSGL = 10
- MAXDEPTH = 11
- QDEPTHHI = 12
- QDEPTHLO = 13
- QDPMAXEV = 14
- QSVCIEV = 15
- QSVCIINT = 16
- TRIGGER = 17

- TRIGTYPE = 18
- TRIGDPATH = 19
- TRIGMPRI = 20
- TRIGDATA = 21
- INITQ = 22
- PROCESS = 23
- DEFSOPT = 24
- MSGDLVSQ = 25
- SHARE = 26
- RETINTVL = 27
- STGCLASS = 28
- HARDENBO = 29
- BOTHRESH = 30
- BOQNAME = 31
- RQMNAME = 32
- RNAME = 33
- XMITQ = 34
- TARGQ = 35
- QDPHIEV = 36
- QDPLOEV = 37
- SCOPE = 38
- DISTL = 39
- INDXTYPE = 40
- CLUSTER = 41
- CLUSNL = 42
- CLUSQMGR = 43
- CLUSQT = 44
- DEFBIND = 45
- QMID = 46
- QSGDISP = 47
- CFSTRUCT = 48
- NPMCLASS = 49
- ACCTQ = 50
- MONQ = 51
- STATQ = 52
- CLWLPRTY = 53
- CLWLRANK = 54
- CLWLUSEQ = 55
- TPIPE = 56
- TARGTYPE = 57
- DEFREADA = 58
- DEFPRESP = 59
- PROPCTL = 60
- CLCHNAME = 61
- CUSTOM = 62

Parameter Type The type of the parameter. The valid format is an alphanumeric string of up to 22 characters.

Parameter Value The value of the parameter. The valid format is an alphanumeric string of up to 256 characters.

Parameter Value (Deprecated) The value of the parameter. The valid format is an alphanumeric string of up to 64 characters.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Name The name of the queue that is specified in the MQOPEN call (MQOD_ObjectName) of the application. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Handle Status attributes

Use the Queue Handle Status attributes to view the most current data about which applications have a queue open. This attribute group can return multiple rows for a query, one for each queue open handle. Note that if a specific Queue Name is provided in the query to this attribute group, and that queue has no open handles, no rows are returned. No data is returned if the WebSphere MQ version requirement is not met.

If there are certain queues to be monitored by situations for Queue Handle Status, you must make a specific situation for each queue to be monitored and match the specific queue name with the Queue Name attribute as a condition in the situation. However, if you choose not to provide the queue name in the situation, only queues that are open are considered for possible match with the situation conditions specified.

Appl Type The type of application that owns the handle. Valid values are as follows:

- Unknown = -1,
- NoContext = 0,
- CICS = 1,
- MVS= 2,
- IMS = 3,
- OS2= 4,
- DOS= 5,
- UNIX= 6,
- QMgr = 7,
- OS400= 8,
- WINDOWS= 9,
- CICS_VSE= 10,
- WINDOWS_NT= 11,
- VMS= 12,
- GUARDIAN= 13,
- VOS= 14,
- IMS_BRIDGE= 19,

- XCF= 20,
- CICS_BRIDGE= 21,
- NOTES_AGENT= 22,
- USER= 25,
- BROKER= 26,
- QMGR_PUBLISH= 27,
- JAVA= 28,
- DQM= 29,
- CHINIT= 30,
- WLM= 31,
- BATCH= 32,
- RRS_BATCH= 33,
- SIB= 34,
- SYSTEMEXT = 35,
- SYSTEM = 101 (z/OS systems only),
- USER_FIRST= 65536

Application Tag The tag name identifies the application that owns the handle. For example, one of the following applications that are connected to the queue manager: z/OS batch job name, TSO USERID, CICS APPLID, IMS region name, Channel initiator job name, i5/OS job name, UNIX process, Windows process. The valid format is an alphanumeric string of up to 28 case-sensitive characters.

ASID The address space identifier of the application that opens the queue; the value is blank on non z/OS systems or on z/OS systems when the application type is Queue Manager. The valid format is an alphanumeric string of up to 4 case-sensitive characters.

Asynch State The state of the asynchronous consumption on this object handle. This attribute has the following valid values:

- None = 0
- Suspended = 4
- SuspendedTemp = 5
- Active = 6
- Inactive = 7
- n/a = 255

Channel Name The name of the channel that owns the handle if the handle belongs to the channel initiator; blank when no channel is associated with the handle. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

CICS Region Name The CICS region name if Appl Type is CICS; otherwise blank. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for CICS applications on z/OS systems only.

CICS Task No The CICS 7-digit task number if Appl Type is CICS; otherwise blank. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for CICS applications on z/OS systems only.

CICS Trans ID The CICS transaction identifier if Appl Type is CICS; otherwise blank. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for CICS applications on z/OS systems only.

Connection Name The name of the connection that is associated with the channel that owns the handle if the channel belongs to the channel initiator; blank when no channel is associated with the handle. The valid format is an alphanumeric string of up to 264 case-sensitive characters.

External Unit of Recovery ID The external unit of recovery identifier that is associated with the connection. The valid format is an alphanumeric string of up to 264 case-sensitive characters.

External Unit of Recovery Type The type of external unit of recovery identifier as perceived. The external unit of recovery type identifies the external unit of recovery identifier type and not the type of the transaction coordinator. When the value of the external unit of recovery type is QMGR, the associated identifier is in the queue manager unit of recovery identifier, and not the external unit of recovery identifier. Valid values are as follows:

- n/a = -1,
- QMGR = 0,
- CICS = 1 (z/OS systems only),
- RRS = 2 (z/OS systems only),
- IMS = 3 (z/OS systems only),
- XA = 4

Handle Status The state of the handle. Valid values are n/a = -1, Inactive = 0, and Active = 1.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

IMS PSB Name The name of the IMS Program Specification Block that is associated with the running IMS transaction if Appl Type is IMS; otherwise blank. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for IMS applications on z/OS systems only.

IMS PST ID The IMS Program Specification Table region identifier for the connected IMS region if Appl Type is IMS; otherwise blank. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for IMS applications on z/OS systems only.

Open for Browse Indicates whether the queue is open for browsing. Valid values are No = 0 and Yes = 1.

Open for Input Indicates whether the queue is open for input. If so, further describes the type of open for input. Valid values are No = 0, Shared = 1, and Exclusive = 2.

Open for Inquire Indicates whether the queue is open for inquiring. Valid values are No = 0 and Yes = 1.

Open for Output Indicates whether the queue is open for output. Valid values are No = 0 and Yes = 1.

Open for Set Indicates whether the queue is open for setting. Valid values are No = 0 and Yes = 1.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Process ID The process identifier of the application that owns the handle; this is the application that opened the queue. Valid values are an integer process identifier or n/a = -1 on a z/OS system.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QMgr Unit of Recovery ID The queue manager unit of recovery identifier. On z/OS systems, this is a 6-byte log RBA, displayed as 12 hexadecimal characters. On systems other than z/OS systems, this is an 8-byte transaction identifier, displayed as m.n where m and n are the decimal representation of the first and last 4 bytes of the transaction identifier.

You can use the queue manager unit of recovery identifier as a filter keyword. On z/OS systems, you must specify the filter value as a hexadecimal string. On systems other than z/OS systems, you must specify the filter value as a pair of decimal numbers separated by a period (.). You can only use the EQ, NE, GT, LT, GE, or LE filter operators.

QSG Disp Disposition of the queue in a queue-sharing group environment. Valid values are Qmgr = 0, Copy = 1, Shared = 2, and Unknown = 255. This attribute is for QSG environment on z/OS systems only.

Queue Name The name of a queue that is managed by the selected queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

RRS UR ID The hexadecimal character form of the 16-byte RRS Unit-of-Recovery identifier that is associated with the handle if Appl Type is RRS Batch; otherwise blank. Valid format is an alphanumeric string of up to 32 case-sensitive characters. This attribute is for RRS Batch applications on z/OS systems only.

Thread ID The thread identifier of the thread in the application that owns the handle; this is the application that opened the queue. Valid values are an integer thread identifier or n/a = -1 on z/OS systems.

User ID The user identifier that is associated with the handle. The valid format is an alphanumeric string of up to 64 case-sensitive characters.

Queue Long Term History attributes

Use the Queue Long Term History attributes to detect problems with individual queues. This attribute group provides queue statistics for each monitored queue within a queue manager. These attributes are informational only; they cannot be used to create situations.

of Tran/Pgms The number of unique CICS transactions or program names. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer. This attribute is for z/OS systems only.

% Full The current number of messages on the queue divided by the maximum number of messages for the queue and expressed as a percentage. The valid format is a decimal (formatted to 1 decimal place) in the range 0.0 - 100.0.

Avg Appl Time Between Calls The average elapsed time between MQI calls for any instances of the selected application ID, transaction, or program. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The value is expressed in seconds, accurate to the third decimal place. The valid format is a decimal (formatted to 3 decimal places). This attribute is for z/OS systems only.

Avg MQ Resp Time The average time that it takes for WebSphere MQ to respond to all MQI calls. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The value is expressed in seconds, accurate to the third decimal place. The valid format is a decimal (formatted to 3 decimal places). This attribute is for z/OS systems only.

Creation Date & Time The date and time that this WebSphere MQ object (for example, a channel or queue) is created. The valid format is the standard 16-character date/time format (CCYYMMDDHHMMSSmmm), where the strings have the following meanings:

C	Century (0 for 20th, 1 for 21st)
YY	Year
MM	Month
DD	Day
HH	Hour
MM	Minute
SS	Second
mmm	Millisecond

Cur Defn Indicates whether the queue or channel is currently defined on the monitored queue manager. Valid values are No = 0 and Yes = 1.

Cur Opened Exclusive Indicates whether this queue is currently opened for exclusive use during the last data sample. Valid values are n/a = 0, Yes = 1, and No = 2. This information is only available if Application Queue Statistics data is

collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the value is 0. This attribute is for z/OS systems only.

Current Depth The number of messages that are currently on the queue. The valid format is an integer.

Get Status Indicates whether the current queue is enabled for gets (that is, whether applications can call WebSphere MQ API routine MQGET for this queue). Valid values are Enabled = 0, Disabled = 1, and n/a = -1.

High Depth Threshold The percentage of the maximum message depth of the current queue that triggers a Queue Depth High event for this queue. This attribute is expressed as an integer in the range 0 - 100.

High Depth Threshold Percent The percentage of the maximum message depth of the current queue that triggers a Queue Depth High event for this queue. This attribute is expressed as a percentage value to one decimal place.

Highest Depth If Queue Statistics are collected (SET QUEUE STATISTICS(YES)), this is the highest number of messages in the queue during the sampling interval; otherwise this is the highest recorded Current Depth value from the collection of sampling intervals that comprise the entire historical period. Valid format is an integer.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Input Msg Size Avg The average size of all input messages belonging to this queue, transaction, program, or application. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer. This attribute is for z/OS systems only.

Input Opens The number of applications that opened this queue for input. This does not include open requests for either inquiry or browse. The valid format is an integer.

Interval Length The interval time over which statistics are taken. The valid format is in the form MMM:SS where M is minute and S is second.

Interval Time The size of the current sampling interval, in hundredths of seconds. For example, .50 is half a second. This value is determined by the control parameters your site set when configuring the WebSphere MQ Monitoring agent; it is usually specified as 60.00 (60 seconds). The valid format is a decimal (formatted to 2 decimal places).

Last Put The date and time of the last sample interval in which a put is recorded. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Last Read The date and time of the last sample interval in which a read is recorded. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Msgs Browsed The number of messages belonging to this queue, transaction, program, or application that are successfully browsed. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer. This attribute is for z/OS systems only.

Msgs Put The number of messages that are put to the queue during the sampling interval. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer.

Msgs Put per Sec The rate per second of messages that are put to the queue. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer (formatted to one decimal place).

Msgs Read The number of messages that are read (and removed) from the queue during the sampling interval. If Queue Statistics data is collected (SET QUEUE

STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer.

Msgs Read per Sec The rate per second of messages that are read from the queue. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer (formatted to one decimal place).

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Output Msg Size Avg The average size of all output messages that belong to this queue, CICS transaction, program, or application. This information is only available if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the value is 0. The valid format is an integer. This attribute is for z/OS systems only.

Output Opens The number of applications that opened this queue for output. The valid format is an integer.

Put Status Indicates whether the current queue is enabled for puts (that is, whether applications can call WebSphere MQ API routines MQPUT or MQPUT1 for this queue). Valid values are Enabled = 0, Disabled = 1, and n/a = -1.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Name The name of the queue that is specified in the MQOPEN call (MQOD_ObjectName) of the application. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Retent Intvl Exceeded Whether the retention interval (that is, the number of hours this queue must be retained after its creation) is exceeded. If yes, this queue is eligible for deletion. Valid values are No = 0, Yes = 1, and n/a = -1.

Sample Date & Time The date and time of the sample. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C	Century (0 for 20th, 1 for 21st)
YY	Year
MM	Month
DD	Day

HH Hour
MM Minute
SS Second
mmm Millisecond

Time to Full Queue (Secs) The amount of time, in seconds, that it takes for the queue to reach maximum allowed depth given the current depth, maximum depth, messages read per second, and messages put per second. If this value cannot be calculated with the current rates, the following values might be set:

Table 2. Values and descriptions for Time to Full Queue (Secs) attribute

Value	Description
Equal_Put_Get_Rates = -1	The rate of both puts and gets is equal.
Zero_Put_Get_Rates = -2	The rate of puts and gets is zero.
Sufficient_Get_Rate = -3	The rate of gets is greater than puts.
n/a = -4	Only occurs if the sample interval length is 0.

If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer (formatted to 2 decimal places).

Time to Zero Msgs (Secs) The amount of time, in seconds, that it takes for the queue to have no messages given the current depth, messages read per second, and messages put per second. If this value cannot be calculated with the current rates, the following values might be set:

Table 3. Values and descriptions for Time to Zero Msgs (Secs) attribute

Value	Description
Equal_Put_Get_Rates = -1	The rate of both puts and gets is equal.
Zero_Put_Get_Rates = -2	The rate of puts and gets is zero.
Deficient_Get_Rate = -3	The rate of gets is less than puts.
n/a = -4	Only occurs if the sample interval length is 0.

If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer (formatted to 2 decimal places).

Trigger Control Whether trigger messages are enabled for this queue. Valid values are No = 0, Yes = 1, and n/a = -1.

Trigger Depth For trigger type Depth, the number of messages that trigger a message to the initiation queue. The valid format is an integer.

Trigger Priority For trigger types First and Every, the message priority that triggers a message to the initiation queue. The valid format is an integer in the range 0 - 9.

Trigger Type The condition (First, Every, Depth, or None) that causes a trigger message to be sent to the initiation queue. Valid values are as follows:

- None = 0
- First = 1
- Every = 2
- Depth = 3
- n/a = -1

Queue Short Term History attributes

Use the Queue Short Term History attributes to detect problems with individual queues. This attribute group provides queue statistics for each monitored queue within a queue manager. These attributes are informational only; they cannot be used to create situations.

of Tran/Pgms The number of unique CICS transactions or program names. This information is only available if Application Queue Statistics are collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the value is 0. The valid format is an integer. This attribute is for z/OS systems only.

% Full The current number of messages on the queue divided by the maximum number of messages for the queue and expressed as a percentage. The valid format is a decimal (formatted to 1 decimal place) in the range 0.0 - 100.0.

Avg Appl Time Between Calls The average elapsed time between MQI calls for any instances of the selected application ID, transaction, or program. This information is only available if Application Queue Statistics are collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the value is 0. The value is expressed in seconds, accurate to the third decimal place. The valid format is a decimal (formatted to 3 decimal places). This attribute is for z/OS systems only.

Avg MQ Resp Time The average time that it takes for WebSphere MQ to respond to all MQI calls. This information is only available if Application Queue Statistics are collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the value is 0. The value is expressed in seconds, accurate to the third decimal place. The valid format is a decimal (formatted to 3 decimal places). This attribute is for z/OS systems only.

Creation Date & Time The date and time that this WebSphere MQ object (for example, a channel or queue) is created. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C	Century (0 for 20th, 1 for 21st)
YY	Year
MM	Month
DD	Day

HH Hour
MM Minute
SS Second
mmm Millisecond

Buffer Pool ID Indicates the buffer pool that this page set is assigned to. Valid values include 00, 01, 02, and 03. This attribute is for z/OS systems only.

CF Struct Name The name of the Coupling Facility application structure for this queue. The valid format is an alphanumeric string of up to 12 uppercase characters. This attribute is for QSG environment on z/OS systems only.

Cur Defn Whether the queue or channel is currently defined on the monitored queue manager. Valid values are No = 0 and Yes = 1.

Cur Opened Exclusive Whether this queue is currently opened for exclusive use during the last data sample. Valid values are n/a = 0, Yes = 1, and No = 2. This information is only available if Application Queue Statistics are collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the value is 0. This attribute is for z/OS systems only.

Current Depth The number of messages that are currently on the queue. The valid format is an integer.

Definition Type The definition type for the queue. Valid values are as follows:

- Predefined = 1
- PermDyn = 2
- TempDyn = 3
- Base_Q_Not_Monitored = 9999
- n/a = -1

Get Status Indicates whether the current queue is enabled for gets (that is, whether applications can call WebSphere MQ API routine MQGET for this queue). Valid values are Enabled = 0, Disabled = 1, and n/a = -1.

High Depth Threshold The percentage of the maximum message depth of the current queue that triggers a Queue Depth High event for this queue. This attribute is expressed as an integer in the range 0 - 100.

High Depth Threshold Percent The percentage of the maximum message depth of the current queue that triggers a Queue Depth High event for this queue. This attribute is expressed as a percentage value to one decimal place.

Highest Depth If Queue Statistics are collected (SET QUEUE STATISTICS(YES)), this is the highest number of messages in the queue during the sampling interval; otherwise, this value is 0. The valid format is an integer.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Initiation Queue Name The name of a local queue to which trigger messages are written. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Input Msg Size Avg The average size of all input messages that belong to this queue, transaction, program, or application. This information is only available if Application Queue Statistics are collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the value is 0. The valid format is an integer. This attribute is for z/OS systems only.

Input Opens The number of applications that opened this queue for input. This does not include open requests for either inquiry or browse. The valid format is an integer.

Interval Time The size of the current sampling interval, in hundredths of seconds. For example, .50 is half a second. This value is determined by the control parameters your site set when configuring the WebSphere MQ Monitoring agent; it is usually specified as 60.00 (60 seconds). The valid format is a decimal (formatted to 2 decimal places).

Last Put The date and time of the last sample interval in which a put is recorded. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Last Read The date and time of the last sample interval in which a read is recorded. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistic data is used. If neither type of monitoring is active, the value is 0. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute
SS Second
mmm Millisecond

Msgs Browsed The number of messages belonging to this queue, transaction, program, or application that are successfully browsed. This information is only available if Application Queue Statistics are collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the value is 0. The valid format is an integer. This attribute is for z/OS systems only.

Msgs Put The number of messages that are put to the queue during the sampling interval. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer.

Msgs Put per Sec The rate per second of messages that are put to the queue. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer (formatted to one decimal place).

Msgs Read The number of messages that are read and removed from the queue during the sampling interval. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer.

Msgs Read per Sec The rate per second of messages that are read from the queue. If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer (formatted to one decimal place).

Max Depth The maximum number of messages that are allowed on the queue. The valid format is an integer.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Output Msg Size Avg The average size of all output messages that belong to this queue, CICS transaction, program, or application. This information is only available if Application Queue Statistics are collected on z/OS systems (SET

APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the value is 0. The valid format is an integer. This attribute is for z/OS systems only.

Output Opens The number of applications that have opened this queue for output. Valid format is an integer.

Page Set ID The page set identifier (a 2-digit integer of 00 - 99). Valid values include 00, 01, 02...98, 99. This attribute is for z/OS systems only.

Process Name The name of a process instance that identifies the application. Note that when writing a situation, a particular process name can sometimes be used to identify a group of critically important queues more easily than writing a separate situation for each queue name. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Put Status Indicates whether the current queue is enabled for puts (that is, whether applications may call WebSphere MQ API routines MQPUT or MQPUT1 for this queue). Valid values are Enabled = 0, Disabled = 1, and n/a = -1.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QSG Disp The disposition of this queue sharing group. This attribute is for QSG environment on z/OS systems only. Valid values are as follows:

- Qmgr = 0
- Copy = 1
- Shared = 2
- Group = 3
- Unknown = 255

QSG Name The name of the queue sharing group. The valid format is an alphanumeric string of up to 4 case-sensitive characters. This attribute is for QSG environment on z/OS systems only.

Queue Name The name of the queue that is specified in the application's MQOPEN call (MQOD_ObjectName). The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Type Type of the queue. Valid values are Local = 1 and Alias = 3.

Queue Usage The queue usage, either Normal, XmitQ (for a transmission queue), or n/a. Valid values are Normal = 0, XmitQ = 1, and n/a = -1.

Retent Intvl Exceeded Whether the retention interval (that is, the number of hours this queue must be retained after its creation) is exceeded. If yes, this queue is eligible for deletion. Valid values are No = 0, Yes = 1, and n/a = -1.

Sample Date & Time The date and time of the sample. The valid format is the standard 16-character date/time format (CYYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year

MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Storage Class The name of the WebSphere MQ storage class this queue is assigned to. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for z/OS systems local queues only.

Time to Full Queue (Secs) The amount of time, in seconds, that it takes for the queue to reach maximum allowed depth given the current depth, maximum depth, messages read per second, and messages put per second. If this value cannot be calculated with the current rates, the following values might be set:

Table 4. Values and descriptions for the Time to Full Queue (Secs) attribute

Value	Description
Equal_Put_Get_Rates = -1	The rate of both puts and gets is equal.
Zero_Put_Get_Rates = -2	The rate of puts and gets is zero.
Sufficient_Get_Rate = -3	The rate of gets is greater than puts.
n/a = -4	Only occurs if the sample interval length is 0.

If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer (formatted to 2 decimal places).

Time to Zero Msgs (Secs) The amount of time, in seconds, that it takes for the queue to have no messages given the current depth, messages read per second, and messages put per second. If this value cannot be calculated with the current rates, the following values might be set:

Table 5. Values and descriptions for the Time to Zero Msgs (Secs) attribute

Value	Description
Equal_Put_Get_Rates = -1	The rate of both puts and gets is equal.
Zero_Put_Get_Rates = -2	The rate of puts and gets is zero.
Deficient_Get_Rate = -3	The rate of gets is less than puts.
n/a = -4	Only occurs if the sample interval length is 0.

If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is an integer (formatted to 2 decimal places).

Total Opens The total number of applications that opened this queue for either input or output. This does not include open requests for either inquiry or browse. The valid format is an integer.

Trigger Control Whether trigger messages are enabled for this queue. Valid values are No = 0, Yes = 1, and n/a = -1.

Trigger Depth For trigger type Depth, the number of messages that trigger a message to the initiation queue. The valid format is an integer.

Trigger Priority For trigger types First and Every, the message priority that triggers a message to the initiation queue. The valid format is an integer in the range 0 - 9.

Trigger Type The condition (First, Every, Depth, or None) that causes a trigger message to be sent to the initiation queue. Valid values are as follows:

- None = 0
- First = 1
- Every = 2
- Depth = 3
- n/a = -1

Queue Statistics attributes

Use the Queue Statistics attributes to create situations for detecting problems with individual queues. This attribute group provides queue statistics for each monitored queue within a queue manager. For example, you can create a situation to detect a put-inhibited queue or a queue that exceeds its high-depth threshold. Queue Statistics is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

of Tran/Pgms The number of unique CICS transactions or program names. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer. This attribute is for z/OS systems only.

% Full The current number of messages on the queue (the current depth) divided by the maximum number of messages for the queue and expressed as a percentage. The valid format is a decimal (formatted to 1 decimal place) in the range 0.0 - 100.0.

Avg Appl Time Between Calls The average elapsed time between MQI calls for any instances of the selected application ID, transaction, or program. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The value is expressed in seconds, accurate to the third decimal place. The valid format is a decimal (formatted to 3 decimal places). This attribute is for z/OS systems only.

Avg MQ Resp Time The average time that it takes for WebSphere MQ to respond to all MQI calls. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is

not active, the values are 0. The value is expressed in seconds, accurate to the third decimal place. The valid format is a decimal (formatted to 3 decimal places). This attribute is for z/OS systems only.

Buffer Pool ID Indicates the buffer pool that this page set is assigned to. Valid values include 00, 01, 02, and 03. This attribute is for z/OS systems only.

CF Struct Name The name of the Coupling Facility application structure for this queue. The valid format is an alphanumeric string of up to 12 uppercase characters. This attribute is for QSG environment on z/OS systems only.

Creation Date & Time The date and time that this WebSphere MQ object (for example, a channel or queue) is created. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Cur Defn Whether the queue or channel is currently defined on the monitored queue manager. Valid values are No = 0 and Yes = 1.

Cur Opened Exclusive Whether this queue currently is opened for exclusive use during the last data sample. Valid values are n/a = 0, Yes = 1, No = 2. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. This attribute is for z/OS systems only.

Current Depth The number of messages currently on the queue. The valid format is an integer.

Definition Type The definition type for the queue. Valid values are as follows:

- Predefined = 1
- PermDyn = 2
- TempDyn = 3
- Base_Q_Not_Monitored = 9999
- n/a = -1

Get Status Indicates whether the current queue is enabled for gets (whether applications can call WebSphere MQ API routine MQGET for this queue). Valid values are Enabled = 0, Disabled = 1, n/a = -1.

High Depth Threshold The percentage of the maximum message depth of the current queue that triggers a Queue Depth High event for this queue. This attribute is expressed as an integer in the range 0 -100.

High Depth Threshold Percent The percentage of the maximum message depth of the current queue that triggers a Queue Depth High event for this queue. This attribute is expressed as a percentage value to one decimal place.

Highest Depth If Queue Statistics are collected (SET QUEUE STATISTICS(YES)), this is the highest number of messages in the queue during the sampling interval; otherwise, this value is 0. The valid format is an integer.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Input Msg Size Avg The average size of all input messages that belong to this queue, transaction, program, or application. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer. This attribute is for z/OS systems only.

Initiation Queue Name The name of a local queue to which trigger messages are written. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Input Opens The number of applications that opened this queue for input. This does not include open requests for either inquiry or browse. The valid format is an integer.

Interval Time The size of the current sampling interval, expressed in hundredths of seconds. For example, .50 is half a second. This value is determined by the control parameters your site set when configuring the WebSphere MQ Monitoring agent; it is usually specified as 60.00 (60 seconds). The valid format is a decimal (formatted to 2 decimal places).

Last Put The date and time of the last sample interval in which a put is recorded. If Queue Statistics are collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used; otherwise, if Application Queue Statistics are collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used. If neither type of monitoring is active, the value is 0. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Last Read The date and time of the last sample interval in which a read is recorded. If Queue Statistics are being collected (SET QUEUE STATISTICS(YES)) then that data is used; otherwise, if Application Queue Statistics are being collected

on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)) that data is used. If neither type of monitoring is active, the values are 0. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)

YY Year

MM Month

DD Day

HH Hour

MM Minute

SS Second

mmm Millisecond

Max Depth The maximum number of messages that are allowed on the queue. The valid format is an integer.

Msgs Browsed The number of messages belonging to this queue, transaction, program, or application that are successfully browsed. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer. This attribute is for z/OS systems only.

Msgs Put The number of messages that are put to the queue during the sampling interval. If Queue Statistics are being collected (SET QUEUE STATISTICS(YES)) then that data is used; otherwise, if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)) that data is used. If neither type of monitoring is active, the values are 0. The valid format is an integer.

Msgs Put per Sec The rate per second of messages that are put to the queue. If Queue Statistics are being collected (SET QUEUE STATISTICS(YES)) then that data is used; otherwise, if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)) that data is used. If neither type of monitoring is active, the values are 0. The valid format is an integer (formatted to one decimal place).

Msgs Read The number of messages that are read and removed from the queue during the sampling interval. If Queue Statistics are being collected (SET QUEUE STATISTICS(YES)) then that data is used; otherwise, if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)) that data is used. If neither type of monitoring is active, the values are 0. The valid format is an integer.

Msgs Read per Sec The rate per second of messages that are read from the queue. If Queue Statistics are being collected (SET QUEUE STATISTICS(YES)) then that data is used; otherwise, if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)) that data is used. If neither type of monitoring is active, the values are 0. The valid format is an integer (formatted to one decimal place).

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If you used the SET AGENT command to set the host ID value, then this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Output Msg Size Avg The average size of all output messages that belong to this queue, transaction, program, or application. This information is only available if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)). If Application Queue Statistics monitoring is not active, the values are 0. The valid format is an integer. This attribute is for z/OS systems only.

Output Opens The number of applications that opened this queue for output. The valid format is an integer.

Page Set ID The page set identifier (a 2-digit integer of 00 - 99). Valid values include 00, 01, 02...98, 99. This attribute is for z/OS systems only.

Process Name The name of a process instance that identifies the application. Note that when writing a situation, a particular process name can sometimes be used to identify a group of critically important queues more easily than writing a separate situation for each queue name. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Put Status Indicates whether the current queue is enabled for puts (that is, whether applications can call WebSphere MQ API routines MQPUT or MQPUT1 for this queue). Valid values are Enabled = 0, Disabled = 1, and n/a = -1.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QSG Disp The disposition of this queue sharing group. This attribute is for QSG environment on z/OS systems only. Valid values are as follows:

- Qmgr = 0
- Copy = 1
- Shared = 2
- Group = 3
- Unknown = 255

QSG Name The name of the queue sharing group. This attribute is for QSG environment on z/OS systems only. The valid format is an alphanumeric string of up to 4 case-sensitive characters.

Queue Description A description of the queue. This can be useful when using situations, because you can use the description field to implement a scheme for classifying queues into groups. In this way you can create a situation that is only triggered by queues belonging to a particular group, avoiding the necessity of creating a separate situation for each individual queue, as you would need to if the queue name attribute were used instead.

For example, if you have queues with descriptions of Type 1 and Type 2, you can create situations with the following formulas to trigger events based on the same attribute (Current_Depth) under different circumstances depending on the description field, as follows:

```
IF Queue_Description = "Type1" AND Current_Depth >99 THEN [situation event occurs]
IF Queue_Description = "Type2" AND Current_Depth >1000 THEN [situation event occurs]
```

Queue Name The name of a queue that is managed by the selected queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Type Type of the queue. Valid values are Local = 1 and Alias = 3.

Queue Usage The queue usage, either Normal, XmitQ (for a transmission queue), or n/a. Valid values are Normal = 0, XmitQ = 1, n/a = -1.

Ret Intvl Exceeded Whether the retention interval (that is, the number of hours this queue must be retained after its creation) is exceeded. If yes, this queue is eligible for deletion. Valid values are No = 0, Yes = 1, and n/a = -1.

Storage Class The name of the WebSphere MQ storage class this queue is assigned to. The valid format is an alphanumeric string of up to 8 case-sensitive characters. This attribute is for z/OS system local queues only.

Time to Full Queue (Secs) The amount of time, in seconds, that it takes for the queue to reach maximum allowed depth given the current depth, maximum depth, messages read per second, and messages put per second. If this value cannot be calculated with the current rates, the following values can be set:

Table 6. Values and descriptions for the Time to Full Queue (Secs) attribute

Value	Description
Equal_Put_Get_Rates = -1	The rate of both puts and gets is equal.
Zero_Put_Get_Rates = -2	The rate of puts and gets is zero.
Sufficient_Get_Rate = -3	The rate of gets is greater than puts.
n/a = -4	Only occurs if the sample interval length is 0.

If Queue Statistics are being collected (SET QUEUE STATISTICS(YES)) then that data is used; otherwise, if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)) that data is used. If neither type of monitoring is active, the values are 0. The valid format is an integer (formatted to 2 decimal places).

Time to Zero Msgs (Secs) The amount of time, in seconds, that it takes for the queue to have no messages given the current depth, messages read per second, and messages put per second. If this value cannot be calculated with the current rates, the following values might be set:

Table 7. Values and descriptions for the Time to Zero Msgs (Secs) attribute

Value	Description
Equal_Put_Get_Rates = -1	The rate of both puts and gets is equal.
Zero_Put_Get_Rates = -2	The rate of puts and gets is zero.
Deficient_Get_Rate = -3	The rate of gets is less than puts.

Table 7. Values and descriptions for the Time to Zero Msgs (Secs) attribute (continued)

Value	Description
n/a = -4	Only occurs if the sample interval length is 0.

If Queue Statistics are being collected (SET QUEUE STATISTICS(YES)) then that data is used; otherwise, if Application Queue Statistics are being collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)) that data is used. If neither type of monitoring is active, the values are 0. The valid format is an integer (formatted to 2 decimal places).

Total Opens The total number of applications that have opened this queue for either input or output. This does not include open requests for either inquiry or browse. The valid format is an integer.

Trigger Control Whether trigger messages are enabled for this queue. Valid values are No = 0, Yes = 1, n/a = -1.

Trigger Depth For trigger type Depth, the number of messages that trigger a message to the initiation queue. The valid format is an integer.

Trigger Priority For trigger types First and Every, the message priority that triggers a message to the initiation queue. The valid format is an integer in the range 0 - 9.

Trigger Type The condition (First, Every, Depth, or None) that causes a trigger message to be sent to the initiation queue. Valid values are as follows:

- None = 0
- First = 1
- Every = 2
- Depth = 3
- n/a = -1

Queue Status attributes

Use the Queue Status attributes to view the most current status data about a specifically chosen queue; note the Queue Name attribute must be provided in queries to this attribute group. No data is returned if the WebSphere MQ version requirement is not met.

If there are certain queues to be monitored by situations for Queue Status, you should make a specific situation for each queue to be monitored and match the specific queue name with the Queue Name attribute as a condition in the situation. However, if you choose not to provide the queue name in the situation, only queues with a non-zero Current Depth value are considered for possible match with the situation conditions specified.

Current Depth The number of messages that are currently on the queue; this includes both committed and uncommitted messages. The valid format is an integer.

Host Name The name of the system on which this queue manager is running. On z/OS systems, this is the SMF ID. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Input Opens The number of handles that are currently open for input (either shared or exclusive), this does not include opens for browsing. The valid format is an integer.

Last Get Date & Time The date and time that the last message is destructively read from the queue. The valid format is the standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Last Put Date & Time The date and time that the last message is successfully put to the queue. Standard 16-character date/time format (CYMMDDHHMMSSmmm), where the strings have the following meanings:

C Century (0 for 20th, 1 for 21st)
YY Year
MM Month
DD Day
HH Hour
MM Minute
SS Second
mmm Millisecond

Long Term Queue Time The time that messages remain on queue in microseconds over a long period of time. The maximum displayable value is 999,999,999.

Media Recovery Log Extent The log extent or journal receiver needed for media recovery of the queue. On queue managers on which circular logging is in place, The media recovery log extent is returned as a null string. The valid format is an alphanumeric string of up to 24 case-sensitive characters. This attribute is valid on AIX, HP-UX, Linux, i5/OS, Solaris, and Windows systems.

Oldest Msg Age Age, in seconds, of the oldest message on the queue. The maximum displayable value is 999,999,999; if the age exceeds this value, 999,999,999 is displayed.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager, and *smfid* is the z/OS system ID or SMF ID.

On distributed systems, this name takes the form *qmgr::MQ*. If the host ID value is specified by the SET AGENT command, this name takes the form *qmgr:hostid:MQ*. The valid format is an alphanumeric string of up to 128 case-sensitive characters.

Queue Monitoring The current level of monitoring data collection for the queue. Valid values are as follows:

- n/a = -1,
- Off = 0 ,
- On = 1,
- Low = 17,
- Medium = 33,
- High = 65

Output Opens The number of handles that are currently open for output. The valid format is an integer.

QSG Disp Indicates the disposition of the queue in a queue-sharing group environment. This attribute is for QSG environment on z/OS systems only. Valid values are as follows:

- Qmgr = 0
- Copy = 1
- Shared = 2
- Unknown = 255

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Queue Name The name of a queue that is managed by the selected queue manager. This attribute is required to be given in queries to this attribute group. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Short Term Queue Time The time that messages remain on queue in microseconds over a short period of time. The maximum displayable value is 999,999,999.

Uncommitted Msgs Whether there are any uncommitted messages on the queue. Valid values are No = 0 and Yes = 1.

Subscription Definitions attributes

The Subscription Definitions attributes provide information of all system defined subscriptions.

Accounting Token The accounting token that is provided by the subscriber and inserted into messages sent to this subscription in the Accounting Token field of the MQMD.

Alter Date & Time Date and time that the subscriber is last modified.

Appl ID Identity data that is provided by the subscriber and inserted into messages sent to this subscription in the ApplIdentityData field of the MQMD.

Create Date & Time Date and time that the subscriber is created.

Destination The name of the destination that is used by the subscription.

Destination Correlation ID The correlation ID of the destination queue that is used by the subscription.

Destination Event The destination event type. Valid values are as follows:

- 2053 queue full
- 2224 queue depth high
- -1 = not applicable

The destination event type is -1 in the following situations:

- The destination event is not found in current events.
- Performance event monitoring on the queue manager is disabled.
- Queue monitoring events (by definition) for the subscription queue is disabled.
- No set events are collected.
- The destination queue manager is not the queue manager currently selected in the navigator tree.
- The destination queue is of one of the following types:
 - QCLUSTER
 - QREMOTE
 - QALIAS

Destination QMgr The name of the destination queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Durable Whether the subscription is durable. Valid values are as follows:

- 1 = yes
- 2 = no
- -1 = not applicable

Expire (Secs) The length of time in seconds until the subscription expires. If the subscription does not expire, this value is -1.

Host Name Name of the system on which the queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Max Rows The maximum number of rows that are returned by the agent as the result of a query. The default value is 2000 rows.

Origin Node Name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system or SMF ID.

Property Type The method of message delivery. Valid values are as follows:

- None = 0
- Compat = 1
- RFH2 = 2
- MsgProp = 3

Pub Priority The message priority. Valid values are 1 - 9, representing the priority of the message, or:

- -1 = as queue definition
- -3 = as published

QMgr Name Name of the queue manager. Valid format is an alphanumeric string of up to 48 case-sensitive characters.

Request Only Whether the subscriber requests updates. Valid values are as follows:

- 1 = yes
- 2 = no
- -1 = not applicable

Status The status for search. Valid values are as follows:

- 0 = ok
- -1 = no results found

Sub ID Unique Subscription Identifier. Valid format is an alphanumeric string of up to 48 case-sensitive characters. The hover help only displays the first character of the Sub ID when you move the cursor over this column.

Sub Level The level within the subscription interception hierarchy at which this subscription is made. Possible values are integers 1 - 9.

Sub Name The name of the application subscription. The valid format is a string of up to 256 UTF-8 characters.

Sub Scope The scope of the subscription. Valid values are as follows:

- 1 = queue manager
- 2 = all
- -1 = not applicable

Sub Type The type of the subscription. Valid values are as follows:

- User = -2
- All = -1
- API = 1
- Admin = 2
- Proxy = 3

Sub User The user ID of the user that currently owns this subscription.

System Managed Destination The system managed destination. Valid values are as follows:

- 1 = managed
- 2 = provided

Topic Name The name of the topic to which the subscription pertains.

Topic String The topic string, which comprises the tree node names that make up the topic. For example, /news/ibm/hursley/. The valid format is an alphanumeric string of up to 256 case-sensitive characters. If the topic string exceeds 256 characters in length, it is truncated.

Variable User Whether other users can connect to the subscription. Valid values are as follows:

- 1 = fixed
- 2 = any
- -1 = not applicable

Wildcard Char The wildcard schema used in the topic string. Possible values are as follows:

- 1 = character
- 2 = topic
- -1 = not applicable

Subscription Status attributes

The Subscription Status attributes provide information about the status of subscriptions.

Connection ID The currently active ConnectionId (CONNID) that has opened this subscription. Used to detect local publications. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Durable Whether durable subscriptions are permitted. Valid values are as follows:

- 1 = yes
- 2 = no
- -1 = not applicable

Host Name Name of the system on which the queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Last Date & Time The date and time that a message is last sent to this subscription by an MQPUT API call.

Msg Count Number of messages that are put to the destination that is specified by this subscription.

Origin Node Name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system or SMF ID.

QMgr Name Name of the queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Recent Date & Time Date and time that the most recent MQSUB connection to this subscription is made.

Sub ID Unique Subscription Identifier. The valid format is an alphanumeric string of up to 48 case-sensitive characters. The hover help only displays the first character of the Sub ID when you move the cursor over this column.

Sub Name The name of the application subscription. The valid format is a string of up to 256 UTF-8 characters.

Sub Type The type of the subscription. Valid values are as follows:

- -2 = User
- -1 = All
- 1 = API
- 2 = Admin
- 3 = Proxy

Sub User The user ID of the user that currently owns this subscription.

Telemetry Channels attributes

Use the Telemetry Channels attributes to create situations that query the properties of telemetry channels. This attribute group provides definition parameters for the telemetry channels that belong to a queue manager. Telemetry Channels is a multiple-instance attribute group. You cannot mix these attributes with attributes of any other multiple-instance group.

Backlog The number of outstanding connection requests that the telemetry channel can support at any one time. When the backlog limit is reached, any further clients trying to connect will be refused connection until the current backlog is processed.

Channel Name The name of the telemetry channel. The valid format is an alphanumeric string of up to 20 case-sensitive characters.

Channel Status The current status of the telemetry channel. Valid values are as follows:

- n/a
- Binding
- Starting
- Running
- Stopping
- Retrying
- Stopped
- Requesting
- Paused
- Disconnected
- Initializing
- Inactive
- Conn Not Def
- Out Service
- Going Out
- Released
- Obtaining

- Acquired
- Freeing
- Available
- Unknown

Channel Type The type of the channel. Valid values are MQTT and n/a.

Current Connections The current connection number of this channel.

Description The description of the telemetry channel. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Host Name The name of the system on which this queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

JAAS Configuration The name of a JAAS configuration for the channel to call a JAAS authentication module. The valid format is an alphanumeric string.

Local Address The IP address that the telemetry channel listens on. This attribute is used when a server has multiple IP addresses.

MCA User ID The user ID for the message channel agent. This user ID is used by the MCA for authorization to access WebSphere MQ resources.

Origin Node The WebSphere MQ Monitoring agent-assigned name of the node on which the data for the queue manager originates.

Port The port number that the MQXR service accepts client connections on.

QMgr Name The name that is assigned to this queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

SSL Authentication Specifies whether the telemetry channel must receive and authenticate an SSL certificate from a client. Valid values are Optional, Required, and n/a.

SSL Cipher Suite Specifies the cipher suite for an SSL connection. The specified cipher suite must be available at the client end of the telemetry channel. If this attribute is not specified, both ends of the telemetry channel negotiate a cipher suite that they both understand.

SSL Key Repository The store for digital certificates and their associated private keys. This attribute is always displayed as n/a on the portal.

SSL Passphrase The password for the key repository. This attribute is always displayed as n/a on the portal.

Transport Type The transmission protocol of the channel. Only TCP/IP is supported by WebSphere MQ.

Use Client ID Specifies whether to use the MQTT client ID for the new connection as the WebSphere MQ user ID for that connection. Valid values are Yes, No, and n/a.

Topic Definitions attributes

The Topic Definitions attributes provide detailed information about all system defined topics.

Alter Date & Time The data and time that this topic is last modified. The valid format is a 16 character timestamp.

Cluster Date & Time The date and time that the cluster topic definition becomes available.

Cluster Name The name of the cluster to which this topic belongs. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Cluster QMgr The name of the queue manager that is hosting the cluster topic. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Durable Sub Whether durable subscriptions are permitted. Possible values are as follows:

- 0 = as parent
- 1 = yes
- 2 = no
- -1 = not applicable

Remember: If this attribute is set to as parent, whether durable subscriptions are permitted depends on the setting of the first parent administrative node found in the topic tree that relates to this topic.

Durable Sub Model The name of the model queue that is used to create dynamic queues for durable subscriptions. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Host Name Name of the system on which the queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Max Rows The maximum number of rows that are returned by the agent as the result of a query.

Msg Persistence Whether messages are persistent. Possible values are as follows:

- n/a = -2
- AsParent = -1
- No = 0
- Yes = 1
- AsQOrTopicDef = 2

Msg Priority The message priority. Possible values are 2 - 9, representing the priority of the message, or one of the following values:

- n/a = -4
- AsPublished = -3
- AsParent = -2
- AsQOrTopicDef = -1

Msg Put Resp Type Put response type of messages that are published on the topic. Possible values are as follows:

- 0 = as parent
- 1 = synchronous
- 2 = asynchronous
- -1 = not applicable

Nonpersistent Msg Delivery The delivery method that is used to publish nonpersistent messages on this topic. Possible values are as follows:

- 0 = as parent
- 1 = all
- 2 = all durable
- 3 = all available
- -1 = not applicable

Non-Durable Sub Model The name of the model queue that is used to create dynamic queues for non-durable subscriptions. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Origin Node Name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system or SMF ID.

Persistent Msg Delivery The delivery method that is used to publish persistent messages on this topic. Possible values are as follows:

- 0 = as parent
- 1 = all
- 2 = all durable
- 3 = all available
- -1 = not applicable

Proxy Sub Forces the propagation of a proxy subscription for this topic string, even if no local or proxy subscriptions exist. Possible values are as follows:

- n/a = -1
- AsParent = 0
- Force = 1
- FirstUse = 2

Pub Enabled Whether publication is enabled. Possible values are as follows:

- n/a = -1
- AsParent = 0
- No = 1
- Yes = 2

Pub Scope String identifying the scope of the publication. Possible values are as follows:

- n/a = -1
- All = 0

- AsParent = 1
- Cluster = 2
- Hierarchy = 3
- QMgr = 4
- Force_All = 5
- Force_QMgr = 6

QMgr ID The unique name of the queue manager that hosts the topic. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QMgr Name Name of the queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

QSG Disp Specifies how commands are executed when the queue manager is a member of a queue-sharing group. This attribute is for QSG environment on z/OS systems only. Possible values are as follows:

- n/a = -2
- All = -1
- QMgr = 0
- Copy = 1
- Shared = 2
- Group = 3
- Private = 4
- Live = 6

Status Status for search. Possible values are as follows:

- OK = 0 (The search result is displayed.)
- No_Results_Found = -1

Sub Enabled Whether subscriptions are enabled. Possible values are as follows:

- n/a = -1
- AsParent = 0
- No = 1
- Yes = 2

Sub Scope String that identifies the scope of the subscription. Possible values are as follows:

- n/a = -1
- All = 0
- AsParent = 1
- Cluster = 2
- Hierarchy = 3
- QMgr = 4
- Force_All = 5
- Force_QMgr = 6

Topic Description A text description of the topic. The valid format is a string of up to 256 UTF-8 characters.

Topic Name Name of the topic. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Topic String The topic string, which comprises the tree node names that make up the topic. For example, /news/ibm/hursley/. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Remember: If the topic string exceeds 256 characters in length, it is truncated.

Topic Type The topic enumeration type. This attribute has the following possible values:

- n/a = -1
- Local = 0
- Cluster = 1
- All = 2

Wildcard How wildcard subscriptions are handled for this topic. Possible values are as follows:

- n/a = -1
- Block = 1
- PassThru = 2

Topic Publishers attributes

The Topic Publishers attributes provide detailed information about the publishers (message producing applications) that use a particular topic.

Connection ID The currently active ConnectionId (CONNID). This is the connection that has opened the subscription. The valid format is an alphanumeric string of up to 48 characters. Possible values are as follows:

- active Connection ID
- Not_Connected_to_QMgr

Host Name Name of the system on which the queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Msg Date & Time Date and time that the message is last sent by this publisher.

Origin Node Name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form of *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system or SMF ID.

Publish Count Number of items that are published by this publisher.

Remember: This is the total number of publications before fan-out, not the total number of messages that result from publication.

QMgr Name Name of the queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Topic ID Topic identifier string. The valid format is an alphanumeric string of up to 40 case-sensitive characters.

Topic String The topic string, which comprises the tree node names that make up the topic. For example, /news/ibm/hursley/. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Remember: If the topic string exceeds 256 characters in length, it is truncated.

Topic Status attributes

The Topic Status attributes provide information about the root level of topic nodes.

Admin Node If this node is an admin node, this attribute is the name of the associated topic object that contains the node configuration. If the field is not an admin node, this attribute is empty.

Durable Sub Whether durable subscriptions are permitted. Possible values are as follows:

- 1 = yes
- 2 = no
- -1 = not applicable

Durable Sub Model The name of the model queue that is used to create dynamic queues for durable subscriptions. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Host Name Name of the system on which the queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Max Rows The maximum number of rows that are returned by the agent as the result of a query. The default value is 2000 rows.

Msg Persistence Whether messages are persistent. Possible values are as follows:

- 0 = no
- 1 = yes
- -1 = not applicable

Msg Priority The message priority. Possible values are 1 - 9, representing the priority of the message, or -1 = not applicable.

Msg Put Resp Type Put response type of messages that are published on the topic. Possible values are as follows:

- 1 = synchronous
- 2 = asynchronous
- -1 = not applicable

Non-Durable Sub Model The name of the model queue that is used to create dynamic queues for non-durable subscriptions. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Non-Persistent Msg Delivery The delivery method that is used to publish nonpersistent messages on this topic. Possible values are as follows:

- 1 = all
- 2 = all durable
- 3 = all available

- -1 = not applicable

Origin Node Name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form of *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system or SMF ID.

Persistent Msg Delivery The delivery method used to publish persistent messages on this topic. Possible values are as follows:

- 1 = all
- 2 = all durable
- 3 = all available
- -1 = not applicable

Pub Enabled Whether publication is enabled. Possible values are as follows:

- n/a = -1
- No = 1
- Yes = 2

Pub Scope Numeric value that identifies the scope of the publication. Possible values are as follows:

- n/a = -1
- All = 0
- Asparent = 1
- Cluster = 2
- Hierarchy = 3
- QMgr = 4
- Force_All = 5
- Force_QMgr = 6

Publisher Count The number of handles that are currently open for publishing on the topic.

QMgr Name Name of the queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Query String Query string. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Retained Pub Whether there is a retained publication associated with this topic. Possible values are as follows:

- 0 = no
- 1 = yes
- -1 = not applicable

Status Status for Search. Possible values are as follows:

- OK = 0 (The search result is displayed.)
- No_Result_Found = -1

Sub Enabled Whether subscriptions are enabled. Possible values are as follows:

- n/a = -1
- No = 1
- Yes = 2

Sub Scope Numeric value identifies the scope of the subscription. Possible values are as follows:

- n/a = -1
- All = 0
- Asparent = 1
- Cluster = 2
- Hierarchy = 3
- QMgr = 4
- Force_All = 5
- Force_QMgr = 6

Subscriber Count The number of subscribers to this topic, including durable subscribers that are not currently connected.

Topic ID Topic identifier string. The valid format is an alphanumeric string of up to 40 case-sensitive characters.

Topic String The topic string, which comprises the tree node names that make up the topic. For example, /news/ibm/hursley/. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Remember: If the topic string exceeds 256 characters in length, it is truncated.

Topic Subscribers attributes

The Topic Subscribers attributes provide detailed information about the subscribers to a particular topic.

% **Full** Current depth full percentage, with one decimal place.

Connection ID The currently active ConnectionId (CONNID) that has opened this subscription. Used to detect local publications. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Connection Type The type of the topology connection. Possible values are as follows:

- DurableSubConn=DurableSubscriptionConnection
- NondurableSubConn=NonDurableSubscriptionConnection
- ApplicationConn=ApplicationConnection
- DestinationConn=DestinationConnection

Durable Whether durable subscriptions are permitted. Possible values are as follows:

- 1 = yes
- 2 = no
- -1 = not applicable

High Depth Threshold % Threshold percent for high depth event.

Host Name Name of the system on which the queue manager is running. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Last Date & Time The date and time that a message is last sent to this subscription by an MQPUT API call.

Max Nodes The maximum number of nodes that are displayed in the topology view in Tivoli Enterprise Portal. The default value is 200.

Msg Count Number of messages that are put to the destination that is specified by this subscription.

Node ID Node identifier. This attribute is hidden.

Node Name Topology Node Name. This attribute has one of the following values:

- The leftmost 48 characters of the last topic string segment
- The subscription name or ID
- The application ID
- The name of the destination Queue

Node Type The type of the topology node. Possible values are as follows:

- Topic=TopicNode
- Application=ApplicationNode
- LocalDestination=LocalDestinationNode
- NonLocalDestination=RemoteDestinationNode
- DurableSubscription=DurableSubNode
- NonDurableSubscription=NonDurableSubNode

Origin Node Name of the node on which the data for the queue manager originates.

On z/OS systems, this name takes the form *qmgr:smfid:MQESA*, where *qmgr* is the name of the queue manager and *smfid* is the z/OS system or SMF ID.

QMgr Name Name of the queue manager. The valid format is an alphanumeric string of up to 48 case-sensitive characters.

Recent Date & Time Date and time that the most recent MQSUB connection to this subscription is made.

Status The status for search. Possible values are as follows:

- 0 = ok
- -1 =No_Results_Found

Sub ID Unique Subscription Identifier. Valid format is an alphanumeric string of up to 48 case-sensitive characters. The hover help only displays the first character of the Sub ID when you move the cursor over this column.

Sub User The user ID of the owner of this subscription. This is either the user ID of the creator of the subscription, or, if subscription takeover is enabled, the user ID of the user that last takes over the subscription.

Sub Type The type of the subscription. Possible values are as follows:

- 1 = API
- -2 = User
- -1 = All
- 0 = not applicable
- 2 = admin
- 3 = proxy

Topic ID Topic identifier string. Valid format is an alphanumeric string of up to 40 case-sensitive characters.

Topic String The topic string, which comprises the tree node names that make up the topic. For example, /news/ibm/hursley/. The valid format is an alphanumeric string of up to 256 case-sensitive characters.

Remember: If the topic string exceeds 256 characters in length, it is truncated.

Chapter 3. Predefined situations

The predefined situations that are provided by the WebSphere MQ Monitoring agent have names that begin with MQSeries. The following predefined managed system list names are associated with WebSphere MQ Monitoring agent:

- *MVS_MQM: All the monitoring agents.
- *MQ_QSG: The monitoring agents on z/OS systems that monitor the queue-sharing group.

MQSeries_Alias_Queue_Problem

The MQSeries_Alias_Queue_Problem situation monitors alias queue related events and issues an alert when the alias queue definition specified in the MQOPEN or MQPUT1 call is not recognized as a queue name, or not a local queue, or local definition of a remote queue.

The formula is:

```
MQSeries_Events.Event EQ Alias_Base_Queue_Type_Error  
OR  
MQSeries_Events.Event EQ Unknown_Alias_Base_Queue
```

MQSeries_Appl_MQ_RespTime_High

The MQSeries_Appl_MQ_RespTime_High situation monitors application response time, and issues an alert when the average response time for MQI requests is greater than two seconds.

This alert automatically resets itself when the situation is no longer true.

The formula is:

```
Application_Transaction/Program_Statistics.Avg MQ Resp Time GT 2
```

MQSeries_Appl_MQI_Failures_High

The MQSeries_Appl_MQI_Failures_High situation monitors applications, and issues an alert when the percentage of MQI request failures is greater than 5%.

This alert automatically resets itself when the situation is no longer true.

The formula is:

```
Application_Transaction/Program_Statistics.% MQI Failures GT 5
```

MQSeries_Appl_Msgs_Put_High

The MQSeries_Appl_Msgs_Put_High situation monitors applications, and issues an alert when the number of messages put to a queue is greater than 100.

This alert automatically resets itself when the situation is no longer true.

The formula is:

```
Application_Transaction/Program_Statistics.Msgs Put GT 100
```

MQSeries_Authority_Problem

The MQSeries_Authority_Problem situation monitors authority related events, and issues an alert when the user is not authorized to issue **MQCONN**, **MQOPEN**, **MQPUT1**, **MQCLOSE**, or other commands.

Authority events are valid on HP OpenVMS, Windows, and UNIX systems only.

The formula is:

MQSeries_Events.Event EQ Not_Authorized

MQSeries_Automation_ChIStart

The MQSeries_Automation_ChIStart situation starts a stopped channel.

The formula is:

Queue_Statistics.Channel Status EQ Stopped

MQSeries_Automation_Fix_XmitQ

The MQSeries_Automation_Fix_XmitQ situation forces triggering for all transmission queues.

The formula is:

Queue_Statistics.Queue Usage EQ XmitQ
AND
Queue_Statistics.Trigger Control EQ No
THEN
set the TRIGGER attribute, and set GET to ENABLED

MQSeries_Bufpool_Buffer_Shrt_C

The MQSeries_Bufpool_Buffer_Shrt_C situation monitors buffer pool usage, and issues a critical alert when the percentage of available buffers is less than 6%.

This alert automatically resets itself when the situation is no longer true.

The formula is:

Buffer_Pools.% of Bufrs Available LT 6

MQSeries_Bufpool_Buffer_Shrt_W

The MQSeries_Bufpool_Buffer_Shrt_W situation monitors buffer pool usage and issues a warning alert when the percentage of available buffers is greater than 5% and less than 16%.

This alert automatically resets itself when the situation is no longer true.

The formula is:

Buffer_Pools.% of Bufrs Available LT 16
AND
Buffer_Pools.% of Bufrs Available GT 5

MQSeries_Bufpool_High_GetPage_IO

The MQSeries_Bufpool_High_GetPage_IO situation monitors the percentage of get-page requests that result in page set I/O and issues a warning alert when the percentage is greater than 25%.

This alert automatically resets itself when the situation is no longer true.

The formula is:

`Buffer_Pools.GetPg IO % GT 25`

MQSeries_Channel_Active_High

The MQSeries_Channel_Active_High situation monitors the percentage of active channel connections within the maximum number of channels that can be active. The situation issues an alert when the percentage is higher than 80%.

This alert automatically resets itself when the situation is no longer true.

The formula is:

`Current_Queue_Manager_Status.% Max Active Channels GT 80.0`

MQSeries_Channel_Autodef_Error

The MQSeries_Channel_Autodef_Error situation monitors channel initiator status and issues an alert when the channel initiator is stopped, stopping, or retrying.

This situation applies to WebSphere MQ version 6.0 or later.

The formula is:

`MQSeries_Events.Event EQ Channel_Auto_Definition_Error`

MQSeries_Channel_Current_High

The MQSeries_Channel_Current_High situation monitors the percentage of current channel connections within the maximum number of channels that can be current. The situation issues an alert when the percentage is higher than 80%.

This alert automatically resets itself when the situation is no longer true.

The formula is:

`Current_Queue_Manager_Status.% Max Channels GT 80.0`

MQSeries_Channel_Initiator_Prob

The MQSeries_Channel_Initiator_Prob situation issues an alert when the automatic definition of a channel fails.

The failure might be caused by an error occurred during the definition process, or the channel automatic-definition exit inhibited the definition. Additional information indicating the reason for the failure is returned in the event message.

The formula is:

Channel Initiator Status.CHINIT EQ Stopped
OR
Channel Initiator Status.CHINIT EQ Stopping
OR
Channel Initiator Status.CHINIT EQ Retrying

MQSeries_Channel_Instance_High

The MQSeries_Channel_Instance_High situation monitors the % **Max Instance** value in the Channel Summary table. The % **Max Instance** attribute reflects the total number of channel instances as a percentage of the maximum number of instances that can be started for a server-connection channel. The situation issues an alert when the percentage is higher than 80%.

This alert automatically resets itself when the situation is no longer true.

The formula is:

Channel_Summary.% Max Instances GT 80.0

MQSeries_Channel_Out_Of_Sync (distributed systems only)

The MQSeries_Channel_Out_Of_Sync monitors the queue manager error log, and issues an alert when a WebSphere MQ error message indicates the message sequence numbers for the channel are inconsistent. This alert is a pure event.

The formula is:

For more information about error log monitoring, see Error Log monitoring (distributed systems only).

SCAN Error_Log.Message ID EQ AMQ9526

MQSeries_Channel_Remain_Indoubt

The MQSeries_Channel_Remain_Indoubt situation monitors the **Highest In-Doubt Samples** value in the Channel Summary table. The **Highest In-Doubt Samples** attribute is the highest value among the numbers of consecutive samples from all instances of a channel that are found in doubt. This situation issues an alert when the value is higher than 1.

The WebSphere MQ Monitoring agent samples the monitored queue manager for performance data. The default sample interval is 300 seconds, which is configured by the **SAMPINT** parameter. This situation alerts for the continuous in-doubt samples that are greater than one, which indicates that a channel remains in-doubt for too long. And the connection between the in-doubt channel and the remote channel about which messages are sent and received is lost. This alert automatically resets itself when the situation is no longer true.

The formula is:

Channel_Summary.Highest In-Doubt Samples GT 1

MQSeries_Channel_SSL_Error

The MQSeries_Channel_SSL_Error monitors the channel using Secure Sockets Layer (SSL), and issues an alert when it fails to establish an SSL connection.

The formula is:

MQSeries_Events.Event EQ Channel_SSL_Error

MQSeries_Channels_Indoubt

The MQSeries_Channels_Indoubt situation monitors channel performance, and issues an alert when an active queue manager has one or more channels in an in-doubt state.

This alert automatically resets itself when the situation is no longer true. This situation is activated by default.

The formula is:

Managers.In-Doubt Channels GT 0
AND
Managers.QMgr Status EQ Active

MQSeries_ChInst_per_Client_High

The MQSeries_ChInst_per_Client_High situation monitors the % **Max Instances per Client** value in the Channel Summary table. The % **Max Instances per Client** attribute reflects the highest number of instances of a given channel that are grouped by clients as percentage of the maximum number of instances that can be started for a channel from a single client. The situation issues an alert when the percentage is higher than 80%.

This alert automatically resets itself when the situation is no longer true.

The formula is:

Channel_Summary.% Max Instances per Client GT 80.0

MQSeries_CICS_Channel_Stopped

The MQSeries_CICS_Channel_Stopped situation monitors CICS channel performance.

This situation issues an alert if a CICS channel is either not currently defined on the monitored queue manager or in one of the following status. This situation is activated by default.

- Out_Service
- Going_Out
- Released
- Freeing

The formula is:

Channel_Statistics.Transport Type EQ CICS AND (Channel_Statistics.Cur Defn EQ No
OR
Channel_Statistics.Channel Status EQ Out_Service
OR
Channel_Statistics.Channel Status EQ Going_Out

```
OR
Channel_Statistics.Channel Status EQ Released
OR
Channel_Statistics.Channel Status EQ Freeing)
```

MQSeries_Cluster_QMgr_Suspended

The MQSeries_Cluster_QMgr_Suspended situation monitors queue managers in a cluster, and issues an alert when a cluster queue manager is suspended. A cluster queue manager is suspended when the **SUSPEND QMGR** is issued.

The formula is:

```
Channel_Definitions.Cluster Qmgr Suspend EQ Yes
```

MQSeries_Conversion_Error

The MQSeries_Conversion_Error situation issues an alert when a channel is unable to carry out data conversion and the MQGET call to get a message from the transmission queue resulted in a data conversion error.

The formula is:

```
MQSeries_Events.Event EQ Channel_Conversion_Error
```

MQSeries_Dead_Letter

The MQSeries_Dead_Letter situation monitors the dead letter queue for an active queue manager, and issues an alert if one or more messages appear on the queue.

This alert automatically resets itself when the situation is no longer true. This situation is activated by default.

The formula is:

```
Managers.DLQ Depth GT 0 AND Managers.QMgr Status EQ Active
```

MQSeries_Delayed_Message_Group

The MQSeries_Delayed_Message_Group situation determines whether the value of the message statistics oldest message time attribute exceeds a given threshold for a specific queue. This query can only include an individual queue name.

In the following example, a queue named TEST.QUEUE is monitored for messages older than 300.00 seconds. Note that the Latency_Threshold_Seconds attribute is not specified since the query tests for Oldest_Message_Seconds greater than a certain value. As a result, the Latency_Threshold_Seconds attribute uses 300.00 as the default value.

```
IF VALUE Message_Statistics.Queue Name EQ TEST.QUEUE
AND VALUE Message_Statistics.Grouping Mechanism EQ Correlation_ID
AND VALUE Message_Statistics.Oldest Msg(Secs) GT 300.00
```

Many of the message statistics are calculated using the put-date-and-time of the messages in the queue. If the queue has messages with put-date-and-times that cannot reflect accurately when the messages are put into the input queue, then the statistics are correspondingly inaccurate. Put-date-and-time is not accurate when the origin context is preserved or set for a message when put by an application to

the queue. This commonly occurs when an application is a message mover that moves messages from one queue to another, or when any application passes or sets origin context for a message.

MQSeries_High_Delayed_Messages

The MQSeries_High_Delayed_Messages situation determines whether the number of delayed messages exceeds a given threshold for a specific queue. This query can include only an individual queue name.

In the following example, a queue named TEST.QUEUE2 is monitored for 10 messages which have a delay for longer than 300.00 seconds. Note that the Grouping_Mechanism attribute is not specified, which means that statistics are collected at the queue level.

```
IF VALUE Message_Statistics.Queue Name EQ TEST.QUEUE2
AND VALUE Message_Statistics.Latency Threshold EQ 300.00
AND VALUE Message_Statistics.Delayed Messages GT 10
```

MQSeries_Inhibit_Problem

The MQSeries_Inhibit_Problem situation issue an alert when MQGET calls are currently inhibited for the queue or MQPUT and MQPUT1 calls are currently inhibited for the queue.

The formula is:

```
MQSeries_Events.Event EQ Put_Inhibited
OR
MQSeries_Events.Event EQ Get_Inhibited
```

MQSeries_Listener_Not_Started (distributed systems only)

The MQSeries_Listener_Not_Started situation monitors listener status, and issues an alert when the listener is either stopped or stopping, or the status is unavailable for some reason.

This situation applies to WebSphere MQ version 6.0 or later.

The formula is:

```
Listener Status.Status NE Running AND Listener Status.Status NE Starting
```

MQSeries_Local_DestQ_Depth_High

The MQSeries_Local_DestQ_Depth_High situation monitors subscriptions for current WebSphere MQ events, and issues an alert when a Queue_Depth_High event occurs for a subscriptions destination queue.

This alert indicates that the queue has reached its user-defined high depth threshold. This alert automatically resets itself when the situation is no longer true.

The formula is:

```
Subscription_Definitions.Destination_Event EQ Queue_Depth_High
```

MQSeries_Local_DestQ_Full

The MQSeries_Local_DestQ_Full situation monitors subscriptions for current WebSphere MQ events, and issues an alert when a Queue_Full event occurs for a subscriptions destination queue.

This alert indicates that the queue is full. This alert automatically resets itself when the situation is no longer true.

The formula is:

Subscription_Definitions.Destination_Event EQ Queue_Full

MQSeries_Local_Object_Unknown

The MQSeries_Local_Object_Unknown situation issues an alert when the object name in the object descriptor is not recognized for the specified object type.

The formula is:

MQSeries_Events.Event EQ Unknown_Object_Name

MQSeries_Logging_High_RBA_Crit

The MQSeries_Logging_High_RBA_Crit situation monitors the **UOW Start RBA** value in the Log Data Set Status table. The **UOW Start RBA** attribute is the current RBA value of the log data. This situation issues an alert when the value is greater than or equal to X'730000000000'.

The formula is:

Log_Data_Set_Status.UOW Start RBA >= 730000000000

MQSeries_Logging_High_RBA_Warn

The MQSeries_Logging_High_RBA_Warn situation monitors the **UOW Start RBA** value in the Log Data Set Status table. The **UOW Start RBA** attribute is the current RBA value of the log data. This situation issues an alert when the value is greater than or equal to X'700000000000'.

The formula is:

Log_Data_Set_Status.UOW Start RBA >= 700000000000

MQSeries_Manager_Inactive

The MQSeries_Manager_Inactive situation monitors queue managers, and issues an alert when a queue manager is not active.

To enable this alert, the queue manager must be specified as being monitored. This alert automatically resets itself when the situation is no longer true.

The formula is:

Managers.QMgr Status EQ Inactive

MQSeries_Manager_Inactive_Event

The MQSeries_Manager_Inactive_Event situation monitors queue managers for WebSphere MQ events, and issues an alert when the Queue_Manager_Not_Active event occurs.

The WebSphere MQ Monitoring agent retrieves event information from the local event queues on a monitored queue manager. Event information can originate either on a local system or on a remote system whose events are routed to a monitored event queue. This situation can be used to detect an inactive queue manager that are monitored by a remote system. This situation does not automatically reset itself when a Queue_Manager_Active event occurs. You must close the event manually (see the Tivoli Enterprise Portal online Help).

The issued alert is a pure event, and is not closed automatically like sampled events. You must close the event manually (see the Tivoli Enterprise Portal online Help). Alternatively, you can add an Until Modifier to the situation. The Until modifier causes a situation to reset itself with an event (for example, Queue_Manager_Active) occurring or with an elapsed time interval. To add an Until modifier to a situation, use the Situation Editor and follow the instructions in the Tivoli Enterprise Portal online Help. To see an example of the Until modifier, see “MQSeries_Queue_Full_Until” on page 352.

The formula is:

```
MQSeries_Events.Event EQ Queue_Manager_Not_Active
```

MQSeries_MQ_Channel_Stopped

The MQSeries_MQ_Channel_Stopped situation monitors queue managers for current WebSphere MQ events, and issues an alert when a Channel_Stopped event occurs. A Channel_Stopped event occurs when there is an error, retry, or disabled condition.

This alert automatically resets itself when the situation is no longer true. This situation is activated by default.

The formula is:

```
Current_Events.Event EQ Channel_Stopped  
AND  
Current_Events.Event Qualifier NE Channel_Stopped_OK
```

MQSeries_MQSecure_Problem

The MQSeries_MQSecure_Problem situation monitors the SYSTEM.MQSECURE.PROBLEMS queue, and issues an alert if MQSecure detects any security problem.

This alert automatically resets itself when the situation is no longer true.

The formula is:

```
Queue_Statistics.Queue Name EQ SYSTEM.MQSECURE.PROBLEMS  
AND  
Queue_Statistics.Current Depth GT 0
```

MQSeries_No_Queue_Messages_Read

The MQSeries_No_Queue_Messages_Read situation monitors message read activity, and issues an alert when there are messages on the queue and there is no read activity during the sampling interval.

The predefined sampling interval is 5 minutes. The information monitored with this situation is available only when Queue Statistics data is collected (SET QUEUE STATISTICS(YES)) or Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)).

If Queue Statistics data is collected (SET QUEUE STATISTICS(YES)), the Queue Statistics data is used. If Application Queue Statistics data is collected on z/OS systems (SET APPLICATION STATISTICS(ALL|NODYNAMQ)), the Application Queue Statistics data is used.

For detailed information about queue statistics data, see Collecting queue statistics data. For instruction about how to change monitoring options, see Customizing monitoring options.

The formula is:

```
Queue_Statistics.Msgs Read EQ 0  
AND  
Queue_Statistics.Current Depth GT 0
```

MQSeries_Old_Message_On_Queue

The MQSeries_Old_Message_On_Queue situation monitors queue status, and issues an alert when the age of the oldest message on a queue is older than the given number of seconds.

This situation indicates that messages are not being processed in a timely way. In the following example, 60 is used for 1 minute. The time threshold can be changed as your site requires. This situation applies to WebSphere MQ version 6.0 or later only.

The formula is:

```
Queue_Status.Oldest_Message_Age GT 60
```

MQSeries_PageSet_Unavailable

The MQSeries_PageSet_Unavailable situation monitors page set usage, and issues an alert when a defined page set is not available.

This alert automatically resets itself when the situation is no longer true.

The formula is:

```
Page_Sets.Status EQ NotAvail
```

MQSeries_PageSet_Usage_High

The MQSeries_PageSet_Usage_High situation monitors page set usage, and issues an alert when the percentage of pages in use is greater than 90% and the number of total extents equals *nnn*, where *nnn* is your site-specific number of maximum extents.

This alert automatically resets itself when the situation is no longer true. The number of the total extents must be specified before using this situation.

The formula is:

```
Page_Sets.% Pages In Use GT 90  
AND  
Page_sets.Total Extents EQ nnn
```

MQSeries_PubSub_Problem

The MQSeries_PubSub_Problem situation monitors the status of the publish-subscribe engine, and issues an alert if the engine is not running or an error is detected.

This alert automatically resets itself when the situation is no longer true.

The formula is:

```
Publish_Subscribe_Status.Pub Sub Status EQ Inactive  
OR  
Publish_Subscribe_Status.Pub Sub Status EQ Error
```

MQSeries_QMgr_Instance_Standby

The MQSeries_QMgr_Instance_Standby situation monitors your queue managers for WebSphere MQ events and issues an informational alert when the status of a queue manager is elsewhere or standby.

This situation is activated by default.

The formula is:

```
Managers.QMgr Status EQ Standby  
OR  
Managers.QMgr Status EQ Running_Elsewhere
```

MQSeries_Queue_Depth_High

The MQSeries_Queue_Depth_High situation monitors queue managers for current WebSphere MQ events, and issues an alert when a Queue_Depth_High event occurs.

This alert indicates that a queue has reached its user-defined high depth threshold. This alert automatically resets itself when the situation is no longer true.

The formula is:

```
Current_Events.Event EQ Queue_Depth_High
```

MQSeries_Queue_Full

The MQSeries_Queue_Full situation monitors queue managers for current WebSphere MQ events, and issues an alert when a Queue_Full event occurs.

This alert automatically resets itself when the situation is no longer true. This situation is activated by default.

The formula is:

```
Current_Events.Event EQ Queue_Full
```

MQSeries_Queue_Full_Until

The MQSeries_Queue_Full_Until situation monitors queue managers for WebSphere MQ events, and issues an alert when a Queue_Full event occurs.

This alert automatically resets itself after 15 minutes. If you remove the Until modifier from this situation, this situation does not reset itself after 15 minutes.

The formula is:

```
MQSeries_Events.Event EQ Queue_Full  
THEN situation MQSeries_Queue_Full_Until is true  
until an elapsed time interval of 15 minutes has expired.
```

MQSeries_Queue_Manager_Problem

The MQSeries_Queue_Manager_Problem situation monitors queue managers for events, and issues an alert when a Queue_Manager_Problem event occurs.

This situation is activated by default.

The formula is:

```
Managers.QMgr Status EQ QueueManager_Not_Available  
OR  
Managers.QMgr Status EQ CommandServer_Not_Responding  
OR  
Managers.QMgr Status EQ Dynamic_Queue_Allocation_Error  
OR  
Managers.QMgr Status EQ Cluster_Repository_Unavailable
```

MQSeries_Queue_Manager_Quiesce

The MQSeries_Queue_Manager_Quiesce situation monitors queue manager status, and issues an alert when the current execution status of the queue manager is quiescing.

This situation applies to WebSphere MQ version 6.0 or later only.

The formula is:

```
MQ Manager Status.QMSTATUS EQ Quiescing
```

MQSeries_Queue_Not_Being_Read

The MQSeries_Queue_Not_Being_Read situation monitors queue status, and issues an alert when there are messages on a queue but there is no application with it open for input.

The formula is:

```
Queue Status.Current_Depth GT 0  
AND  
Queue Status.Input_Opens LT 1
```

MQSeries_Queue_Service_Int_High

The MQSeries_Queue_Service_Int_High situation monitors queue managers for current WebSphere MQ events, and issues an alert when a Queue_Service_Interval_High event occurs.

This alert automatically resets itself when the situation is no longer true.

The formula is:

Current_Events.Event EQ Queue_Service_Interval_High

MQSeries_Remote_Queue_Error

The MQSeries_Remote_Queue_Error situation covers serious remote queue related events, and issues an alert when an application (or a queue manager) cannot access a (remote) queue on another queue manager.

The formula is:

MQSeries_Events.Event EQ Queue_Type_Error
OR
MQSeries_Events.Event EQ Default_Xmit_Queue_Type_Error
OR
MQSeries_Events.Event EQ Default_Xmit_Queue_Usage_Error
OR
MQSeries_Events.Event EQ Remote_Queue_Name_Error
OR
MQSeries_Events.Event EQ Transmission_Queue_Type_Error
OR
MQSeries_Events.Event EQ Transmission_Queue_Usage_Error

MQSeries_Remote_Queue_Problem

The MQSeries_Remote_Queue_Problem situation covers common remote queue related events, and issues an alert when an application (or a queue manager) cannot access a (remote) queue on another queue manager.

The formula is:

MQSeries_Events.Event EQ Unknown_Default_Xmit_Queue
OR
MQSeries_Events.Event EQ Unknown_Remote_Queue_Manager
OR
MQSeries_Events.Event EQ Unknown_Transmission_Queue

Chapter 4. Predefined Take Action commands

The WebSphere MQ Monitoring agent provides predefined Take Action commands. For more detailed information about any of the WebSphere MQ commands, see *WebSphere MQ Script (MQSC) Command Reference*.

Take Action commands for the WebSphere MQ Monitoring agent have names beginning with the MQ characters.

Exception: The predefined commands are not applicable to telemetry channels. For a telemetry channel, you must create a custom command on Tivoli Enterprise Portal. For example, to start a telemetry channel, create a custom command with the channel type specified. The following line is an example of what you can type in the **Command** field when you create a custom command on Tivoli Enterprise Portal:

```
START CHANNEL(&Telemetry_Channel_Definitions.Channel_Name) CHLTYPE(MQTT)
```

For instructions about how to create a custom command, see *Creating a custom Take Action command*.

MQ Reset Channel

The **MQ Reset Channel** command resets the message sequence number of a WebSphere MQ channel. If you execute this command from a workspace in which the attribute does not resolve, the Edit Argument Values window is displayed. Enter the name of the channel that you want to reset in the **Value** field.

The syntax of the command sent to the agent is:

```
MQ:RESET CHANNEL(&Channel_Statistics.Channel_Name)
```

MQ Resume Cluster Queue Manager

The **MQ Resume Cluster Queue Manager** command informs other queue managers that the availability of the specified cluster is resumed. If you execute this command from a workspace in which the attribute does not resolve, the Edit Argument Values is displayed. Enter the name of the cluster in the **Value** field.

The syntax of the command sent to the agent is as follows:

```
MQ:RESUME QMGR CLUSTER(&Channel_Definitions.Cluster)
```

MQ Start Channel

The **MQ Start Channel** starts the specified WebSphere MQ channel. If you run this command from a workspace in which the attribute does not resolve, the Edit Argument Values window is displayed. Enter the name of the channel that you want to start in the **Value** field.

The syntax of the command sent to the agent is as follows:

```
MQ:START CHANNEL(&Channel_Statistics.Channel_Name)
```

MQ Stop Channel

The **MQ Stop Channel** stops the specified WebSphere MQ channel. If you run this command from a workspace in which the attribute does not resolve, the Edit Argument Values window is displayed. Enter the name of the channel that you want to stop in the **Value** field.

The syntax of the command sent to the agent is as follows:

```
MQ:STOP CHANNEL(&Channel_Statistics.Channel_Name)
```

Appendix. ITCAM for Applications documentation library

Various publications are relevant to the use of ITCAM for Applications.

To find publications from the previous version of a product, click **Previous versions** under the name of the product in the **Contents** pane.

Documentation for this product is in the :

- Quick Start Guide
- Offering Guide
- Download instructions
- Links to Prerequisites
- Installation and Configuration Guide for each agent
- Link to Reference information for each agent
- Link to Troubleshooting Guide for each agent

Prerequisite publications

To use the information in this publication effectively, you must have some prerequisite knowledge, which you can obtain from the following publications:

- *IBM Tivoli Monitoring Installation and Setup Guide, SC32-9407*
Provides instructions for installing and configuring IBM Tivoli Monitoring components on Windows, Linux, and UNIX systems.
- *IBM Tivoli Composite Application Manager Agents for WebSphere Messaging: Installation and Setup Guide*
Describes how to install WebSphere MQ Monitoring agent, WebSphere MQ Configuration agent, and WebSphere Message Broker Monitoring agent on Windows, UNIX, Linux and i5/OS systems.
- *Configuring Tivoli Enterprise Monitoring Server on z/OS, SC32-9463*
Gives detailed instructions for using the Configuration Tool to configure Tivoli Enterprise Monitoring Server on z/OS systems. Includes scenarios for using batch mode to replicate monitoring environments across the z/OS enterprise. Also provides instructions for setting up security and for adding application support to a Tivoli Enterprise Monitoring Server on z/OS systems.
- *IBM Tivoli OMEGAMON XE for Messaging on z/OS: Planning and Configuration Guide*
Provides information about installing and setting up WebSphere MQ Monitoring agent, WebSphere MQ Configuration agent, and WebSphere Message Broker Monitoring agent on z/OS systems and upgrading from a previous installation.

Related publications

The following documents also provide useful information:

- *IBM Tivoli Monitoring Administrator's Guide, SC32-9408*
Describes the support tasks and functions required for the Tivoli Enterprise Portal Server and clients, including Tivoli Enterprise Portal user administration.
- *Tivoli Enterprise Portal User's Guide, SC32-9409*

Provides hands-on lessons and detailed instructions for all Tivoli Enterprise Portal features.

- *IBM Tivoli Monitoring Troubleshooting Guide*, GC32-9458

Provides information and messages to help you troubleshoot problems with IBM Tivoli Monitoring.

- *IBM Tivoli Monitoring Command Reference*, SC23-6045

Provides detailed syntax and parameter information, as well as examples, for the commands you can use in IBM Tivoli Monitoring.

Other sources of documentation

You can obtain additional technical documentation about monitoring products from other sources.

See the following sources of technical documentation about monitoring products:

- Service Management Connect (SMC)
 - For introductory information about SMC, see IBM Service Management Connect (<http://www.ibm.com/developerworks/servicemanagement/>).
 - For information about Tivoli products, see the Application Performance Management community on SMC (<http://www.ibm.com/developerworks/servicemanagement/apm/index.html>).
 - Connect, learn, and share with Service Management professionals. Get access to developers and product support technical experts who provide their perspectives and expertise. You can use SMC for these purposes:
 - Become involved with transparent development, an ongoing, open engagement between external users and developers of Tivoli products where you can access early designs, sprint demos, product roadmaps, and pre-release code.
 - Connect one-on-one with the experts to collaborate and network about Tivoli and Integrated Service Management.
 - Benefit from the expertise and experience of others using blogs.
 - Collaborate with the broader user community using wikis and forums.
- IBM Integrated Service Management Library (<http://www.ibm.com/software/brandcatalog/ismlibrary/>) is an online catalog that contains integration documentation as well as other downloadable product extensions.
- IBM Redbook publications (<http://www.redbooks.ibm.com/>) include Redbooks® publications, Redpapers, and Redbooks technotes that provide information about products from platform and solution perspectives.
- Technotes (<http://www.ibm.com/support/entry/portal/software>), which are found through the IBM Software Support website, provide the latest information about known product limitations and workarounds.

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