IBM® Tivoli® Netcool/OMNIbus Probe for Tekelec Eagle STP 4.0

Reference Guide March 02, 2012



Notice Before using this information and the product it supports, read the information in Appendix A, "Notices and Trademarks," on page 17.

Edition notice

This edition (SC23-7933-02) applies to version 4.0 of IBM Tivoli Netcool/OMNIbus Probe for Tekelec Eagle STP and to all subsequent releases and modifications until otherwise indicated in new editions.

This edition replaces SC23-7933-01.

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About this guide

The following sections contain important information about using this guide.

Document control page

Use this information to track changes between versions of this guide.

The IBM Tivoli Netcool/OMNIbus Probe for Tekelec Eagle STP documentation is provided in softcopy format only. To obtain the most recent version, visit the IBM® Tivoli® Information Center:

http://publib.boulder.ibm.com/infocenter/tivihelp/v8r1/index.jsp?topic=/com.ibm.tivoli.namomnibus.doc/welcome_ptsm.htm

Table 1. Document modification history		
Document version	Publication date	Comments
SC23-7933-01	December 31, 2008	Summary table updated. IPv6 support information added. FIPS information added. Installation section added.
SC23-7933-02	March 02, 2012	Information about operating system conventions added in "Conventions used in this guide" on page v. Multicultural support information updated in "Summary" on page 1. Installation information updated in "Installing probes" on page 2. Configuration information updated in "Configuring the hosts file" on page 3. Information about known issues added in "Known issues" on page 15.

Conventions used in this guide

All probe guides use standard conventions for operating system-dependent environment variables and directory paths.

Operating system-dependent variables and paths

All probe guides use standard conventions for specifying environment variables and describing directory paths, depending on what operating systems the probe is supported on.

For probes supported on UNIX and Linux operating systems, probe guides use the standard UNIX conventions such as *\$variable* for environment variables and forward slashes (/) in directory paths. For example:

\$OMNIHOME/probes

For probes supported only on Windows operating systems, probe guides use the standard Windows conventions such as %variable% for environment variables and backward slashes ($\$) in directory paths. For example:

%OMNIHOME%\probes

For probes supported on UNIX, Linux, and Windows operating systems, probe guides use the standard UNIX conventions for specifying environment variables and describing directory paths. When using the Windows command line with these probes, replace the UNIX conventions used in the guide with Windows conventions. If you are using the bash shell on a Windows system, you can use the UNIX conventions.

Note: The names of environment variables are not always the same in Windows and UNIX environments. For example, %TEMP% in Windows environments is equivalent to \$TMPDIR in UNIX and Linux environments. Where such variables are described in the guide, both the UNIX and Windows conventions will be used.

Operating system-specific directory names

Where Tivoli Netcool/OMNIbus files are identified as located within an arch directory under NCHOME or OMNIHOME, arch is a variable that represents your operating system directory. For example:

\$OMNIHOME/probes/arch

The following table lists the directory names used for each operating system.

Note: This probe may not support all of the operating systems specified in the table.

Table 2. Directory names for the arch variable		
Operating system	Directory name represented by <i>arch</i>	
AIX® systems	aix5	
Red Hat Linux® and SUSE systems	linux2x86	
Linux for System z	linux2s390	
Solaris systems	solaris2	
Windows systems	win32	

OMNIHOME location

Probes and older versions of Tivoli Netcool/OMNIbus use the OMNIHOME environment variable in many configuration files. Set the value of OMNIHOME as follows:

- On UNIX and Linux, set \$OMNIHOME to \$NCHOME/omnibus.
- On Windows, set %OMNIHOME% to %NCHOME%\omnibus.

Chapter 1. Probe for Tekelec Eagle STP

The Tekelec Eagle Signaling Transfer Point (STP) is a carrier-grade packet switch for Intelligent Network control configuration.

The Probe for Tekelec Eagle STP is a multiheaded probe that can connect to one or more Tekelec Eagle STP devices over TCP/IP.

This guide contains the following sections:

- "Summary" on page 1
- "Installing probes" on page 2
- "Configuring the hosts file" on page 3
- "Chatin and chatout strings" on page 3
- "Data acquisition" on page 4
- "Properties and command line options" on page 7
- "Elements" on page 10
- "Error messages" on page 11
- "ProbeWatch messages" on page 12
- "Running the probe" on page 15
- "Known issues" on page 15

Summary

Each probe works in a different way to acquire event data from its source, and therefore has specific features, default values, and changeable properties. Use this summary information to learn about this probe.

The following table provides a summary of the Probe for Tekelec Eagle STP.

Table 3. Summary		
Probe target	Tekelec Eagle STP	
Probe executable name	nco_p_eaglestp	
Probe installation package	omnibus- <i>arch</i> -probe-nco-p-eaglestp- <i>version</i>	
Package version	4.0	
Probe supported on	For details of supported operating systems, see the following Release Notice on the IBM Software Support website: http://www-304.ibm.com/support/docview.wss? uid=swg21414861 Note: The probe is supported on HP-UX PA-RISC 11.11. It is not supported on HP-UX PA-RISC 11.0.	
Properties file	\$OMNIHOME/probes/arch/eaglestp.props	
Rules file	\$OMNIHOME/probes/arch/eaglestp.rules	

Table 3. Summary (continued)		
Additional files	\$OMNIHOME/probes/arch/eaglestp.hosts	
Requirements	A currently supported version of IBM Tivoli Netcool/OMNIbus.	
Connection method	TCP/IP	
Remote connectivity	The probe can connect to a device on a remote host.	
Multicultural support	Available	
Peer-to-peer failover functionality	Available	
IP environment	IPv4 and IPv6	
Federal Information Processing Standards (FIPS)	IBM Tivoli Netcool/OMNIbus uses the FIPS 140-2 approved cryptographic provider: IBM Crypto for C (ICC) certificate 384 for cryptography. This certificate is listed on the NIST website at http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/1401val2004.htm. For details about configuring Netcool/OMNIbus for FIPS 140-2 mode, see the IBM Tivoli Netcool/OMNIbus Installation and Deployment Guide.	

Installing probes

All probes are installed in a similar way. The process involves downloading the appropriate installation package for your operating system, installing the appropriate files for the version of Netcool/OMNIbus that you are running, and configuring the probe to suit your environment.

The installation process consists of the following steps:

1. Downloading the installation package for the probe from the Passport Advantage Online website.

Each probe has a single installation package for each operating system supported. For details about how to locate and download the installation package for your operating system, visit the following page on the IBM Tivoli Knowledge Center:

http://www-01.ibm.com/support/knowledgecenter/SSSHTQ/omnibus/probes/all_probes/wip/reference/install_download_intro.html

2. Installing the probe using the installation package.

The installation package contains the appropriate files for all supported versions of Netcool/OMNIbus. For details about how to install the probe to run with your version of Netcool/OMNIbus, visit the following page on the IBM Tivoli Knowledge Center:

http://www-01.ibm.com/support/knowledgecenter/SSSHTQ/omnibus/probes/all_probes/wip/reference/install_install_intro.html

3. Configuring the probe.

This guide contains details of the essential configuration required to run this probe. It combines topics that are common to all probes and topics that are peculiar to this probe. For details about additional configuration that is common to all probes, see the *IBM Tivoli Netcool/OMNIbus Probe and Gateway Guide*.

Configuring the hosts file

The probe can connect to multiple Tekelec Eagle STP devices. You must configure the connection details for each device's host machine in the eaglestp.hosts file supplied with the probe.

When the probe starts up, it first checks the **HostsFile** property for the presence of a hosts file. If you have not specified a hosts file, the probe then checks the **Host** and **Port** properties for the host name and port details of a single Tekelec Eagle STP host. If you have specified values for all three properties, the probe will use the details in the hosts file.

The format of a host entry in the hosts file is as follows:

```
host port : ci , co , ft , ia , ri , ra , af ;
```

Multiple log-ins within entries must be separated by colons (:). Individual elements of an entry are separated by commas (,) or by one of the following white space characters: space (sp), tab (tab), carriage return (cr), or newline (nl). Each entry must end with a semicolon (;). Blank lines are ignored.

When using chatin (ci) and chatout (co) elements in a host entry, you must enclose the chatin and chatout strings in quotation marks. For example:

```
110.26.10.166 22 : ".*\> 20\r .*\> login: uid=eagle\r .*\: tklc.1023\r .*\> rept-stat-trbl\r" , "logout" , 10 , 10 , 3 , 3 , true ;
```

The following table describes the elements used in host entries.

Table 4. Hosts file elements		
element	Description	
host	This element specifies the IP address of the host to which the probe connects.	
port	This element specifies the port to which the probe connects.	
ci	This element specifies the chatin string.	
со	This element specifies the chatout string.	
ft	This element specifies the flush time interval.	
ia	This element specifies the inactivity time.	
ri	This element specifies the reconnection interval.	
ra	This element specifies the number of reconnection attempts.	
af	This element specifies the active flag. You must set this element to true. Setting this element to false deactivates the connection.	

Chatin and chatout strings

The probe uses chatin and chatout strings to log into and out of the target system.

Use the **ChatinString** property to specify the chatin string used to log in to the target system and the **ChatoutString** property to specify the chatout string used to disconnect from the target system.

Chat strings are contained in a single line. Chatin and chatout strings use the following expect-send and send-expect formats:

```
ChatinString : expect send expect send
ChatoutString : send expect send expect
```

Each element in a chat string is separated by white space. To send or expect a character sequence that includes white space, surround the sequence with single quotes. The expect string can use any regular expression. The send string can include any character, including control characters that use standard UNIX/C escape sequences.

This is an example of a typical chatin script:

```
.*login.*:.*anu\r\n.*password.*:.*anu\r\n
```

Escape codes

You can use C-style escape codes in the values of the **ChatinString** and **ChatoutString** properties.

For example, the following chatin string sends a carriage return character ($\rdot r$) after the user name and password:

```
ChatinString : ".*: user\r .*: passwd\r .*:"
```

Note: The escape sequences for backslash ($\backslash \backslash$), single quote ($\backslash \prime$), and double quote ($\backslash \prime$) characters must be double-escaped. For example, to send a backslash character ($\backslash \backslash$), use $\backslash \backslash \backslash$.

The following table lists the available escape codes:

Table 5. ChatinString escape codes	
Escape code	Character
\b	Backspace character.
\f	Form-feed character.
\n	New-line character.
\r	Carriage return character.
\t	Tab character.
\\	Backslash character.
\'	Single quote character.
/"	Double quote character.

Data acquisition

Each probe uses a different method to acquire data. Which method the probe uses depends on the target system from which it receives data.

The probe connects to one or more Tekelec Eagle STP devices over TCP/IP.

When the probe connects to a single device, it uses values specified by the **ChatinString**, **Host**, and **Port** properties to establish the connection.

When the probe connects to multiple devices, it uses the hosts file (\$OMNIHOME/probes/arch/eaglestp.hosts) to establish the connections. The probe cycles through the connections, processing one event from each host. If, during a cycle, the probe experiences a read timeout on its first read of any connection, it moves on to the next connection in the list.

Data acquisition is further described in the following topics:

- "Data stream capture" on page 5
- "Logging invalid alarms" on page 5

- "Read timeout" on page 6
- "Inactivity" on page 6
- "Backoff strategy" on page 6
- "Peer-to-peer failover functionality" on page 6

Data stream capture

The probe can log the raw data stream sent from a device to a data stream capture file. The raw data can be used for debugging purposes, to develop new features for the probe, or to pass to other management systems that require the same data.

To enable data stream capture, use the **StreamCaptureFile** property to specify a file in which to store the data.

For each connection to a Tekelec Eagle STP device, the full data stream is stored in a log file. The file is named according to the following naming convention:

streamcapturefile_host_port

where *streamcapturefile* is the file name specified by the **StreamCaptureFile** property and *host* and *port* are the host name and port of the device to which the probe is connected.

The data stream capture function can generate large log files. To conserve disk space, disable this function when you no longer require the data.

Rotating stream capture files

The probe can rotate stream capture files by archiving files that reach a predefined size.

To enable the rotation of stream capture files, set the **DateStreamCapture** property to 1. This makes the probe append a timestamp to the stream capture file name. When the data stream file reaches the maximum size specified by the **MaxStreamCapFileSize** property, the file is archived and a new file is opened with a new timestamp. If the data stream being read exceeds the remaining space in a file, a new file is started to ensure that the entire stream is captured in one file.

If you do not use the **MaxStreamCapFileSize** property to specify a maximum size for the stream capture file, the file grows indefinitely until the connection is closed.

If the MaxStreamCapFileSize property is enabled and the DateStreamCapture property is set to 0, the probe overwrites the stream capture file each time the maximum file size is reached.

Logging invalid alarms

The probe can log invalid alarms to a log file for later examination.

Use the **InvalidAlarmLogging** property to specify whether the probe logs invalid alarms. Specify a value of 1 to enable logging. The default is 0, which disables logging.

Use the **InvalidAlarmLogFile** property to specify the name and location of the invalid alarm log file and the **MaxInvalidAlarmLogFileSize** property to specify the maximum size of the log file in bytes. When the maximum log file size is reached, the probe creates a new file and appends the current date and time to the file name.

The probe flushes an event to the ObjectServer after five seconds, as specified by the default value of the **FlushTime** property. If an event is flushed while it is being parsed by the probe, the buffer is discarded and the incomplete alarm is logged as invalid. If too many events are being flushed before completion, you might need to increase the flush time interval.

Read timeout

Use the **ReadTimeout** property to specify the length of time for which the probe tries to read an alarm before timing out.

The probe tries to read each alarm for the length of time specified by the **ReadTimeout** property. The default is 100 milliseconds. If no data is received within this time, the probe moves on to the next alarm.

Inactivity

The probe has a timeout facility that allows it to disconnect from the socket if it fails to receive the next alarm data within a predefined amount of time.

Use the **Inactivity** property to specify how long the probe waits before disconnecting,. After this length of time, the probe disconnects from the switch, sends a ProbeWatch message to the ObjectServer, and tries to reconnect.

You can also use the **InactivityRetry** property to specify the number of consecutive inactivity intervals that the probe allows before disconnecting. If this property is set to 0, the probe disconnects after a single period of inactivity.

Backoff strategy

If the probe fails to connect to the target device, or loses an existing connection, it tries to reconnect using a backoff strategy.

The probe's backoff strategy is to try to reestablish the connection at successive intervals of one second, two seconds, four seconds, eight seconds, and so on, up to a maximum of 4096 seconds. When the maximum retry interval is reached, the probe shuts down, restarts, and tries to log in again. The backoff strategy remains in place until a successful login occurs.

You can also use the **ReconnectionAttempts** and **ReconnectionInterval** properties to override the backoff strategy. The **ReconnectionAttempts** property specifies the maximum number of times that the probe attempts to reconnect to the device. The **ReconnectionInterval** property specifies the time interval (in seconds) between successive reconnection attempts.

If the connection is terminated by the remote host, the connection is also closed by the probe on its host machine. The operating system is not allowed to close it.

Peer-to-peer failover functionality

The probe supports failover configurations where two probes run simultaneously. One probe acts as the master probe, sending events to the ObjectServer; the other acts as the slave probe on standby. If the master probe fails, the slave probe activates.

While the slave probe receives heartbeats from the master probe, it does not forward events to the ObjectServer. If the master probe shuts down, the slave probe stops receiving heartbeats from the master and any events it receives thereafter are forwarded to the ObjectServer on behalf of the master probe. When the master probe is running again, the slave probe continues to receive events, but no longer sends them to the ObjectServer.

Example property file settings for peer-to-peer failover

You set the peer-to-peer failover mode in the properties files of the master and slave probes. The settings differ for a master probe and slave probe.

Note: In the examples, make sure to use the full path for the property value. In other words replace \$OMNIHOME with the full path. For example: /opt/IBM/tivoli/netcool.

The following example shows the peer-to-peer settings from the properties file of a master probe:

Server : "NCOMS" RulesFile : "master_rules_file" MessageLog : "master_log_file"
PeerHost : "slave_hostname"
PeerPort : 6789 # [communication port between master and slave probe]
Mode : "master"
PidFile : "master_pid_file"

The following example shows the peer-to-peer settings from the properties file of the corresponding slave probe:

Server : "NCOMS"
RulesFile : "slave_rules_file"
MessageLog : "slave_log_file"
PeerHost : "master_hostname"
PeerPort : 6789 # [communication port between master and slave probe]
Mode : "slave"
PidFile : "slave_pid_file"

Properties and command line options

You use properties to specify how the probe interacts with the device. You can override the default values by using the properties file or the command line options.

The following table describes the properties and command line options specific to this probe. For more information about generic Netcool/OMNIbus properties and command line options, see the *IBM Tivoli Netcool/OMNIbus Probe and Gateway Guide*.

Table 6. Properties and command line options		
Property name	Command line option	Description
ChatinString string	-chatinstring string	Use this property to specify the chatin string for connecting to the target system. The default is "".
ChatoutString string	-chatoutstring string	Use this property to specify the chatout string for disconnecting from the target system. The default is "".
DateStreamCapture integer	-datestreamcapture integer	Use this property to specify whether the probe appends the current date and time to the name of the data stream capture file. This property takes the following values:
		0: The probe does not append the date and time to the file name.
		1: The probe appends the date and time to the file name.
		The default is 0.
		For more information, see <u>"Data stream capture" on page 5</u> .

Table 6. Properties and command line options (continued)		
Property name	Command line option	Description
ExpectTimeout integer	-expecttimeout integer	Use this property to specify the time (in seconds) that the probe waits for an expected string when logging in or logging out. The default is 20.
FlushTime integer	-flushtime integer	Use this property to specify the time (in seconds) that the probe waits before flushing an event to the ObjectServer. The default is 5.
Host string	-host string	Use this property to specify the DNS name of the host to which the probe connects. The default is localhost.
HostsFile string	-hostsfile string	Use this property to specify the name and location of the hosts file. The default is "".
Inactivity integer	-inactivity integer	Use this property to specify the time (in seconds) that the probe allows a port to be inactive before disconnecting.
InactivityRetry integer	-inactivityretry integer	Use this property to specify the number of consecutive periods of inactivity that the probe allows before attempting to reconnect to the host.
InvalidAlarmLogFile string	-invalidlog string	The default is 0. Use this property to specify the file to which the probe logs invalid alarms. The current date and time is appended to the file name. The default is \$0MNIHOME/var/eaglestp.invalid.
InvalidAlarmLogging integer	-invalidalarmlogging integer	Use this property to specify whether the probe logs invalid alarms. This property takes the following values: 0: The probe does not log invalid alarms. 1: The probe logs invalid alarms. The default is 0.

Table 6. Properties and command line options (continued)		
Property name	Command line option	Description
MaxEvents integer	-maxevents integer	Use this property to specify the maximum number of events that the probe attempts to read simultaneously from a device.
		The default is 1.
		Note: When a large number of events is being generated by the device, you can increase this number to increase event throughput.
MaxInvalidAlarmLog FileSize integer	-maxinvalidlog <i>integer</i>	Use this property to specify the maximum size (in bytes) of the invalid alarm log file. When this limit is reached, the probe creates a new file and appends the current date and time to the file name.
		The default is 1048576.
MaxStreamCapFileSize integer	-maxstreamcapfilesize integer	Use this property to specify the maximum size (in bytes) of the data stream capture file. When this limit is reached, the probe creates a new file. The default is 0.
Port integer	-port integer	Use this property to specify the port to
		which the probe connects. The default is 23.
Props.CheckNames boolean	N/A	Use this property to specify whether the probe shuts down if it detects an invalid property value in the properties file. This property takes the following values:
		TRUE: The probe shuts down if it detects an invalid property value in the properties file.
		FALSE: The probe does not shut down if it detects an invalid property value.
		The default is TRUE.
ReadTimeout integer	-readtimeout <i>integer</i>	Use this property to specify the time (in milliseconds) for which the probe tries to read an alarm before timing out.
		The default is 100.

Table 6. Properties and command line options (continued)		
Property name	Command line option	Description
ReconnectionAttempts integer	-reconnectionattempts integer	Use this property to specify the maximum number of times that the probe attempts to reconnect to the device.
		The default is 0 (the probe makes an unlimited number of attempts to reconnect).
ReconnectionInterval integer	-reconnectioninterval integer	Use this property to specify the time interval (in seconds) between successive reconnection attempts.
		The default is 0. (the probe uses the standard backoff strategy.
StreamCaptureFile string	-streamcapturefile string	Use this property to specify the name and location of the file that the probes uses to store the raw data stream sent from the device.
		The default is "".
		For more information, see <u>"Data stream</u> capture" on page 5.

Elements

The probe breaks event data down into tokens and parses them into elements. Elements are used to assign values to ObjectServer fields; the field values contain the event details in a form that the ObjectServer understands.

The probe generates both static and dynamic elements.

Static elements

The probe generates the same set of static elements for each event it receives. The following table describes the static elements that the probe generates.

Table 7. Static elements		
Element name Element description		
\$Host	This element contains the host name of the event source device.	
\$Port	This element identifies the port number on the host contained in the \$Host element.	
\$Date	This element contains the date of the alarm in the format YY-MM-DD.	
\$Time	This element contains the time of the alarm in the format HH:MM:SS.	

Table 7. Static elements (continued)		
Element name	Element description	
\$TimeZone	This element contains the three letter time zone code.	
\$SRN	This element contains the System Release Number.	

Dynamic elements

The dynamic elements that the probe generates are entirely dependent on the devices monitored.

The following table describes the dynamic elements that the probe generates, depending on the event type. Not all the elements described are necessarily generated for each event.

Table 8. Dynamic elements		
Element name	Element description	
\$AlarmLevel	This element indicates the severity of alarm. This element is not generated for information messages or reports.	
\$MSN	This element contains the Message Sequence Number. This element is not generated for reports.	
\$MRN	This element contains the Message Reference Number. This element is not generated for reports.	
\$Message	This element contains the affected device and the event message. This element is not generated for reports.	
\$Report	This element is set to TRUE if the event is a report.	
\$TextLine <i>nn</i>	This element contains one line of the event-specific message(s), where <i>nn</i> is the line number.	

Error messages

Error messages provide information about problems that occur while running the probe. You can use the information that they contain to resolve such problems.

The following table describes the error messages specific to this probe. For information about generic Netcool/OMNIbus error messages, see the IBM Tivoli Netcool/OMNIbus Probe and Gateway Guide.

Table 9. Error messages			
Error Description		Action	
CreateAndSet failed for token_number	The probe failed to process an alert.	Check the connection to the Tekelec Eagle STP device.	

Table 9. Error messages (continued)			
Error	Description	Action	
ConvertEscapes: Error allocating memory for octal code	There was an error while allocating memory for the buffer that contains the event being read. This caused the probe to terminate.	Make more memory available.	
ConvertEscapes: Error allocating memory for temp buffer			
Expect: Error allocating memory for buffer			
LogInOut: Error allocating memory for token			
Unable to allocate memory for processing buffer			
Expect timed out	The probe was unable to connect to the remote host.	Check that the remote host is available.	
Failed to open connection to host port	The probe was unable to create a connection to the host on the specified port.	Check the physical connection to the host system.	
SendAlert failed	The probe was unable to send an alert to the ObjectServer.	Check that the connection to the the ObjectServer is available.	
SessionProcess failed	The probe was unable to process the alert against the rules file.	Contact IBM Software Support.	

ProbeWatch messages

During normal operations, the probe generates ProbeWatch messages and sends them to the ObjectServer. These messages tell the ObjectServer how the probe is running.

The following table describes the ProbeWatch messages that the probe generates. For information about generic Netcool/OMNIbus ProbeWatch messages, see the *IBM Tivoli Netcool/OMNIbus Probe and Gateway Guide*.

Table 10. ProbeWatch messages			
ProbeWatch message Description		Triggers/causes	
Connection attempted (host,port)	The probe is trying to establish a connection to the host.	The probe is trying to establish a connection to the host.	

Table 10. ProbeWatch messages (continued)			
ProbeWatch message	Description	Triggers/causes	
Connection failed (host,port)	The probe failed to establish a connection to the host.	General connection failure due either to an incorrect setting of the Host or Port properties, or to the host refusing a connection request from the probe.	
Connection lost (host,port)	The probe lost the connection to the host.	The device has dropped the connection to the probe.	
Connection succeeded (host,port)	The probe successfully established a connection to the host.	The probe successfully established a connection to the host.	
Discarding on read failure buffer	The probe discarded a partially read event from its buffer following a read failure.	The probe is unable to finish reading an event due to a problem with the connection to the device. The device might have dropped the connection to the probe.	
Discarding on timeout buffer	The probe discarded a partially read event from its buffer following a read timeout.	While reading a line of the event, the probe could not find the end-of-line terminator within the time period specified by the ReadTimeout property. This is due to a slow or busy network, or to the value specified by the ReadTimeout property being set too low.	
Disconnected from system due to shutdown signal	The probe disconnected from the host.	A shutdown signal was sent to the probe.	
Disconnecting from system due to Inactivity alarm (host,port)	The probe disconnected from the device.	The device was silent for the period specified by the Inactivity property. If you want the probe to time out less frequently, increase the value of the Inactivity property.	
Disconnection attempted (host,port)	The probe is attempting to disconnect from the host.	The probe is shutting down or has lost the connection.	
Disconnection failed (host,port)	The probe failed to disconnect cleanly from the host.	The memory location where the connection details are stored has been corrupted.	
Disconnection succeeded (host,port)	The probe disconnected from the host.	The probe shut down or lost the connection.	

Table 10. ProbeWatch messages (continued)			
ProbeWatch message	Description	Triggers/causes	
Failed to get events	A problem occurred while receiving events.	Either there was a problem initializing the connection due to insufficient memory or, if this message was sent after some events had been parsed, there was a license failure or a connection failure.	
Failed to get license (host,port)	The probe is unable to obtain a license for the connection to the host.	Either the license server is down or there are insufficient licenses in the server.	
Going Down	The probe is shutting down.	The probe is shutting down after performing the shutdown routine.	
Have lost all connections -going down	The probe is shutting down because all of its connections have been deactivated.	The probe has reached the reconnection attempt limit specified by the ReconnectionAttempts property.	
License failure -going down	The license server could not be reached.	Either the license has expired, the license server has gone down, or the connection to the license server has been lost.	
Login attempted (host,port)	The probe is trying to log in to the host.	The probe is trying to log in to the host.	
Login failed (host,port)	The probe failed to log in to the host.	The probe encountered a problem while logging in. Check that the ChatinString property is specified correctly.	
Login succeeded (host,port)	The probe logged in to the host.	The probe logged in to the host.	
Logout attempted (host,port)	The probe is trying to log out from the host.	The probe has received a command to shut down.	
Logout failed (host,port)	The probe failed to log out from the host.	The probe encountered a problem while logging out. Check that the ChatoutString property is specified correctly.	
Logout succeeded (host,port)	The probe logged out from the host.	The probe logged out from the host.	
Running	The probe is running normally.	The probe has just been started.	

Running the probe

Before running the probe for the first time, you must specify a minimum set of properties.

If you want to use the probe with a single Tekelec Eagle STP device, you must specify the host name and port of the device using the **Host** and **Port** properties.

If you want to use the probe with multiple Tekelec Eagle STP devices, you must specify the location of a hosts file using the **HostsFile** property.

To start the probe, use the following command:

\$OMNIHOME/probes/nco_p_eaglestp

Known issues

At the time of release, two known issues were reported that you should be aware of when running the probe.

VT100 escape codes

VT100 escape codes are sometimes inserted into the message stream by the terminal server. These must be stripped from the elements in the rules file.

Invalid host name causes glibc error

This issue only applies when the probe is installed on Linux operating systems.

If an invalid host name is used, the gethostbyname_r lookup method fails and causes a segmentation fault in the GNU C library (glibc). This problem only occurs with version 2.1 of glibc. It does not occur with versions 2.0 or 2.2 of glibc.

Appendix A. Notices and Trademarks

This appendix contains the following sections:

- Notices
- Trademarks

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