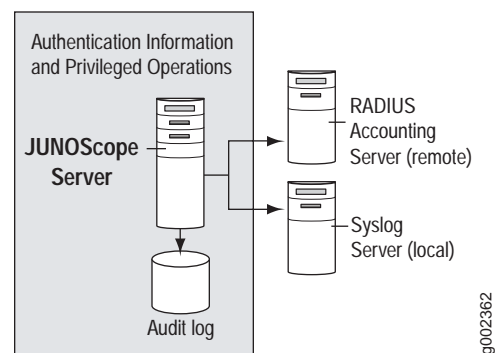


## Chapter 34

# JUNOScope System Log Messages

JUNOScope events are stored in the JUNOScope database and are subsequently sent to the system log server and an optional RADIUS accounting server if one is configured (see Figure 13).

**Figure 13: JUNOScope Security-Enhanced Sensitive Data Logging**



The JUNOScope software generates events or system log messages based on the status of the following operations, and forwards them to the local system log server.

- User login success
- User login failure attempt
- User account automatically locked
- User account locked and unlocked by the JUNOScope administrator using Users > Authentication Policy
- A new user account added, existing user account deleted, or existing user account password changed using Users > Local Authentication
- A new device is deleted or existing device is edited or deleted using Settings > Devices
- A label association is changed using Settings > Labels
- A configuration is committed to a device using Configuration > Current > Edit

- Completed Archive operations—When an archive of a device is performed the first time or some change in configuration is done after the last successful archive of that device.
- Completed Inventory Scan operations—When an inventory scan is performed the first time or after a change in the inventory after the last successful scan.
- Completed Restore operations—When a configuration is successfully restored on a device.
- The success or failure of a JUNOScope operation—This information is reflected in the system log message severity level.
- The final status of each leaf operation shown on the Monitor Status Page. For example, for an operation named **archive edge routers**, which consists of a group of edge routers **edge1**, **edge2**, and **edge3**, the success (or failure) status of **archive edge1**, **archive edge2**, and **archive edge3** will be forwarded to the system log.
- All information recorded in the JUNOScope View Status page (Monitor > Status).

Each system log message identifies the JUNOScope software process that generated the message and briefly describes the operation or error that occurred.

This chapter includes the following topics:

- Configuring JUNOScope System Log Output on page 430
- Interpreting JUNOScope System Log Messages on page 431
- Sample System Log Output on page 431
- JUNOScope System Log Messages on page 432

## Configuring JUNOScope System Log Output

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The JUNOScope system log output is enabled during installation by default.

During the JUNOScope installation process, the installer is prompted for the following:

Please enter the syslog facility (local0-local7) [local2]:

The syslog facility indicates a pipe where the syslog daemon (**syslogd**) sends the JUNOScope software system log messages that it receives. The administrator can enter the values **local0**, **local1**, **local2**, **local3**, **local4**, **local5**, **local6**, or **local7** that correspond to a logging facility. The default is **local2**, which is logging facility 2.

The JUNOScope administrator can change the syslog facility at any time by reconfiguring JUNOScope using the **jtk-setup.sh** script.

## Interpreting JUNOScope System Log Messages

The syntax of a JUNOScope system log message is as follows:

```
timestamp message-source:code:message-text
```

Table 44 defines each JUNOScope system log message field.

**Table 44: JUNOScope System Log Message Field Syntax**

Field	Description
<i>timestamp</i>	Time when the message was logged.
<i>message-source</i>	The identifier of the process or component that generated the message. The format of the <i>message-source</i> field is:  <i>hostname process[process-ID]</i>  Where <i>process</i> is identified by source code module (for example, <i>junoscope</i> ) concatenated by the HTTP port where JUNOScope is running.
<i>code</i>	Code that uniquely identifies the message. The name begins with a prefix that indicates the generating software process or library.
<i>message-text</i>	Text of the message.

## Sample System Log Output

The following is a sample JUNOScope software system log message output:

```
Jun 20 13:00:05 valhalla2 junoscope7080[9348]: JUNOSCOPE_LOGIN_FAILURE:
Login failed using username: 'admin'
```

Table 45 defines the sample JUNOScope software system log message fields.

**Table 45: Sample JUNOScope Software Log Message Fields**

Field	Description
Jun 20 13:00:05	Timestamp (time when the message was logged)
valhalla2	Hostname
junoscope7080[9348]:	Source code module concatenated with the HTTP port where JUNOScope is running and the process ID
JUNOSCOPE_LOGIN_FAILURE	Error message tag
Login failed using username: 'admin'	Log message

## JUNOScope System Log Messages

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This section describes the JUNOScope software system log messages.

- Login to JUNOScope Messages on page 432
- Authentication Policy Change Messages on page 434
- Users Setup Messages on page 435
- RADIUS Configuration Messages on page 436
- Authentication Information Setup Messages on page 437
- Access Methods Setup Messages on page 437
- Labels Setup Messages on page 438
- Configuration Edit Messages on page 438
- Archive Configuration Messages on page 438
- Authentication Information Setup Events on page 440
- Inventory Scan Messages on page 440
- Inventory Reports Messages on page 442
- Restore Configuration Messages on page 443
- Devices Setup Messages on page 444
- Software Manager Messages on page 445

### Login to JUNOScope Messages

#### JUNOSCOPE\_LOGIN\_FAILURE

<b>System Log Message</b>	JUNOSCOPE_LOGIN_FAILURE: Failed to login: username: ' < user name > ' client address: ' < client address > '
<b>Description</b>	The user failed to login because of an invalid username or password.
<b>RADIUS Attributes</b>	(For RADIUS, this is implemented as two messages: a session start followed immediately by a session end.) <ul style="list-style-type: none"> <li>■ Message 1: Acct-Status-Type: Start</li> <li>■ Message 2: Account-Status-Type: Stop Account-Terminate-Cause: User Error Juniper-JUNOScope-Login-Failure-Reason: &lt; Authentication Failure   User Account Locked &gt;</li> </ul>

**Type** Event

**Severity** info

### **JUNOSCOPE\_LOGIN\_SUCCESS**

**System Log Message** JUNOSCOPE\_LOGIN\_SUCCESSFUL:  
User logged in: username: ' < user name > ' client address: ' < client address > '

**Description** A user successfully logged in.

**RADIUS Attributes** Acct-Status-Type: Start

**Type** Event

**Severity** info

### **JUNOSCOPE\_LOGOUT**

**System Log Message** JUNOSCOPE\_LOGOUT:  
User logged out: username: ' < user name > ' client address: ' < client address > '

**Description** A user logged out.

**RADIUS Attributes** Acct-Status-Type: Stop

### **JUNOSCOPE\_SESSION\_TIMEOUT**

**System Log Message** JUNOSCOPE\_SESSION\_TIMEOUT:  
User session timed out: username: ' < user name > ' client address: ' < client address > '

**Description** A user successfully logged in.

**RADIUS Attributes**

- Acct-Status-Type: Start
- Acct-Terminate-Cause: Session Timeout

**Type** Event

**Severity** info

**JUNOSCOPE\_USER\_AUTO\_LOCKED**

<b>System Log Message</b>	JUNOSCOPE_USER_AUTO_LOCKED: User locked: username: ' < user name > ' client address: ' < client address > '
<b>Description</b>	A user is automatically locked from logging in to the JUNOScope software because the number of consecutive login failure attempts within the configured Access Window equals the Maximum Login Attempts value.
<b>RADIUS Attributes</b>	(For RADIUS, this event is implemented as two messages: a session start followed immediately by a session end.) <ul style="list-style-type: none"> <li>■ Message 1: Acct-Status-Type: Start</li> <li>■ Message 2: Acct-Status-Type: Stop User-Name: &lt; user name &gt; Juniper-JUNOScope-Login-Failure-Reason: &lt; user locked   login failure &gt;</li> </ul>
<b>Type</b>	Event
<b>Severity</b>	info

**Authentication Policy Change Messages****JUNOSCOPE\_USER\_LOCKED\_BY\_ADMIN**

<b>System Log Message</b>	JUNOSCOPE_USER_LOCKED_BY_ADMIN: User locked: username: ' < user name > ' client address: ' < client address > ' by user: ' < admin user name > '
<b>Description</b>	A user is locked from logging in to the JUNOScope software by the administrator using the Authentication Policy wizard.
<b>RADIUS Attributes</b>	<ul style="list-style-type: none"> <li>■ Account-Status-Type: Interim-Update</li> <li>■ Juniper-JUNOScope-Target: &lt; user name &gt;</li> </ul>
<b>Type</b>	Event
<b>Severity</b>	info

**JUNOSCOPE\_USER\_UNLOCKED\_BY\_ADMIN**

**System Log Message** JUNOSCOPE\_USER\_UNLOCKED\_BY\_ADMIN:  
User unlocked: username: ' < user name > ' client address: ' < client address > ' by user: ' < admin user name > '

**Description** A user is unlocked from logging in to the JUNOScope software by the administrator using the Authentication Policy wizard.

**RADIUS Attributes** Acct-Status-Type: Interim-Update User-Name: < user name >

**Type** Event

**Severity** Info

**Users Setup Messages****JUNOSCOPE\_USER\_CREATED**

**System Log Message** JUNOSCOPE\_USER\_CREATED:  
User created: user: ' < new user name > ' by username: ' < user name > ' client address: ' < client address > '

**Description** A new user was created.

**RADIUS Attributes** ■ Acct-Status-Type: Interim-Update  
Juniper-JUNOScope-Privileged-Command: USER\_CREATED  
Juniper-JUNOScope-Target: < user name >

**Type** Event

**Severity** info

**JUNOSCOPE\_USER\_DELETED**

**System Log Message** JUNOSCOPE\_USER\_DELETED:  
User deleted: user: ' < deleted user name > ' by username: ' < user name > ' client address: ' < client address > '

**Description** A user was deleted.

**RADIUS Attributes** ■ Acct-Status-Type: Interim-Update  
Juniper-JUNOScope-Privileged-Command: USER\_DELETED  
Juniper-JUNOScope-Target: < user name >

**Type** Event

**Severity** info

**JUNOSCOPE\_USER\_PASSWORD\_CHANGED**

**System Log Message** JUNOSCOPE\_USER\_PASSWORD\_CHANGED:  
Password changed: user: ' < user name > ' by username: ' < user name > ' client address: ' < client address > '

**Description** A user's password was changed.

**RADIUS Attributes**

- Acct-Status-Type: Interim-Update
- Juniper-JUNOScope-Privileged-Command: USER\_PASSWORD\_CHANGED
- Juniper-JUNOScope-Target: < user name >

**Type** Event

**Severity** Info

**RADIUS Configuration Messages****JUNOSCOPE\_RADIUS\_CONFIG\_ADDED**

**System Log Message** JUNOSCOPE\_RADIUS\_CONFIG\_ADDED:  
RADIUS configuration added: RADIUS server address: < RADIUS server address > client address: ' < client address > '

**Description** A new RADIUS configuration entry was added.

**RADIUS Attributes**

- Acct-Status-Type: Interim-Update
- JUNIPER-JUNOScope-Target: < RADIUS server address >

**JUNOSCOPE\_RADIUS\_CONFIG\_CHANGED**

**System Log Message** JUNOSCOPE\_RADIUS\_CONFIG\_CHANGED:  
RADIUS configuration changed: RADIUS server address: < RADIUS server address > client address: ' < client address > '

**Description** An existing RADIUS configuration entry was edited.

**RADIUS Attributes:**

- Acct-Status-Type: Interim-Update
- JUNIPER-JUNOScope-Target: < RADIUS server address >

**JUNOSCOPE\_RADIUS\_CONFIG\_DELETED**

**System Log Message:** JUNOSCOPE\_RADIUS\_CONFIG\_DELETED:  
RADIUS configuration deleted: RADIUS server address: <RADIUS server address >  
client address: ' < client address > '

**Description** An existing RADIUS configuration entry was deleted.

- RADIUS Attributes:**
- Acct-Status-Type: Interim-Update
  - JUNIPER-JUNOScope-Target: <RADIUS server address >

**Authentication Information Setup Messages****JUNOSCOPE\_AUTH\_INFO\_CHANGED**

**System Log Message** JUNOSCOPE\_AUTH\_INFO\_CHANGED: Authentication information changed: name: ' < auth info name > ' by username: ' < user name > ' client address: ' < client address > '

**Description** Device authentication information was changed.

- RADIUS Attributes**
- Acct-Status-Type: Interim-Update
  - Juniper-JUNOScope-Privileged-Command: AUTH\_INFO\_CHANGED
  - Juniper-JUNOScope-Target: < auth info name >

**Type** Event

**Severity** Info

**Access Methods Setup Messages****JUNOSCOPE\_ACCESS\_METHOD\_CHANGED**

**System Log Message** JUNOSCOPE\_ACCESS\_METHOD\_CHANGED:  
Access method changed: access method: ' < access method name > ' by username: ' < user name > ' client address: ' < client address > '

**Description** An access method was changed.

- RADIUS Attributes**
- Acct-Status-Type: Interim-Update
  - Juniper-JUNOScope-Privileged-Command: ACCESS\_METHOD\_CHANGED
  - Juniper-JUNOScope-Target: < access method name >

**Type** Event

**Severity** Info

## Labels Setup Messages

### JUNOSCOPE\_LABEL\_ASSOC\_CHANGED

**System Log Message** JUNOSCOPE\_LABEL\_ASSOC\_CHANGED:  
Label associations changed: label: ' <label name > ' by username: ' <user name > '  
client address: ' <client address > '

**Description** The devices associated with a label were changed.

- RADIUS Attributes**
- Acct-Status-Type: Interim-Update
  - Juniper-JUNOScope-Privileged-Command: LABEL\_ASSOC\_CHANGED
  - Juniper-JUNOScope-Target: <label name >

**Type** Event

**Severity** info

## Configuration Edit Messages

### JUNOSCOPE\_COMMIT\_PERFORMED

**System Log Message** JUNOSCOPE\_COMMIT\_PERFORMED:  
Commit performed: device: ' <device name > ' by username: ' <user name > '  
client address: ' <client address > '

**Description** A user committed a configuration on a device.

- RADIUS Attributes**
- Acct-Status-Type: Interim-Update
  - Juniper-JUNOScope-Privileged-Command: COMMIT\_PERFORMED
  - Juniper-JUNOScope-Target: <device name >

**Type** Event

**Severity** info

## Archive Configuration Messages

### JUNOSCOPE\_ARCHIVE\_CONNECTION\_ERROR

**System Log Message** JUNOSCOPE\_ARCHIVE\_CONNECTION\_ERROR:  
Could not connect to device: ' <device name > ' operation name: ' <operation name > '  
operation type: ' <operation type > ' username: ' <username > ' start time: ' <start  
time > ' last updated time: ' <last updated time > '

**Description** An archive operation failed because the connection could not be established with the device.

**Type** Error

**Severity** Error

**Action** Contact System Administrator

### **JUNOSCOPE\_ARCHIVE\_NO\_ACCESS\_INFO\_ERROR**

**System Log Message** JUNOSCOPE\_ARCHIVE\_NO\_ACCESS\_INFO\_ERROR:  
Could not find access information for device: ' < device name > ' operation name:  
' < operation name > ' operation type: ' < operation type > ' username:  
' < username > ' start time: ' < start time > ' last updated time: ' < last updated  
time > '

**Description** An archive operation failed because no access information for the device was found.

**Type** Error

**Severity** Error

**Action** Contact System Administrator

### **JUNOSCOPE\_ARCHIVE\_NO\_CHANGE**

**System Log Message** JUNOSCOPE\_ARCHIVE\_NO\_CHANGE:  
No change in configuration for device: ' < device name > ' operation name:  
' < operation name > ' operation type: ' < operation type > ' username:  
' < username > ' start time: ' < start time > ' last updated time: ' < last updated  
time > '

**Description** No change in the configuration was found after the last archive.

**Type** Event

**Severity** Info

### **JUNOSCOPE\_ARCHIVE\_SUCCESS**

**System Log Message** JUNOSCOPE\_ARCHIVE\_SUCCESS:  
Successfully archived device: ' < device name > ' revision: ' < revision > ' operation  
name: ' < operation name > ' operation type: ' < operation type > ' username:  
' < username > ' start time: ' < start time > ' last updated time: ' < last updated  
time > '

**Description** A user successfully archived a device configuration.

- RADIUS Attributes**
- Acct-Status-Type: Interim-Update
  - Juniper-JUNOScope-Privileged-Command: ARCHIVE\_SUCCESS
  - Juniper-JUNOScope-Target: < device name >

**Type** Event

**Severity** Info

**JUNOSCOPE\_ARCHIVE\_SYSTEM\_ERROR**

<b>System Log Message</b>	JUNOSCOPE_ARCHIVE_SYSTEM_ERROR: A System error occurred during archive operation for device: ' <code>&lt; device name &gt;</code> ' operation name: ' <code>&lt; operation name &gt;</code> ' operation type: ' <code>&lt; operation type &gt;</code> ' username: ' <code>&lt; username &gt;</code> ' start time: ' <code>&lt; start time &gt;</code> ' last updated time: ' <code>&lt; last updated time &gt;</code> '
<b>Description</b>	An archive operation failed because a system error occurred.
<b>Type</b>	Error
<b>Severity</b>	Error
<b>Action</b>	Contact System Administrator

**Authentication Information Setup Events****JUNOSCOPE\_AUTH\_INFO\_CHANGED**

<b>System Log Message</b>	JUNOSCOPE_AUTH_INFO_CHANGED: Authentication information changed: name: ' <code>&lt; auth info name &gt;</code> ' by username: ' <code>&lt; user name &gt;</code> ' client address: ' <code>&lt; client address &gt;</code> '
<b>Description</b>	Device authentication information was changed.
<b>RADIUS Attributes</b>	<ul style="list-style-type: none"> <li>■ Acct-Status-Type: Interim-Update</li> <li>■ Juniper-JUNOScope-Privileged-Command: AUTH_INFO_CHANGED</li> <li>■ Juniper-JUNOScope-Target: <code>&lt; auth info name &gt;</code></li> </ul>
<b>Type</b>	Event
<b>Severity</b>	Info

**Inventory Scan Messages****JUNOSCOPE\_SCAN\_CONNECTION\_ERROR**

<b>System Log Message</b>	JUNOSCOPE_SCAN_CONNECTION_ERROR: Could not open connection to device: ' <code>&lt; device name &gt;</code> ' operation name: ' <code>&lt; operation name &gt;</code> ' operation type: ' <code>&lt; operation type &gt;</code> ' username: ' <code>&lt; username &gt;</code> ' start time: ' <code>&lt; start time &gt;</code> ' last updated time: ' <code>&lt; last updated time &gt;</code> '
<b>Description</b>	An Inventory Management System scan operation failed because a connection could not be established with the device.
<b>Type</b>	Error
<b>Severity</b>	Error
<b>Action</b>	Contact System Administrator

**JUNOSCOPE\_SCAN\_NO\_ACCESS\_INFO\_ERROR**

**System Log Message** JUNOSCOPE\_SCAN\_NO\_ACCESS\_INFO\_ERROR:  
 Could not find access information for device: ' < device name > ' operation name:  
 ' < operation name > ' operation type: ' < operation type > ' username:  
 ' < username > ' start time: ' < start time > ' last updated time: ' < last updated  
 time > '

**Description** An Inventory Management System scan failed because no access information for the device was found.

**Type** Error

**Severity** Error

**Action** Contact System Administrator

**JUNOSCOPE\_SCAN\_NO\_CHANGE**

**System Log Message** JUNOSCOPE\_SCAN\_NO\_CHANGE:  
 No change in inventory database for device: ' < device name > ' operation name:  
 ' < operation name > ' operation type: ' < operation type > ' username:  
 ' < username > ' start time: ' < start time > ' last updated time: ' < last updated  
 time > '

**Description** No change in inventory was found after the last scan.

**Type** Event

**Severity** Info

**JUNOSCOPE\_SCAN\_SUCCESS**

**System Log Message** JUNOSCOPE\_SCAN\_SUCCESS:  
 Successfully scanned items into inventory database for device: ' < device name > '  
 operation name: ' < operation name > ' operation type: ' < operation type > '  
 username: ' < username > ' start time: ' < start time > ' last updated time: ' < last  
 updated time > '

**Description** A device was successfully scanned.

**Type** Event

**Severity** Info

### **JUNOSCOPE\_SCAN\_SYSTEM\_ERROR**

- System Log Message** JUNOSCOPE\_SCAN\_SYSTEM\_ERROR:  
 A System error occurred during inventory scan operation for device: ' < device name > ' operation name: ' < operation name > ' operation type: ' < operation type > ' username: ' < username > ' start time: ' < start time > ' last updated time: ' < last updated time > '
- Description** An Inventory Management System scan operation failed because a system error occurred.
- Type** Error
- Severity** Error
- Action** Contact System Administrator

### ***Inventory Reports Messages***

#### **JUNOSCOPE\_REPORT\_SUCESS**

- System Log Message** JUNOSCOPE\_REPORT\_SUCCESS:  
 Successfully generated report: ' < report name > ' username: ' < username > '
- Description** A custom report is successfully archived
- Type** Event
- Severity** info

#### **JUNOSCOPE\_REPORT\_ERROR**

- System Log Message** JUNOSCOPE\_REPORT\_ERROR:  
 Error while generating report: ' < report name > ' username: ' < username > '
- Description** Failed to archive a custom report
- Type** Error
- Severity** Error

## Restore Configuration Messages

### JUNOSCOPE\_RESTORE\_CONNECTION\_ERROR

**System Log Message** JUNOSCOPE\_RESTORE\_CONNECTION\_ERROR:  
 Could not open connection to device: ' < device name > ' operation name:  
 ' < operation name > ' operation type: ' < operation type > ' username:  
 ' < username > ' start time: ' < start time > ' last updated time: ' < last updated  
 time > '

**Description** A restore configuration operation failed because a connection could not be established with the device.

**Type** Error

**Severity** Error

**Action** Contact System Administrator

### JUNOSCOPE\_RESTORE\_NO\_ACCESS\_INFO\_ERROR

**System Log Message** JUNOSCOPE\_RESTORE\_NO\_ACCESS\_INFO\_ERROR:  
 Could not find access information for device: ' < device name > ' operation name:  
 ' < operation name > ' operation type: ' < operation type > ' username:  
 ' < username > ' start time: ' < start time > ' last updated time: ' < last updated  
 time > '

**Description** A restore operation failed because no access information for the device was found.

**Type** Error

**Severity** Error

**Action** Contact System Administrator

### JUNOSCOPE\_RESTORE\_SUCCESS

**System Log Message** JUNOSCOPE\_RESTORE\_SUCCESS:  
 Successfully restored configuration for device: ' < device name > ' operation name:  
 ' < operation name > ' operation type: ' < operation type > ' username:  
 ' < username > ' start time: ' < start time > ' last updated time: ' < last updated  
 time > '

**Description** A user successfully restored a configuration to a device.

- RADIUS Attributes**
- Acct-Status-Type: Interim-Update
  - Juniper-JUNOScope-Privileged-Command: RESTORE\_SUCCESS
  - Juniper-JUNOScope-Target: < device name >

**Type** Event

**Severity** info

### JUNOSCOPE\_RESTORE\_SYSTEM\_ERROR

- System Log Message** JUNOSCOPE\_RESTORE\_SYSTEM\_ERROR:  
 A System error occurred during restore operation for device: '< device name >' operation name: '< operation name >' operation type: '< operation type >' username: '< username >' start time: '< start time >' last updated time: '< last updated time >'
- Description** A restore operation failed because a system error occurred.
- Type** Error
- Severity** Error
- Action** Contact System Administrator

### Devices Setup Messages

#### JUNOSCOPE\_DEVICE\_ADDED

- Description** A new device was added.
- System Log Message** JUNOSCOPE\_DEVICE\_ADDED:  
 Device added: device: '< device name >' by username: '< user name >' client address: '< client address >'
- RADIUS Attributes**
- Acct-Status-Type: Interim-Update
  - Juniper-JUNOScope-Privileged-Command: DEVICE\_ADDED
  - Juniper-JUNOScope-Target: < device name >
- Type** Event
- Severity** info

#### JUNOSCOPE\_DEVICE\_CHANGED

- System Log Message** JUNOSCOPE\_DEVICE\_CHANGED:  
 Device changed: device: '< device name >' by username: '< user name >' client address: '< client address >'
- Description** The device setup information has changed.
- RADIUS Attributes**
- Acct-Status-Type: Interim-Update
  - Juniper-JUNOScope-Privileged-Command: DEVICE\_CHANGED
  - Juniper-JUNOScope-Target: < device name >
- Type** Event
- Severity** Info

**JUNOSCOPE\_DEVICE\_DELETED**

**System Log Message** JUNOSCOPE\_DEVICE\_DELETED:  
Device deleted: device: ' < device name > ' by username: ' < user name > ' client address: ' < client address > '

**Description** A device was deleted.

- RADIUS Attributes**
- Acct-Status-Type: Interim-Update
  - Juniper-JUNOScope-Privileged-Command: DEVICE\_DELETED
  - Juniper-JUNOScope-Target: < device name >

**Type** Event

**Severity** info

**Software Manager Messages****JUNOSCOPE\_SOFTWARE\_IMAGE\_INSTALL**

**System Log Message** JUNOSCOPE\_SOFTWARE\_IMAGE\_INSTALL  
Successfully installed image ' < target-version > ' on ' < router > '

**Description** A software image was successfully installed on a device.

- RADIUS Attributes**
- Acct-StatusType: 3
  - Juniper-JUNOScope-Privileged-Command: SOFTWARE\_IMAGE\_INSTALL\_SUCCESS
  - Juniper-JUNOScope-Target: ' < deviceType > '

**Type** Event

**Severity** info

**JUNOSCOPE\_SOFTWARE\_IMAGE\_INSTALL\_ERROR**

**System Log Message** JUNOSCOPE\_SOFTWARE\_IMAGE\_INSTALL\_ERROR  
Installation failed: software ' < package-info > ' is running instead of expected ' < target-version > ' on ' < hostname > '

**Description** A software image installation failed.

**Type** Event

**Severity** Error

### **JUNOSCOPE\_SOFTWARE\_IMAGE\_DOWNLOAD**

**System Log Message** JUNOSCOPE\_SOFTWARE\_IMAGE\_DOWNLOAD  
Successfully downloaded image ‘ < image-name > ’ to target ‘ < router > ’

**Description** A software image has been downloaded on a device.

- RADIUS Attributes**
- Acct-StatusType: 3
  - Juniper-JUNOScope-Privileged-Command: SOFTWARE\_IMAGE\_DOWNLOAD\_SUCCESS
  - Juniper-JUNOScope-Target: < device >

**Type** Event

**Severity** Info

### **JUNOSCOPE\_SOFTWARE\_IMAGE\_DOWNLOAD\_ERROR**

**System Log Message** JUNOSCOPE\_SOFTWARE\_IMAGE\_DOWNLOAD\_ERROR  
Download failed for image ‘ < image-name > ’

**Description** A software image download failed.

**Type** Event

**Severity** Error

### **JUNOSCOPE\_SOFTWARE\_IMAGE\_IMPORT**

**System Log Message** JUNOSCOPE\_SOFTWARE\_IMAGE\_IMPORT  
Successfully imported image % image by user %username

**Description** A software image was successfully imported.

- RADIUS Attributes**
- Acct-StatusType: 3
  - Juniper-JUNOScope-Privileged-Command: SOFTWARE\_IMAGE\_IMPORT\_SUCCESS

**Type** Event

**Severity** Info

**JUNOSCOPE\_SOFTWARE\_IMAGE\_IMPORT\_ERROR**

**System Log Message** JUNOSCOPE\_SOFTWARE\_IMAGE\_IMPORT\_ERROR  
Import failed

**Description** A software image import failed.

- RADIUS Attributes**
- Acct-StatusType:
  - Juniper-JUNOScope-Privileged-Command:
  - Juniper-JUNOScope-Target:

**Type** Event

**Severity** Error

**JUNOSCOPE\_SOFTWARE\_IMAGE\_DELETE**

**System Log Message** JUNOSCOPE\_SOFTWARE\_IMAGE\_DELETE  
User %username deleted image %image

**Description** A user deleted a software image.

- RADIUS Attributes**
- Acct-StatusType: 3
  - Juniper-JUNOScope-Privileged-Command:  
SOFTWARE\_IMAGE\_DELETE\_SUCCESS

**Type** Event

**Severity** Info

