



HP OpenView Integration Pack User Guide

Release 5.1.x

Juniper Networks, Inc.
1194 North Mathilda Avenue
Sunnyvale, CA 94089
USA
408-745-2000
www.juniper.net

Part No. 162-00857-00 Rev. A00

Juniper
NETWORKS

Juniper Networks is registered in the U.S. Patent and Trademark Office and in other countries as a trademark of Juniper Networks, Inc. Broadband Cable Processor, ERX, ESP, G1, G10, G-series, Internet Processor, JUNOS, JUNOScript, M5, M10, M20, M40, M40e, M160, M-series, NMC-RX, SDX, ServiceGuard, T320, T640, T-series, UMC, and Unison are trademarks of Juniper Networks, Inc. All other trademarks, service marks, registered trademarks, or registered service marks are the property of their respective owners. All specifications are subject to change without notice.

Products made or sold by Juniper Networks (including the M5, M10, M20, M40, M40e, M160, and T320 routers, T640 routing node, and the JUNOS software) or components thereof might be covered by one or more of the following patents that are owned by or licensed to Juniper Networks: U.S. Patent Nos. 5,473,599, 5,905,725, 5,909,440, 6,333,650, 6,359,479, and 6,406,312.

HP OpenView Integration Pack User Guide, Release 5.1.x
Copyright © 2003, Juniper Networks, Inc.
All rights reserved. Printed in USA.

Writers: John Borelli
Editor: Fran Mues

Revision History
December 2003

The information in this document is current as of the date listed in the revision history above.

Juniper Networks assumes no responsibility for any inaccuracies in this document. Juniper Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.

SOFTWARE LICENSE AGREEMENT*

JUNIPER NETWORKS, INC. IS WILLING TO LICENSE THE ENCLOSED SOFTWARE AND ACCOMPANYING USER DOCUMENTATION (COLLECTIVELY, THE "PROGRAM") TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT. PLEASE READ THESE TERMS AND CONDITIONS CAREFULLY BEFORE COPYING OR USING THE ACCOMPANYING SOFTWARE OR INSTALLING THE HARDWARE UNIT WITH PRE-ENABLED SOFTWARE OR USING THE ACCOMPANYING USER DOCUMENTATION.

BY USING THE ACCOMPANYING SOFTWARE OR INSTALLING THE HARDWARE UNIT WITH PRE-ENABLED SOFTWARE, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT. IF YOU DO NOT AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE AGREEMENT, JUNIPER NETWORKS IS UNWILLING TO LICENSE THE PROGRAM TO YOU, IN WHICH EVENT YOU SHOULD PROMPTLY WITHIN TEN (10) DAYS FROM SHIPMENT RETURN THE UNUSED SOFTWARE, USER DOCUMENTATION, AND RELATED EQUIPMENT AND HARDWARE TO THE PLACE OF PURCHASE AND YOU WILL RECEIVE A FULL REFUND OF YOUR LICENSE FEE. THIS LICENSE AGREEMENT REPRESENTS THE ENTIRE AGREEMENT CONCERNING THE PROGRAM BETWEEN YOU AND JUNIPER NETWORKS, AND IT SUPERSEDES ANY PRIOR PROPOSAL, REPRESENTATION OR UNDERSTANDING BETWEEN THE PARTIES.

1. License Grant. Juniper Networks, Inc. ("Juniper Networks") and its suppliers and licensors hereby grant to you and you hereby accept a nonexclusive, personal and nontransferable license to use the computer software and/or hardware unit with pre-enabled software, including all patches, error corrections, updates, and revisions thereto in machine-readable, object code form only (the "Software"), and the accompanying User Documentation on the Juniper Networks product owned by you and only as authorized in this License Agreement. You may make one (1) archival copy of the Software for backup purposes provided you affix to such copy all copyright, confidentiality, and proprietary notices that appear on the original. Except as authorized under this paragraph, no copies of the Program or any portions thereof may be made, in whole or in part, by you or any person under your authority or control.

The Software and User Documentation are protected under copyright laws. The title to Software and User Documentation shall remain solely with Juniper Networks and its suppliers.

Except as authorized above, you shall not: copy, in whole or in part, the Software or the related User Documentation; modify, reverse assemble, reverse compile, or otherwise translate, disassemble, or obtain source code for the Software or User Documentation, in whole or in part, or permit a third party to do so; rent, lease, distribute, sell, or create derivative works of the Software; pledge, lease, rent, sublicense or share its rights under this License Agreement; or, without Juniper Networks' prior written consent, assign or transfer its rights hereunder.

2. Juniper Networks' Rights. You agree that the Software, including the User Documentation, embodies Juniper Networks and its suppliers' and licensors' confidential and proprietary intellectual property protected under U.S. copyright law and you will use your best efforts to maintain their confidentiality. You further acknowledge and agree that Juniper Networks or its suppliers and licensors own all right, title, and interest in and to the Software, including all intellectual property rights therein. You shall take no action inconsistent with Juniper Networks or its suppliers' ownership of such Software. You shall not sublicense, assign, or otherwise disclose to any third party the Software or any information about the operation, design, performance, or implementation of the Software and User Documentation without prior written consent of Juniper Networks. You agree to implement reasonable security measures to protect such confidential and proprietary information and copyrighted material. This License Agreement does not convey to you an interest in or to the Program, but only the limited right of use revocable in accordance with the terms of this License Agreement.

3. License Fees. The license fees paid by you are paid in consideration of the license granted under this License Agreement.

4. Term. This license is effective upon opening of the package(s) or use of the hardware containing the Software, and shall continue until terminated. You may terminate this License at any time by returning the Software, including any User Documentation, and all copies or portions thereof to Juniper Networks. This License will terminate immediately without notice from Juniper Networks if you breach any term or provision of this License. Upon such termination by Juniper Networks, you

a. If you and Juniper Networks, Inc., have executed another license agreement for the Program which is now in effect, then such agreement ("Negotiated Agreement") shall supersede this Software License Agreement and shall exclusively govern the use and license terms of the Program.

must return the Software, including any User Documentation, and all copies or portions thereof to Juniper Networks. Termination of this License Agreement shall not prejudice Juniper Networks' rights to damages or other available remedy.

5. Limited Software Warranty: Juniper Networks warrants, for your benefit alone, that for a period of ninety (90) days from the date of shipment from Juniper Networks that the Software substantially conforms to its published specifications.

The limited warranty extends only to you as the original licensee. Your exclusive remedy and the entire liability of Juniper Networks and its suppliers under this limited warranty will be, at Juniper Networks' option, repair or replacement of the Software, or refund of the amounts paid by you under this License Agreement. You agree that this is your sole and exclusive remedy for breach by Juniper Networks, its suppliers or its licensors of any warranties made under this License Agreement.

In no event does Juniper Networks warrant that the Software is error free or that you will be able to operate the Software without problems or interruptions. Juniper Networks does not warrant: 1) that the functions contained in the software will meet your requirements; 2) that the Software will operate in the hardware or software combination that you may select; 3) that the operation of the Software will be uninterrupted or error free; or 4) that all defects in the operation of the Software will be corrected.

This warranty does not apply if the product: 1) has been altered, except by Juniper Networks; 2) has not been installed, operated, repaired, or maintained in accordance with instruction supplied by Juniper Networks; or 3) has been subjected to or damaged by improper environment, abuse, misuse, accident, or negligence.

EXCEPT FOR THE WARRANTIES SET FORTH ABOVE, THE SOFTWARE IS LICENSED "AS IS," AND JUNIPER NETWORKS DISCLAIMS ANY AND ALL OTHER REPRESENTATIONS, CONDITIONS, AND WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTIES FOR NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE. ANY AND ALL SUCH WARRANTIES ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW. JUNIPER NETWORKS' SUPPLIERS AND LICENSORS DO NOT MAKE OR PASS ON TO YOU OR ANY THIRD PARTY ANY EXPRESS, IMPLIED, OR STATUTORY WARRANTY OR REPRESENTATION, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTIES FOR NONINFRINGEMENT.

6. Proprietary Rights Indemnification. Juniper Networks shall at its expense defend you against and, subject to the limitations set forth elsewhere herein, pay all costs and damages made in settlement or awarded against you resulting from a claim that the Program as supplied by Juniper Networks infringes a United States copyright or a United States patent, or misappropriates a United States trade secret, provided that you: (a) provide prompt written notice of any such claim, (b) allow Juniper Networks to direct the defense and settlement of the claim, and (c) provide Juniper Networks with the authority, information, and assistance that Juniper Networks reasonably deems necessary for the defense and settlement of the claim. You shall not consent to any judgment or decree or do any other act in compromise of any such claim without first obtaining Juniper Networks' written consent. In any action based on such a claim, Juniper Networks may, at its sole option, either: (1) obtain for you the right to continue using the Program, (2) replace or modify the Program to avoid the claim, or (3) if neither (1) nor (2) can reasonably be effected by Juniper Networks, terminate the license granted hereunder and give you a pro rata refund of the license fee paid for such Program, calculated on the basis of straight-line depreciation over a five-year useful life. Notwithstanding the preceding sentence, Juniper Networks will have no liability for any infringement or misappropriation claim of any kind if such claim is based on: (i) the use of other than the current unaltered release of the Program and Juniper Networks has provided or offers to provide such release to you for its then current license fee, or (ii) use or combination of the Program with programs or data not supplied or approved by Juniper Networks if such use or combination caused the claim.

7. Limitation of Liability. IN NO EVENT WILL JUNIPER NETWORKS OR ITS SUPPLIERS OR LICENSORS BE LIABLE FOR ANY COST FOR SUBSTITUTE PROCUREMENT; SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, EXEMPLARY, OR CONSEQUENTIAL DAMAGES; OR ANY DAMAGES RESULTING FROM INACCURATE OR LOST DATA OR LOSS OF USE OR PROFITS ARISING OUT OF OR IN CONNECTION WITH THE PERFORMANCE OF THE SOFTWARE, EVEN IF JUNIPER NETWORKS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Juniper Networks' cumulative liability to you or any other party for any loss or damages resulting from any claims, demands, or actions arising out of or relating to this License Agreement shall not exceed the total fees paid to Juniper Networks for the Software.

8. Export Control. Software, including technical data, is subject to U.S. export control laws, including the U.S. Export Administration Act and its associated regulations, and may be subject to

export or import regulations in other countries. You agree to comply strictly with all such regulations and acknowledge that you have the responsibility to obtain licenses to export, re-export, or import Software.

9. Government Licensees: If any Software or associated documentation is acquired by or on behalf of a unit or agency of the United States government, the government agrees that such Software or documentation is a "commercial item" as that term is defined in 48 C.F.R. 2.101, consisting of "commercial computer software" or "commercial computer software documentation" as such terms are used in 48 C.F.R. 12.212 of the Federal Acquisition Regulations and its successors and 48 C.F.R. 227.7202-1 through 227.7202-4 of the DoD FAR Supplement and its successors. The use, duplication, or disclosure by the United States government of technical, data, computer software and documentation is subject to the restrictions set forth in FAR section 12.212(a), FAR section 52.227-14(g)(2), FAR section 52.227-19, DFARS section 252.227-7015(b), DFARS section 227.7202-1(a), and DFARS section 227.7202-3(a), as applicable. All United States government end users acquire the Software with only the rights set forth in this License Agreement.

10. General: This License shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts, United States of America, as if performed wholly within the state and without giving effect to the principles of conflict of law. Any dispute arising out of this Agreement shall be referred to an arbitration proceeding in Boston, Massachusetts, in accordance with the commercial arbitration rules of the American Arbitration Association (the "AAA"). If the parties cannot agree upon an arbitrator, arbitration shall be conducted by a neutral arbitrator selected by the AAA who is knowledgeable in electronics equipment manufacturing and software licensing. The parties shall share the procedural costs of arbitration equally, and each party shall pay its own attorneys' fees and other costs and expenses associated with the arbitration, unless the arbitrator decides otherwise. The arbitrator's award shall be in writing and shall include a statement of reasons, but the arbitrator shall not be permitted to award punitive or indirect damages. The arbitrator's decision and award shall be final and binding and may be entered in any court having jurisdiction. The terms of this section shall not prevent any party from seeking injunctive relief in any court of competent jurisdiction in order to protect its proprietary and confidential information. If any term or provision hereof is found to be void or unenforceable by a court of competent jurisdiction, the remaining provisions of this License Agreement shall remain in full force and effect. This License Agreement constitutes the entire agreement between the parties with respect to the use of the Software and User Documentation and supersedes any and all prior oral or written agreements, discussions, negotiations, commitments, or understandings. No amendment, modification, or waiver of any provision of this License Agreement will be valid unless in writing and signed by the authorized representative of the party against which such amendment, modification, or waiver is sought to be enforced. The waiver by either party of any default or breach of this License Agreement shall not constitute a waiver of any other or subsequent default or breach. This License Agreement shall be binding upon the parties and their respective successors and permitted assigns.

Should you have any questions about this agreement, please contact:

Juniper Networks, Inc.
1194 North Mathilda Avenue
Sunnyvale, CA 94089
Attn: Contracts Administrator

Contents

About This Guide

Introduction	ix
Audience	ix
Conventions	x
Documentation	xi
Release Notes	xi
Web Access	xi
Comments About the Documentation	xi
Contacting Customer Support	xii

Chapter 1 Overview

Features	1-1
System Description	1-2
Devices Supported	1-2
System Requirements	1-2
Hardware Requirements	1-3
Software Requirements	1-3
Sun Solaris Workstations	1-3
Windows Workstations	1-3

Chapter 2 Installing and Uninstalling HP OpenView Integration Pack

Before Installing HPOV Integration Pack	2-1
Installing and Uninstalling on a Sun Solaris Workstation	2-1
Installing HPOV Integration Pack	2-1
Uninstalling HPOV Integration Pack	2-2
Installing and Uninstalling on a Windows Workstation	2-2
Installing HPOV Integration Pack	2-2
Uninstalling HPOV Integration Pack	2-3

Chapter 3 Using HP OpenView Integration Pack

Custom Icons	3-1
SNMP Trap Descriptions	3-2
Browsing MIBs and Collecting SNMP Statistics	3-3
Configuring Juniper Networks Devices with the NMC-RX Application	3-3
Launching the NMC-RX Application	3-3

Appendix A MIBs and Traps

MIB Files Installation Directories	A-1
MIB Files for Juniper Networks Devices and Software	A-1
Shared/Common Standard MIBs	A-2
E-Series MIBs	A-3
M-Series and T-Series MIBs	A-4
SDX MIBs	A-5
HPOV Default MIBs	A-5
SNMP Traps for Juniper Networks Devices	A-6
E-Series Traps	A-6
E-Series Standard Traps	A-6
E-Series Juniper Networks Traps	A-10
M-Series and T-Series Traps	A-12
M-Series and T-Series Standard Traps	A-12
M-Series and T-Series Juniper Networks Traps	A-13
SDX Software Traps	A-14
SDX Software Juniper Networks Traps	A-14

About This Guide



Note: If the information in the *HP OpenView Integration Pack Release Notes* differs from the information in this guide, follow the *HP OpenView Integration Pack Release Notes*.

Introduction

HP OpenView Integration Pack is powered by the HP OpenView Network Node Manager (HPOV NNM) platform. It includes customizations that provide configuration and fault management for the Juniper Networks E-series routers, the SDX software, and the M-series and T-series routing platforms.

This user guide includes:

- An introduction and product overview
- Workstation requirements (hardware and software) for workstations on which HP OpenView Integration Pack is installed
- Installation and removal procedures for HP OpenView Integration Pack
- Description and user procedures for HP OpenView Integration Pack
- An appendix describing MIB files installed with HP OpenView Integration Pack and SNMP traps supported by HP OpenView Integration Pack

Audience

This guide is intended for experienced system and network specialists who will install and use HP OpenView Integration Pack.

Conventions

Table 1 and Table 2 list all the conventions used in the documentation. Table 1 defines notice icons. Table 2 shows text conventions used throughout the book.

Table 1 Notice icons




Icon	Meaning	Description
	Informational note	Indicates important features or instructions.
	Caution	Indicates that you may risk losing data or damaging your hardware.
	Warning	Alerts you to the risk of personal injury.

Table 2 Text conventions

Convention	Description	Examples
Bold typeface	Represents commands and keywords in text.	<ul style="list-style-type: none"> Command example: Issue the clock source command. Keyword example: Specify the keyword exp-msg.
Bold Courier typeface	Represents text that the user must type.	user input
Key name in angle brackets	Indicates the name of a key on the keyboard.	Press <Enter>.
Key names linked with a plus sign (+) in angle brackets.	Indicates that you must press two or more keys simultaneously.	Press <Ctrl+B>.
Plain Courier typeface	Represents information as displayed on your terminal's screen.	<pre>host1#show ip ospf 2 Routing Process OSPF 2 with Router ID 5.5.0.250 Router is an Area Border Router (ABR)</pre>
<i>Italics</i>	<ul style="list-style-type: none"> Emphasize words. Identify variables. Identify chapter, appendix, and book names. 	<ul style="list-style-type: none"> There are two levels of access, <i>user</i> and <i>privileged</i>. <i>clusterId</i>, <i>ipAddr</i>. <i>Appendix A, System Specifications</i>.

Documentation

Contact your sales representative for the latest documentation from Juniper Networks, Inc. With each software release, we provide the HP OpenView Integration Pack Documentation CD. The documentation CD contains the document set in PDF format and HTML format (with and without frames). From the HTML files, you can also access PDF files of individual chapters and appendixes.

The documentation is also available on the Web. You can order a set of printed documents from your Juniper Networks sales representative.

Release Notes

Release notes are included on the corresponding software CD and are available on the Web.

In the *Release Notes*, you will find the latest information about features, changes, known problems and resolved problems. If the information in the *Release Notes* differs from the information found in the documentation set, follow the *Release Notes*.

Web Access

To view the documentation on the Web, go to:

<http://www.juniper.net/techpubs/>

Additional documentation on the HP Openview application is available through Hewlett Packard Company.

Comments About the Documentation

We encourage you to provide feedback, comments, and suggestions so that we can improve the documentation to better meet your needs. Please e-mail your comments to:

- techpubs-comments@juniper.net

Along with your comments, be sure to indicate:

- Document name
- Document part number
- Page number
- Software release version

Contacting Customer Support

For technical support, contact Juniper Networks at support@juniper.net, or at 1-888-314-JTAC (within the United States) or 408-745-9500 (from outside the United States).

Overview

1

HP OpenView Integration Pack provides advanced configuration management of Juniper Networks routers. It is powered by the HP OpenView Network Node Manager platform, and is used in conjunction with the Juniper Networks NMC-RX element manager.

The NMC-RX application configures and manages Juniper Networks devices in a network managed by HP OpenView (HPOV). The NMC-RX application can be launched from HPOV.

Features

HP OpenView Integration Pack provides the following main features:

- The NMC-RX application can be launched from the HPOV network map or the NMC-RX application Tools menu
- Juniper Networks E-series router, M-series and T-series routing platform, and SDX software MIB files can be loaded and installed in an SNMP directory
- Custom icons for E-series devices and M-series and T-series routing platforms can be used in the network map
- Plain language descriptions of SNMP traps can be generated for Juniper Networks devices in a network
- SNMP trap support exists for:
 - > E-series routers
 - > M-series and T-series routing platforms
 - > SDX software

System Description

HP OpenView Integration Pack provides integration software that leverages the strengths of HPOV for device management.

Figure 1-1 shows an example of a network management system architecture. HP OpenView Integration Pack enables you to manage Juniper Networks devices and software from HPOV. From HPOV, network operators can access a network map showing all Juniper devices discovered on the network. Operators also have access to the alarm browser, the SNMP MIB browser, and the data presenter, and can launch the NMC-RX application from HPOV.

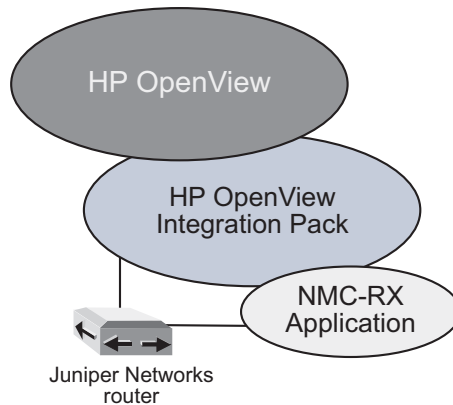


Figure 1-1 Relationship of HP OpenView Integration Pack and associated components

Devices Supported

HP OpenView Integration Pack Release 5.1 supports devices using:

- E-series software Releases 4.0.x, 4.1.x, 5.0.x, and 5.1.x
- M-series and T-series routing platform software Release 6.0
- SDX software Release 4.1

System Requirements

HP OpenView Integration Pack and HP OpenView run on the same workstation, either a Sun Solaris or a Windows workstation. To run HP OpenView Integration Pack, the workstation must meet specific hardware and software requirements, in addition to the hardware and software requirements for running the HP OpenView application.

Hardware Requirements

The workstation on which you install HP OpenView Integration Pack must be the same workstation that runs HP OpenView. The workstation must meet all hardware requirements for HP OpenView and must meet the following additional hardware requirements:

- CD-ROM drive
- 100 MB free hard disk space

Software Requirements

This section describes the software requirements for a Sun Solaris or Windows workstation on which you install HP OpenView Integration Pack.

If you intend to configure nodes by using the NMC-RX application, you must install a version of it that is compatible with your device software.

The workstation on which you install HP OpenView Integration Pack must be the same workstation that runs HP OpenView. The workstation must meet all software requirements for HP OpenView, and must have the following software installed:

Sun Solaris Workstations

- Sun Solaris, version 2.7 or higher
- HP OpenView Network Node Manager for Solaris, version 6.2
- HPOV patches: PSOV_03184 and PSOV_03271

Visit the HPOV Web site for more information
(www.openview.hp.com)

Windows Workstations

- Windows NT 4.0 Service Pack 4+ or Windows 2000
- HP OpenView Network Node Manager for Windows, version 6.2
- HPOV patches: NNM_00932 and NNM_00999

Visit the HPOV Web site for more information
(www.openview.hp.com)

Installing and Uninstalling HP OpenView Integration Pack

2

You can install HP OpenView Integration Pack on either Sun Solaris or Windows workstations that meet system requirements.

Before Installing HPOV Integration Pack

Be sure all related HPOV processes are running on the target machine before installing HP Openview Integration Pack. Follow these preinstallation steps to ensure a proper installation:

- 1** Start Network Node Manager (NNM) and be sure it is installed and running properly.
- 2** After you have confirmed NNM is running properly, close the application.
- 3** Run the ovstatus command to verify that the owddb daemon is running. If it is not running, run the ovstart command.

Installing and Uninstalling on a Sun Solaris Workstation

The following two sections discuss installing and uninstalling HP OpenView Integration Pack on a Sun Solaris workstation.

Installing HPOV Integration Pack

Before installing HP OpenView Integration Pack on your workstation, you must first install HP OpenView NNM 6.2.

The NMC-RX element management system does not need to be installed for the HP OpenView Integration Pack to run. However, if you do install or uninstall the NMC-RX application after installing the HP OpenView

Integration Pack, you must fully reinstall the HP OpenView Integration Pack. You can monitor the installation process by viewing the following log files in `$OV_LOG/`:

- `cminstall_log`
- `Juniper_HP_Openview_Integration_Pack_Release_5.1.0_InstallLog.log`

To install HP OpenView Integration Pack:

- 1 Insert the HP OpenView Integration Pack CD in your CD drive and run `UXCMinstall.bin`.
- 2 Follow the instructions that appear on the screen.
- 3 When the installation is finished, click Done.

Uninstalling HPOV Integration Pack

You can monitor the uninstallation process by viewing the following log file in `$OV_LOG/`:

- `cmuninstall_log`

To uninstall HPOV Integration Pack from a Sun Solaris workstation:

- 1 Navigate to the following directory and run the script:
 - `/opt/OV/JuniperHPOVIntegration/CMuninstall.sh`



Note: It may take a few minutes before the uninstall dialog box appears as the application gathers required information on the installation.

- 2 Once the About to Uninstall dialog box appears, click Uninstall.

Installing and Uninstalling on a Windows Workstation

The following two sections discuss installing and uninstalling HP OpenView Integration Pack on a Windows workstation.

Installing HPOV Integration Pack

Before installing HP OpenView Integration Pack on your workstation, you must first install HP OpenView NNM.

The NMC-RX application does not need to be installed for the HP OpenView Integration Pack to run. However, if you do install or uninstall the NMC-RX application after installing the HP OpenView Integration Pack, you must fully reinstall the HP OpenView Integration Pack.

You can monitor the installation process by viewing the following log files in %OV_LOG%\:

- cm_installation.log
- Juniper_HP_Openview_Integration_Pack_Release_5.1.0_InstallLog.log



Note: Before installing HP OpenView Integration Pack, ensure that you followed all preinstallation steps, such as installing Microsoft SNMP Agent. See the previous section.

To install the HP OpenView Integration Pack:

- 1 Insert the HP OpenView Integration Pack CD in your CD drive. If the installation program does not autoplay, double-click WindowsCMinstall.exe.
- 2 Follow the instructions that appear on the screen.



Note: When prompted, install the Integration Pack in the same location that HP OpenView NNM was installed.

- 3 When the application is installed, reboot your system.

Uninstalling HPOV Integration Pack

You can monitor the uninstallation process by viewing the following log file in %OV_LOG%\:

- cm_uninstallation.log

To uninstall HPOV Integration Pack from a Windows workstation:

- 1 Navigate to the following directory and run the script.
 - %OV_Main_Path%\JuniperHPOVIntegration\CMuninstall.bat



Note: It may take a few minutes before the uninstall dialog box appears as the application gathers required information on the installation.

- 2 Once the About to Uninstall dialog box appears, click Uninstall.

Using HP OpenView Integration Pack

This section describes the basic operation of the HP OpenView Integration Pack.

Custom Icons

HP OpenView Integration Pack contains custom icons for the E-series routers and the M-series and T-series routing platforms. These icons appear on the HP OpenView network map and are installed in the following directory:

- Sun Solaris: \$OV_BITMAPS/C/Juniper
- Windows: %OV_BITMAPS%\C\Juniper



Note: For the definition of the OpenView environment variables (\$OV_BITMAPS for Solaris and %OV_BITMAPS% for Windows), refer to the HP OpenView manuals.

HP OpenView Integration Pack recognizes E-series, M-series, and T-series routers during autodiscovery. When HP OpenView Integration Pack recognizes a router it displays the appropriate icon, like the ones shown in Figure 3-1.



Figure 3-1 Custom icons for Juniper Networks devices

SNMP Trap Descriptions

HP OpenView Integration Pack supplies plain language translations of SNMP traps (alarms) generated by the devices. These plain language descriptions appear automatically in the HP OpenView alarm browser when HP OpenView receives events from devices (see Figure 3-2).

The default severity levels of each trap are only recommendations by Juniper Networks. The severity fields are user-configurable through the Event Configuration option within Network Node Manager. Juniper Networks recommends that these severities be tailored based on your specific network environment.

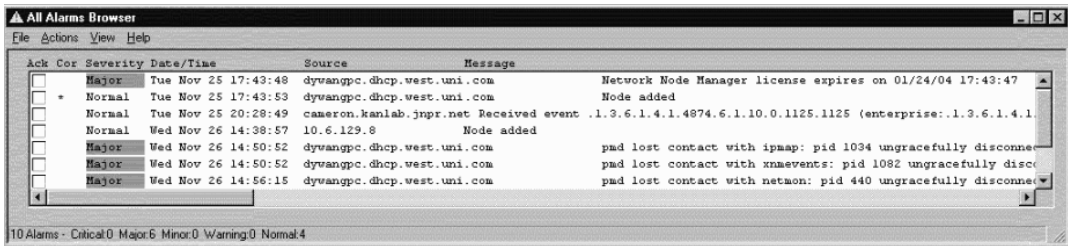


Figure 3-2 HPOV plain language alarm descriptions example

See *Appendix A, MIBs and Traps*, for a complete list of alarms that can be generated by Juniper Networks devices. Plain language descriptions can be viewed in the following directories and files:

Sun Solaris:

- \$OV_MAIN_PATH/JuniperHPOVIntegration/conf/
 - > erxTrapd.conf
 - > mtTrapd.conf
 - > sdxTrapd.conf
 - > sdxTrapd.conf.v2c

Windows:

- %OV_MAIN_PATH%\JuniperHPOVIntegration\conf\
 - > erxTrapd.conf
 - > mtTrapd.conf
 - > sdxTrapd.conf
 - > sdxTrapd.conf.v2c

Browsing MIBs and Collecting SNMP Statistics

As a system operator, you can:

- Browse SNMP MIBs

For more information, see the Hewlett-Packard guide, *Managing Your Network with HP OpenView Network Node Manager*, “Customizing Events: Doing It Your Way.”

- Collect SNMP statistics

For more information, see the Hewlett-Packard guide, *Managing Your Network with HP OpenView Network Node Manager*, “Using Event Data.”

For more information on MIBs and traps supported by HP OpenView Integration Pack, see *Appendix A, MIBs and Traps*.

Configuring Juniper Networks Devices with the NMC-RX Application

You can configure and manage only E-series devices with the NMC-RX application through HP OpenView Integration Pack. M-series and T-series platforms can only be viewed. Menus are added to HP OpenView that allow you to launch the NMC-RX application.



Note: HP OpenView Integration Pack also allows you to configure E-series devices directly by the Juniper Networks command line interface. For more information on configuring E-series routers, see the *E-Series Configuration Guides*.



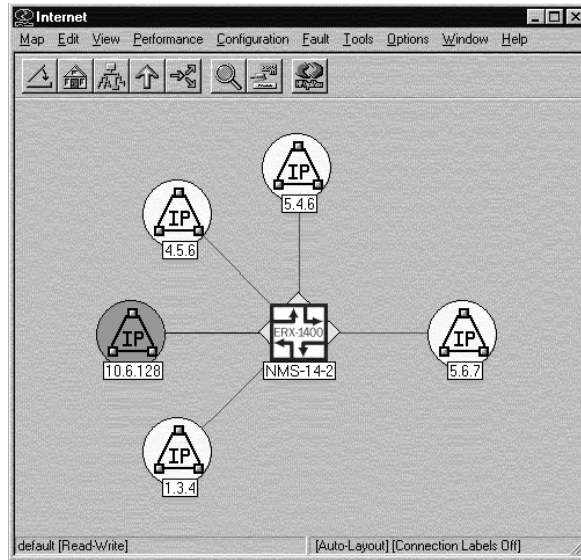
Note: M-series and T-series routing platforms can be viewed in the *Network Workshop*. They cannot be configured in the *Device Workshop*.

For more information on configuring or managing parameters, see the *NMC-RX User Guide* or the *NMC-RX Online Help*.

Launching the NMC-RX Application

To launch the NMC-RX application from HP OpenView:

- 1 Ensure that the following NMC-RX components are running:
 - Sybase Adaptive Server Anywhere database
 - Polling server
 - ConfigSync server
- 2 Select a node on the HP OpenView network map.



- 3 Right-click the node and select NMC-RX from the menu.
Depending on the node type selected, the NMC-RX application launches and displays either the Device Workshop (E-series) or Network Workshop (M-series and T-series platform).

MIBs and Traps



This appendix lists the Management Information Base (MIB) files and the SNMP traps installed with HP OpenView Integration Pack on Sun Solaris and Windows workstations for Juniper Networks devices.

The MIB files are supported in:

- E-series software Release 5.1
- M-series and T-series routing platform software Release 6.0
- SDX software Release 4.1

MIB Files Installation Directories

MIBs are installed in the following directory:

- Sun Solaris workstations – \$OV_SNMP_MIBS/Vendor/Juniper/
- Windows workstations – %OV_SNMP_MIBS%\Vendor\Juniper

MIB Files for Juniper Networks Devices and Software

The HPOV software, E-series routers, M-series and T-series platforms, and SDX software share several MIBs and also have their own product-specific MIBs.

Refer to the following tables for a list of supported MIB files.

Shared/Common MIBs:

- Table A-1: Shared/common standard MIBs

E-series MIBs:

- Table A-2: E-series standard MIBs

- Table A-3: E-series Juniper Networks MIBs

M-series and T-series MIBs:

- Table A-4: M-series and T-series standard MIBs
- Table A-5: M-series and T-series Juniper Networks MIBs

SDX MIBs:

- Table A-6: SDX Juniper Networks MIBs

•

HPOV MIBs:

- Table A-7: HPOV default MIBs

Shared/Common Standard MIBs

Table A-1 Shared/common standard MIBs

HPOV Preload	M-series and T-series MIB Name	E-series MIB Name	SDX MIB Name	MIB That Is Loaded
	IANA-RTPROTO-MIB.mib	IANA-RTPROTO-MIB.mib		E-series
IANAifType-MIB	IANAifType-MIB.mib	IANAifType-MIB.mib		E-series
	bgpmib.mib	draft-ietf-idr-bgp4-mib-07.mi2		E-series
	igmpmib.mib	rfc2933.mi2		E-series
	ospf2mib.mib	rfc1850.mi2 and rfc1850t.mi2		E-series
	pimmib.mib	rfc2934.mi2		E-series
Rfc1213-MIB-II	rfc1213.mib	rfc1213.mib		E-series
Rfc1907-SNMPv2-MIB	rfc1907.mib	rfc3418.mi2		E-series
Rfc2011-IP-MIB	rfc2011a.mib	rfc2011.mi2		E-series
Rfc2012-TCP-MIB	rfc2012a.mib	rfc2012.mi2		E-series
Rfc2013-UDP-MIB	rfc2013a.mib	rfc2013.mi2		E-series
	rfc2115a.mib	rfc2115.mi2		E-series
	rfc2493.mib	rfc2493.mi2		E-series
	rfc2514.mib	rfc2514.mi2		E-series
	rfc2515a.mib	rfc2515.mi2		E-series
	rfc2571.mib	rfc3411.mi2	V3-arch.my	E-series
	rfc2572.mib	rfc3412.mi2		E-series
	rfc2574.mib	rfc3414.mi2		E-series
	rfc2575.mib	rfc3415.mi2		E-series
	rfc2787a.mib	rfc2787.mi2		E-series

Table A-1 Shared/common standard MIBs (continued)

HPOV Preload	M-series and T-series MIB Name	E-series MIB Name	SDX MIB Name	MIB That Is Loaded
	rfc2851.mib	rfc3291.mi2		E-series
Rfc2863-IF-MIB	rfc2863a.mib	rfc2863.mi2		E-series
	rfc2925a.mib	rfc2925p.mi2		E-series
	rfc2932.mib	rfc2932.mi2		E-series
	rtmib.mib	rfc2096.mi2		E-series
	rfc2665a.mib	rfc2358.mi2		M/T-series
	rfc2465.mib	rfc2465tc.mi2		M/T-series
	rfc2558a.mib	rfc2558.mi2		M/T-series
	rfc2790a.mi2	rfc2790.mi2		M/T-series
	rfc2925b.mi2	rfc2925t.mi2		M/T-series

E-Series MIBs

See the following tables for a list of E-series standard and Juniper Networks MIBs.

Table A-2 E-series standard MIBs

IANA-ADDRESS-FAMILY-NUMBERS-MIB.mi2	rfc1406.mib	rfc2737.mi2
af-nm-0095_001_mib.mi2	rfc1407.mib	rfc2925n.mi2
draft-ietf-atommib-atm2-15.mi2	rfc1471.mib	rfc3014.mi2
draft-ietf-atommib-sonetaps-mib-05-juni.mi2	rfc1473.mib	rfc3413n.mi2
draft-ietf-disman-event-mib-v2-01.mi2	rfc1493.mib	rfc3413t.mi2
draft-ietf-idmr-dvmrp-mib-11-juni.mi2	rfc1724.mi2	rfc3419.mi2
rfc1158.mib	rfc2513.mi2	

Table A-3 E-series Juniper Networks MIBs

juniAaa.mi2	juniAcctng.mi2	juniAddrPool.mi2
juniAtm.mi2	juniAutoconf.mi2	juniBgp.mi2
juniBridge.mi2	juniBridgeEthernet.mi2	juniBridgingMgr.mi2
juniCbf.mi2	juniCli.mi2	juniCops.mi2
juniDhcp.mi2	juniDhcpv6.mi2	juniDns.mi2
juniDs1.mi2	juniDs3.mi2	juniDvmrp.mi2
juniErxRegistry.mi2	juniErxSystem.mi2	juniEthernet.mi2
juniExperiment.mi2	juniFileXfer.mi2	juniFr.mi2

Table A-3 E-series Juniper Networks MIBs (continued)

juniFt1.mi2	juniHdlc.mi2	juniHost.mi2
juniIf.mi2	juniIcmp.mi2	juniIp.mi2
juniIpPolicy.mi2	juniIpTunnel.mi2	juniIpls.mi2
juniL2tp.mi2	juniL2tpDialout.mi2	juniLog.mi2
juniMRouter.mi2	juniMibs.mi2	juniMpls.mi2
juniOspf.mi2	juniPim.mi2	juniPolicy.mi2
juniPpp.mi2	juniPppoe.mi2	juniProducts.mi2
juniQos.mi2	juniRadClient.mi2	juniRadDiscon.mi2
juniRegistry.mi2	juniRouter.mi2	juniSlep.mi2
juniSmds.mi2	juniSmi.mi2	juniSnmp.mi2
juniSonet.mi2	juniSscClient.mi2	juniSubscriber.mi2
juniSystem.mi2	juniSystemClock.mi2	juniTc.mi2
juniTcsClient.mi2	juniTmpl.mi2	juniTmplAtm.mi2
juniTmplIp.mi2	juniTmplIpv6.mi2	juniTmplPpp.mi2
juniTmplPppoe.mi2	juniV35.mi2	

M-Series and T-Series MIBs

See the following tables for a list of M-series and T-series standard and Juniper Networks MIBs.

Table A-4 M-series and T-series standard MIBs

802.3ad.mib	mplstcmib.mib	rfc2851.mib
ggsn.mib	mroutemib.mib	rfc2856a.mib
ilmim.mib	rfc2287a.mib	rfc3020.mib
isismib.mib	rfc2495a.mib	vpntcmib.mib
l3vpn.mib	rfc2496a.mib	
ldpmib.mib	rfc2819a.mib	

Table A-5 M-series and T-series Juniper Networks MIBs

mib-jnx-atm-cos.txt	mib-jnx-atm.txt	mib-jnx-bgpmib2.txt
mib-jnx-cfgmgmt.txt	mib-jnx-chas-defines.txt	mib-jnx-chassis-alarm.txt
mib-jnx-chassis.txt	mib-jnx-cos.txt	mib-jnx-dcu.txt
mib-jnx-exp.txt	mib-jnx-firewall.txt	mib-jnx-if-extensions.txt
mib-jnx-ipv4.txt	mib-jnx-ipv6.txt	mib-jnx-ldp.txt
mib-jnx-mac.txt	mib-jnx-mpls.txt	mib-jnx-ping.txt

Table A-5 M-series and T-series Juniper Networks MIBs (continued)

mib-jnx-pmon.txt	mib-jnx-rmon.txt	mib-jnx-rpf.txt
mib-jnx-scu.txt	mib-jnx-smi.txt	mib-jnx-sonet.txt
mib-jnx-sonetaps.txt	mib-jnx-traceroute.txt	mib-jnx-vpn.txt

SDX MIBs

See the following table for a list of SDX Juniper Networks MIBs. There are no SDX standard MIBs.

Table A-6 SDX Juniper Networks MIBs

nxSdx.mi2	jnxSdxDes.mi2	jnxSdxGw.mi2
jnxSdxLic.mi2	jnxSdxMibs.mi2	jnxSdxPom.mi2
jnxSdxSsp.mi2	jnxSdxTc.mi2	jnxSdxTrap.mi2
jnxSdxWorkflow.mi2	ussmi.mi2	

HPOV Default MIBs

See the following table for a list of HPOV default MIBs.

Table A-7 HPOV default MIBs

Rfc1902-SNMPv2-SMI	Rfc1906-SNMPv2-TM	Hp-unix
Rfc1903-SNMPv2-TC	Dmtf-dmi.mib	

SNMP Traps for Juniper Networks Devices

This section lists SNMP traps that support Juniper Networks devices. Traps are defined in the file trapd.conf.

Refer to the following tables for a list of traps for each MIB.

E-series traps:

- Table A-8: E-series standard traps
- Table A-9: E-series Juniper Networks traps

M-series and T-series traps:

- Table A-10: M-series and T-series standard traps
- Table A-11: M-series and T-series Juniper Networks traps

SDX software traps:

- Table A-12: SDX software (version 1) Juniper Networks traps
- Table A-12: SDX software (version 2) Juniper Networks traps

E-Series Traps

See the following sections for a list of E-series standard traps and Juniper Networks traps.

E-Series Standard Traps

E-series standard traps are defined in the MIB files listed in Table A-8. Unless otherwise noted, the alarm type for these traps is “Juniper Alarms.”

Table A-8 E-series standard traps

MIB Name	Trap Name	OID	Severity
af-nm-0095_001_mib.mi2	atmfM4IfAisAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.1	Major
	atmfM4IfLcdAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.2	Major
	atmfM4IfLofAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.3	Major
	atmfM4IfLopAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.4	Major
	atmfM4IfLosAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.5	Major
	atmfM4IfPayloadMismatchAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.6	Major
	atmfM4IfXmissionErrAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.7	Major
	atmfM4IfPathTraceMismatchAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.8	Major
	atmfM4IfRdiAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.9	Major

Table A-8 E-series standard traps (continued)

MIB Name	Trap Name	OID	Severity
	atmfM4IfSignalLabelMismatchAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.10	Major
	atmfM4VpITpAisAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.11	Major
	atmfM4VpITpRdiAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.12	Major
	atmfM4VpcTpAisAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.13	Major
	atmfM4VpcTpRdiAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.14	Major
	atmfM4VclTpAisAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.15	Major
	atmfM4VclTpRdiAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.16	Major
	atmfM4VccTpAisAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.17	Major
	atmfM4VccTpRdiAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.18	Major
	atmfM4HwBackPlaneAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.19	Major
	atmfM4HwCallEstErrAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.20	Major
	atmfM4HwCongestionAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.21	Major
af-nm-0095_001_mib.mi2	atmfM4HwExtIfDevProbAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.22	Major
	atmfM4HwLineCardAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.23	Major
	atmfM4HwMultiplexerAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.24	Major
	atmfM4HwPowerAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.25	Major
	atmfM4HwProcessorAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.26	Major
	atmfM4HwProtectionPathAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.27	Major
	atmfM4HwReceiverFailAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.28	Major
	atmfM4HwPIUnitMissingAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.29	Major
	atmfM4HwPIUnitProbAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.30	Major
	atmfM4HwPIUnitMismatchAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.31	Major
	atmfM4HwTimingProbAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.32	Major
	atmfM4HwXmitterFailAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.33	Major
	atmfM4HwTrunkCardAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.34	Major
	atmfM4HwStorageCapacityAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.35	Major
af-nm-0095_001_mib.mi2	atmfM4HwMemoryMismatchAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.36	Major
	atmfM4HwCorruptDataAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.37	Major
	atmfM4HwSwEnvironAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.38	Major
	atmfM4HwSwDownloadFailAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.39	Major
	atmfM4HwVersionMismatchAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.40	Major
	atmfM4HwFanFailAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.41	Major
	atmfM4HwDoorOpenAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.42	Major
	atmfM4HwFuseFailAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.43	Major

Table A-8 E-series standard traps (continued)

MIB Name	Trap Name	OID	Severity
	atmfM4HwHighTempAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.44	Major
	atmfM4SwVersionMismatchAlarm	.1.3.6.1.4.1.353.5.1.3.1.2.0.45	Major
	atmfM4VpiTpUp	.1.3.6.1.4.1.353.5.1.3.1.2.0.46	Normal
	atmfM4VpiTpDown	.1.3.6.1.4.1.353.5.1.3.1.2.0.47	Major
	atmfM4VciTpUp	.1.3.6.1.4.1.353.5.1.3.1.2.0.48	Normal
	atmfM4VciTpDown	.1.3.6.1.4.1.353.5.1.3.1.2.0.49	Major
	atmfM4VpiXConnUp	.1.3.6.1.4.1.353.5.1.3.1.2.0.50	Normal
	atmfM4VpiXConnDown	.1.3.6.1.4.1.353.5.1.3.1.2.0.51	Major
af-nm-0095_001_mib.mi2	atmfM4VciXConnUp	.1.3.6.1.4.1.353.5.1.3.1.2.0.52	Normal
	atmfM4VciXConnDown	.1.3.6.1.4.1.353.5.1.3.1.2.0.53	Major
	atmfM4HwUnitUp	.1.3.6.1.4.1.353.5.1.3.1.2.0.54	Normal
	atmfM4HwUnitDown	.1.3.6.1.4.1.353.5.1.3.1.2.0.55	Major
	atmfM4AtmCellIfCreated	.1.3.6.1.4.1.353.5.1.3.1.2.0.56	Normal
	atmfM4AtmCellIfDeleted	.1.3.6.1.4.1.353.5.1.3.1.2.0.57	Normal
	atmfM4VpcTpCreated	.1.3.6.1.4.1.353.5.1.3.1.2.0.58	Normal
	atmfM4VpcTpDeleted	.1.3.6.1.4.1.353.5.1.3.1.2.0.59	Normal
	atmfM4VccTpCreated	.1.3.6.1.4.1.353.5.1.3.1.2.0.60	Normal
	atmfM4VccTpDeleted	.1.3.6.1.4.1.353.5.1.3.1.2.0.61	Normal
	atmfM4VpiXConnCreated	.1.3.6.1.4.1.353.5.1.3.1.2.0.62	Normal
	atmfM4VpiXConnDeleted	.1.3.6.1.4.1.353.5.1.3.1.2.0.63	Normal
	atmfM4VciXConnCreated	.1.3.6.1.4.1.353.5.1.3.1.2.0.64	Normal
	atmfM4VciXConnDeleted	.1.3.6.1.4.1.353.5.1.3.1.2.0.65	Normal
	atmfM4HwUnitCreated	.1.3.6.1.4.1.353.5.1.3.1.2.0.66	Normal
	atmfM4HwUnitDeleted	.1.3.6.1.4.1.353.5.1.3.1.2.0.67	Normal
	atmfM4InstalledSwCreated	.1.3.6.1.4.1.353.5.1.3.1.2.0.68	Normal
	atmfM4InstalledSwDeleted	.1.3.6.1.4.1.353.5.1.3.1.2.0.69	Normal
	atmfM4IfChanged	.1.3.6.1.4.1.353.5.1.3.1.2.0.70	Normal
	atmfM4VpiTpChanged	.1.3.6.1.4.1.353.5.1.3.1.2.0.71	Normal
af-nm-0095_001_mib.mi2	atmfM4VciTpChanged	.1.3.6.1.4.1.353.5.1.3.1.2.0.72	Normal
	atmfM4VpiXConnChanged	.1.3.6.1.4.1.353.5.1.3.1.2.0.73	Normal
	atmfM4VciXConnChanged	.1.3.6.1.4.1.353.5.1.3.1.2.0.74	Normal
	atmfM4HwUnitChanged	.1.3.6.1.4.1.353.5.1.3.1.2.0.75	Normal
	atmfM4InstalledSwChanged	.1.3.6.1.4.1.353.5.1.3.1.2.0.76	Normal
draft-ietf-atommib-atm2-15.mi2	atmIntfPvcFailuresTrap	.1.3.6.1.2.1.37.1.14.2.1.0.1	Critical

Table A-8 E-series standard traps (continued)

MIB Name	Trap Name	OID	Severity
draft-ietf-atommib-sonetaps-mib-05-juni.mi2	junidApsEventSwitchover	.1.3.6.1.4.1.4874.3.2.2.1.2.0.1	Normal
	junidApsEventModeMismatch	.1.3.6.1.4.1.4874.3.2.2.1.2.0.2	Warning
	junidApsEventChannelMismatch	.1.3.6.1.4.1.4874.3.2.2.1.2.0.3	Warning
	junidApsEventPSBF	.1.3.6.1.4.1.4874.3.2.2.1.2.0.4	Warning
	junidApsEventFEPLF	.1.3.6.1.4.1.4874.3.2.2.1.2.0.5	Warning
draft-ietf-disman-event-mib-v2-01.mi2	mteTriggerFired	.1.3.6.1.2.1.88.2.0.1	Normal
	mteTriggerRising	.1.3.6.1.2.1.88.2.0.2	Normal
	mteTriggerFalling	.1.3.6.1.2.1.88.2.0.3	Normal
	mteTriggerFailure	.1.3.6.1.2.1.88.2.0.4	Normal
	mteEventSetFailure	.1.3.6.1.2.1.88.2.0.5	Normal
draft-ietf-idmr-dvmp-mib-11-juni.mi2	junidDvmpNeighborLoss	.1.3.6.1.4.1.4874.3.2.1.1.1.0.1	Normal
	junidDvmpNeighborNotPruning	.1.3.6.1.4.1.4874.3.2.1.1.1.0.2	Normal
draft-ietf-idr-bgp4-mib-07.mi2	bgpEstablishedNotification	.1.3.6.1.2.1.15.0.1	Normal
	bgpBackwardTransNotification	.1.3.6.1.2.1.15.0.2	Minor
	bgpEstablished	.1.3.6.1.2.1.15.7.0.1	Normal
	bgpBackwardTransition	.1.3.6.1.2.1.15.7.0.2	Minor
rfc1493.mib	newRoot	.1.3.6.1.2.1.17.0.1	Normal
	topologyChange	.1.3.6.1.2.1.17.0.2	Normal
rfc1850t.mi2	ospfVirtIfStateChange	.1.3.6.1.2.1.14.16.2.0.1	Critical
	ospfNbrStateChange	.1.3.6.1.2.1.14.16.2.0.2	Minor
	ospfVirtNbrStateChange	.1.3.6.1.2.1.14.16.2.0.3	Minor
	ospflfConfigError	.1.3.6.1.2.1.14.16.2.0.4	Critical
	ospfVirtIfConfigError	.1.3.6.1.2.1.14.16.2.0.5	Critical
	ospflfAuthFailure	.1.3.6.1.2.1.14.16.2.0.6	Critical
	ospfVirtIfAuthFailure	.1.3.6.1.2.1.14.16.2.0.7	Critical
	ospflfRxBadPacket	.1.3.6.1.2.1.14.16.2.0.8	Minor
	ospfVirtIfRxBadPacket	.1.3.6.1.2.1.14.16.2.0.9	Minor
	ospfTxRetransmit	.1.3.6.1.2.1.14.16.2.0.10	Warning
	ospfVirtIfTxRetransmit	.1.3.6.1.2.1.14.16.2.0.11	Warning
	ospfOriginateLsa	.1.3.6.1.2.1.14.16.2.0.12	Normal
	ospfMaxAgeLsa	.1.3.6.1.2.1.14.16.2.0.13	Warning
	ospfLsdbOverflow	.1.3.6.1.2.1.14.16.2.0.14	Critical

Table A-8 E-series standard traps (continued)

MIB Name	Trap Name	OID	Severity
	ospfLsdbApproachingOverflow	.1.3.6.1.2.1.14.16.2.0.15	Major
	ospfIfStateChange	.1.3.6.1.2.1.14.16.2.0.16	Normal
rfc2115.mi2	frDLCIStatusChange	.1.3.6.1.2.1.10.32.0.1	Normal
rfc2513.mi2	acctngFileNearlyFull	.1.3.6.1.2.1.60.2.0.1	Minor
	acctngFileFull	.1.3.6.1.2.1.60.2.0.2	Critical
rfc2737.mi2	entConfigChange	.1.3.6.1.2.1.47.2.0.1	Critical
rfc2787.mi2	vrrpTrapNewMaster	.1.3.6.1.2.1.68.0.1	Normal
	vrrpTrapAuthFailure	.1.3.6.1.2.1.68.0.2	Warning
rfc2863.mi2	SNMP_Link_Down	.1.3.6.1.6.3.1.1.5.3	Minor
	SNMP_Link_Up	.1.3.6.1.6.3.1.1.5.4	Normal
rfc2925p.mi2	pingProbeFailed	.1.3.6.1.2.1.80.0.1	Minor
	pingTestFailed	.1.3.6.1.2.1.80.0.2	Critical
	pingTestCompleted	.1.3.6.1.2.1.80.0.3	Normal
rfc2925t.mi2	traceRoutePathChange	.1.3.6.1.2.1.81.0.1	Warning
	traceRouteTestFailed	.1.3.6.1.2.1.81.0.2	Critical
	traceRouteTestCompleted	.1.3.6.1.2.1.81.0.3	Normal
rfc2934.mi2	pimNeighborLoss	.1.3.6.1.3.61.1.0.1	Normal
rfc3418.mi2	SNMP_Cold_Start	.1.3.6.1.6.3.1.1.5.1	Normal
	SNMP_Authen_Failure	.1.3.6.1.6.3.1.1.5.5	Warning
	SNMP_Authen_Failure	.1.3.6.1.6.3.1.1.5.5	Warning

E-Series Juniper Networks Traps

E-series Juniper Networks traps are defined in the MIB files listed in Table A-9. Unless otherwise noted, the alarm type for these traps is “Juniper Alarms” and the severity level is “Normal.”

Table A-9 E-series Juniper Networks traps

MIB Name	Trap Name	OID
JuniSystem.mi2	juniSystemHighMemUtil	.1.3.6.1.4.1.4874.2.2.2.0.1
	Note: Severity is Warning	
	juniSystemAbatedMemUtil	.1.3.6.1.4.1.4874.2.2.2.0.2
	Note: Severity is Warning	
	juniSystemModuleOperStatusChange	.1.3.6.1.4.1.4874.2.2.2.0.3
	juniSystemPowerStatusChange	.1.3.6.1.4.1.4874.2.2.2.0.4
	juniSystemFanStatusChange	.1.3.6.1.4.1.4874.2.2.2.0.5

Table A-9 E-series Juniper Networks traps (continued)

MIB Name	Trap Name	OID
	juniSystemTempStatusChange	.1.3.6.1.4.1.4874.2.2.2.0.6
	juniSystemTempProtectionStatusChange	.1.3.6.1.4.1.4874.2.2.2.0.7
	juniSystemReloadCommand	.1.3.6.1.4.1.4874.2.2.2.0.8
	juniSystemUtilizationThreshold	.1.3.6.1.4.1.4874.2.2.2.0.9
juniSonet.mi2	juniSonetPathEvents	.1.3.6.1.4.1.4874.2.2.7.6.0.1
juniAtm.mi2	juniAtmVpPingTestCompleted	.1.3.6.1.4.1.4874.2.2.8.3.0.1
	juniAtmVcPingTestCompleted	.1.3.6.1.4.1.4874.2.2.8.3.0.2
juniErxSystem.mi2	juniERXSysSlotOperStatusChange	.1.3.6.1.4.1.4874.2.2.17.0.1
	juniERXSysPowerStatusChange	.1.3.6.1.4.1.4874.2.2.17.0.2
	juniERXSysTempFanStatusChange	.1.3.6.1.4.1.4874.2.2.17.0.3
	juniERXSysTempStatusChange	.1.3.6.1.4.1.4874.2.2.17.0.4
	Note: Alarm type is LOGONLY	
	juniERXSysHighMemUtil	.1.3.6.1.4.1.4874.2.2.17.0.5
	juniERXSysAbatedMemUtil	.1.3.6.1.4.1.4874.2.2.17.0.6
	juniERXSysTempProtectionStatusChange	.1.3.6.1.4.1.4874.2.2.17.0.7
juniRadClient.mi2	juniRadiusAuthClientServerUnavailable	.1.3.6.1.4.1.4874.2.2.19.3.0.1
	juniRadiusAuthClientNoServerAvailable	.1.3.6.1.4.1.4874.2.2.19.3.0.2
	Note: Alarm type is LOGONLY	
	juniRadiusAcctClientServerUnavailable	.1.3.6.1.4.1.4874.2.2.19.3.0.3
	juniRadiusAcctClientNoServerAvailable	.1.3.6.1.4.1.4874.2.2.19.3.0.4
	juniRadiusAuthClientServerAvailable	.1.3.6.1.4.1.4874.2.2.19.3.0.5
	juniRadiusAcctClientServerAvailable	.1.3.6.1.4.1.4874.2.2.19.3.0.6
juniAddrPool.mi2	juniAddressPoolHighAddrUtil	.1.3.6.1.4.1.4874.2.2.21.3.0.1
	juniAddressPoolAbatedAddrUtil	.1.3.6.1.4.1.4874.2.2.21.3.0.2
	juniAddressPoolNoAddresses	.1.3.6.1.4.1.4874.2.2.21.3.0.3
juniFileXfer.mi2	juniFileXferTrap	.1.3.6.1.4.1.4874.2.2.23.2.0.1
juniLog.mi2	juniLogMsgThresholdTrap	.1.3.6.1.4.1.4874.2.2.28.0.1
juniCli.mi2	juniCliSecurityAlert	.1.3.6.1.4.1.4874.2.2.30.0.1
juniDvmp.mi2	juniDvmpRouteHogNotificationTrap	.1.3.6.1.4.1.4874.2.2.44.1.1.0.1
juniSystemClock.mi2	juniNtpFrequencyCalibrationStart	.1.3.6.1.4.1.4874.2.2.56.2.0.1
	juniNtpFrequencyCalibrationEnd	.1.3.6.1.4.1.4874.2.2.56.2.0.2
	juniNtpTimeSynUp	.1.3.6.1.4.1.4874.2.2.56.2.0.3
	juniNtpTimeSynDown	.1.3.6.1.4.1.4874.2.2.56.2.0.4
	juniNtpTimeServerSynUp	.1.3.6.1.4.1.4874.2.2.56.2.0.5
	juniNtpTimeServerSynDown	.1.3.6.1.4.1.4874.2.2.56.2.0.6

Table A-9 E-series Juniper Networks traps (continued)

MIB Name	Trap Name	OID
	juniNtpFirstSystemClockSet	.1.3.6.1.4.1.4874.2.2.56.2.0.7
	juniNtpClockOffSetLimitCrossed	.1.3.6.1.4.1.4874.2.2.56.2.0.8

M-Series and T-Series Traps

See the following sections for a list of M-series and T-series standard traps and Juniper Networks traps.

M-Series and T-Series Standard Traps

M-series and T-series platform standard traps are defined in the MIB files listed in Table A-10. Unless otherwise noted, the alarm type for these traps is “Juniper Alarms” and the severity level is “Normal.”

Table A-10 M-series and T-series standard traps

MIB Name	Trap Name	OID
ggsn.mib	ggsnTrapNew	.1.3.6.1.4.1.10923.1.1.2.1
	ggsnTrapChanged	.1.3.6.1.4.1.10923.1.1.2.2
	ggsnTrapCleared	.1.3.6.1.4.1.10923.1.1.2.3
rfc2495a.mib	dsx1LineStatusChange	.1.3.6.1.2.1.10.18.15.0.1
rfc2496a.mib	dsx3LineStatusChange	.1.3.6.1.2.1.10.30.15.0.1
fr3020.mib	mfrMibTrapBundleLinkMismatch	.1.3.6.1.2.1.10.47.4.0.1
ldpmib.mib	mplsLdpInitSesThresholdExceeded	.1.3.6.1.2.1.10.166.3.2.0.1
	mplsLdpPathVectorLimitMismatch	.1.3.6.1.2.1.10.166.3.2.0.2
	mplsLdpSessionUp	.1.3.6.1.2.1.10.166.3.2.0.3
	mplsLdpSessionDown	.1.3.6.1.2.1.10.166.3.2.0.4
rfc2465.mib	ipv6IfStateChange	.1.3.6.1.2.1.55.2.0.1
isismib.mib	isisDatabaseOverload	.1.3.6.1.3.37.2.0.1
	isisManualAddressDrops	.1.3.6.1.3.37.2.0.2
	isisCorruptedLSPDetected	.1.3.6.1.3.37.2.0.3
	isisAttemptToExceedMaxSequence	.1.3.6.1.3.37.2.0.4
	isisIDLenMismatch	.1.3.6.1.3.37.2.0.5
	isisMaxAreaAddressesMismatch	.1.3.6.1.3.37.2.0.6
	isisOwnLSP Purge	.1.3.6.1.3.37.2.0.7
	isisSequenceNumberSkip	.1.3.6.1.3.37.2.0.8
	isisAuthenticationTypeFailure	.1.3.6.1.3.37.2.0.9
	isisAuthenticationFailure	.1.3.6.1.3.37.2.0.10

Table A-10 M-series and T-series standard traps (continued)

MIB Name	Trap Name	OID
	isisVersionSkew	.1.3.6.1.3.37.2.0.11
	isisAreaMismatch	.1.3.6.1.3.37.2.0.12
	isisRejectedAdjacency	.1.3.6.1.3.37.2.0.13
	isisLSPTooLargeToPropagate	.1.3.6.1.3.37.2.0.14
	isisOriginatingLSPBufferSizeMismatch	.1.3.6.1.3.37.2.0.15
	isisProtocolsSupportedMismatch	.1.3.6.1.3.37.2.0.16
I3vpnlib.mib	mplsVrflfUp 1	.1.3.6.1.3.118.0.
	mplsVrflfDown	.1.3.6.1.3.118.0.2
	mplsNumVrfRouteMidThreshExceeded	.1.3.6.1.3.118.0.3
	mplsNumVrfRouteMaxThreshExceeded	.1.3.6.1.3.118.0.4
	mplsNumVrfSecIllglLbLThrshExcd	.1.3.6.1.3.118.0.5
rfc2819a.mib	RMON_Rise_Alarm	.1.3.6.1.2.1.16.0.1
	Note: Alarm type is Threshold Alarms and severity is Warning	
	RMON_Falling_Alarm	.1.3.6.1.2.1.16.0.2
	Note: Alarm type is Threshold Alarms and severity is Warning	

M-Series and T-Series Juniper Networks Traps

M-series and T-series platform Juniper Networks traps are defined in the MIB files listed in Table A-11. Unless otherwise noted, the alarm type for these traps is “Juniper Alarms” and the severity level is “Normal.”

Table A-11 M-series and T-series Juniper Networks traps

MIB Name	Trap Name	OID
mib-jnx-mpls.txt	mplsLspUp	.1.3.6.1.4.1.2636.3.2.4.1
	mplsLspDown	.1.3.6.1.4.1.2636.3.2.4.2
	mplsLspChange	.1.3.6.1.4.1.2636.3.2.4.3
mib-jnx-sonetaps.txt	apsEventSwitchover	.1.3.6.1.4.1.2636.3.24.2.0.1
	apsEventModeMismatch	.1.3.6.1.4.1.2636.3.24.2.0.2
	apsEventChannelMismatch	.1.3.6.1.4.1.2636.3.24.2.0.3
	apsEventPSBF	.1.3.6.1.4.1.2636.3.24.2.0.4
	apsEventFEPLF	.1.3.6.1.4.1.2636.3.24.2.0.5
mib-jnx-vpn.txt	jnxVpnIfUp	.1.3.6.1.4.1.2636.3.26.0.1
	jnxVpnIfDown	.1.3.6.1.4.1.2636.3.26.0.2
	jnxVpnPwUp	.1.3.6.1.4.1.2636.3.26.0.3

Table A-11 M-series and T-series Juniper Networks traps (continued)

MIB Name	Trap Name	OID
	jnxVpnPwDown	.1.3.6.1.4.1.2636.3.26.0.4
mib-jnx-chassis.txt	jnxPowerSupplyFailure	.1.3.6.1.4.1.2636.4.1.1
	jnxFanFailure	.1.3.6.1.4.1.2636.4.1.2
	jnxOverTemperature	.1.3.6.1.4.1.2636.4.1.3
	jnxRedundancySwitchover	.1.3.6.1.4.1.2636.4.1.4
	jnxFruRemoval	.1.3.6.1.4.1.2636.4.1.5
	jnxFruInsertion	.1.3.6.1.4.1.2636.4.1.6
	jnxFruPowerOff	.1.3.6.1.4.1.2636.4.1.7
	jnxFruPowerOn	.1.3.6.1.4.1.2636.4.1.8
	jnxPowerSupplyOK	.1.3.6.1.4.1.2636.4.2.1
	jnxFanOK	.1.3.6.1.4.1.2636.4.2.2
	jnxTemperatureOK	.1.3.6.1.4.1.2636.4.2.3
mib-jnx-rmon.txt	jnxRmonAlarmGetFailure	.1.3.6.1.4.1.2636.4.3.0.1
	jnxRmonGetOk	.1.3.6.1.4.1.2636.4.3.0.2
mib-jnx-ldp.txt	jnxLdpLspUp	.1.3.6.1.4.1.2636.4.4.0.1
	jnxLdpLspDown	.1.3.6.1.4.1.2636.4.4.0.2
	jnxLdpSesUp	.1.3.6.1.4.1.2636.4.4.0.3
	jnxLdpSesDown	.1.3.6.1.4.1.2636.4.4.0.4
mib-jnx-cfgmgmt.txt	jnxCmCfgChange	.1.3.6.1.4.1.2636.4.5.0.1
mib-jnx-sonet.txt	jnxSonetAlarmSet	.1.3.6.1.4.1.2636.4.6.0.1
	jnxSonetAlarmCleared	.1.3.6.1.4.1.2636.4.6.0.2
mib-jnx-pmon.txt	jnxPMonOverloadSet	.1.3.6.1.4.1.2636.4.7.0.1
	jnxPMonOverloadCleared	.1.3.6.1.4.1.2636.4.7.0.2
mib-jnx-bgpmib2.txt	jnxBgpM2Established	.1.3.6.1.4.1.2636.5.1.1.1.0.1
	jnxBgpM2BackwardTransition	.1.3.6.1.4.1.2636.5.1.1.1.0.2

SDX Software Traps

See the following section for a list of SDX software Juniper Networks traps.

SDX Software Juniper Networks Traps

SDX software traps are defined in the MIB file `jnxSdxRtrap.mi2`. Unless otherwise noted, the alarm type for these traps is “SDX Alarms” and the severity level is “Normal.”

Table A-12 SDX software (version 1) Juniper Networks traps

Trap Name	OID
saeHeapUsedClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.10
saeHeapUsedCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.11
saeHeapUsedMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.12
saeHeapUsedMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.13
saeLoginsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.20
saeLoginsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.21
saeLoginsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.22
saeLoginsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.23
saeLogoutsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.30
saeLogoutsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.31
saeLogoutsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.32
saeLogoutsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.33
saeServiceActClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.40
saeServiceActCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.41
saeServiceActMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.42
saeServiceActMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.43
saeServiceDeactClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.50
saeServiceDeactCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.51
saeServiceDeactMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.52
saeServiceDeactMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.53
saeCurrentUsersClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.60
saeCurrentUsersCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.61
saeCurrentUsersMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.62
saeCurrentUsersMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.63
saeUserNumLicClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.70
saeUserNumLicCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.71
saeUserNumLicMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.72
saeUserNumLicMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.73
saeUserLicExpiryClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.80
saeUserLicExpiryCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.81
saeUserLicExpiryMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.82
saeUserLicExpiryMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.83
licenseNetworkCapacityTrap	.1.3.6.1.4.1.4874.6.1.10.0.90
serviceLicenseClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.100

Table A-12 SDX software (version 1) Juniper Networks traps (continued)

Trap Name	OID
serviceLicenseCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.101
serviceLicenseMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.102
serviceLicenseMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.103
serviceSessionLicenseClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.110
serviceSessionLicenseCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.111
serviceSessionLicenseMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.112
serviceSessionLicenseMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.113
saeAccInvSvrAddrClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.200
saeAccInvSvrAddrCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.201
saeAccInvSvrAddrMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.202
saeAccInvSvrAddrMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.203
saeAccRoundTripTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.210
saeAccRoundTripTimeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.211
saeAccRoundTripTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.212
saeAccRoundTripTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.213
saeAccRetransClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.220
saeAccRetransCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.221
saeAccRetransMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.222
saeAccRetransMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.223
saeAccMalformedRespClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.230
saeAccMalformedRespCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.231
saeAccMalformedRespMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.232
saeAccMalformedRespMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.233
saeAccBadAuthentClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.240
saeAccBadAuthentCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.241
saeAccBadAuthentMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.242
saeAccBadAuthentMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.243
saeAccPendingsReqsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.250
saeAccPendingsReqsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.251
saeAccPendingsReqsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.252
saeAccPendingsReqsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.253
saeAccTimeoutsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.260
saeAccTimeoutsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.261
saeAccTimeoutsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.262

Table A-12 SDX software (version 1) Juniper Networks traps (continued)

Trap Name	OID
saeAccTimeoutsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.263
saeAccUnknownTypesClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.270
saeAccUnknownTypesCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.271
saeAccUnknownTypesMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.272
saeAccUnknownTypesMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.273
saeAccPktsDroppedClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.280
saeAccPktsDroppedCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.281
saeAccPktsDroppedMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.282
saeAccPktsDroppedMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.283
saeAuthInvSvrAddrClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.400
saeAuthInvSvrAddrCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.401
saeAuthInvSvrAddrMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.402
saeAuthInvSvrAddrMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.403
saeAuthRoundTripTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.410
saeAuthRoundTripTimeCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.411
saeAuthRoundTripTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.412
saeAuthRoundTripTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.413
saeAuthRetransClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.420
saeAuthRetransCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.421
saeAuthRetransMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.422
saeAuthRetransMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.423
saeAuthMalformedRespClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.430
saeAuthMalformedRespCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.431
saeAuthMalformedRespMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.432
saeAuthMalformedRespMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.433
saeAuthBadAuthentClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.440
saeAuthBadAuthentCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.441
saeAuthBadAuthentMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.442
saeAuthBadAuthentMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.443
saeAuthPendingReqsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.450
saeAuthPendingReqsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.451
saeAuthPendingReqsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.452
saeAuthPendingReqsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.453
saeAuthTimeoutsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.460

Table A-12 SDX software (version 1) Juniper Networks traps (continued)

Trap Name	OID
saeAuthTimeoutsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.461
saeAuthTimeoutsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.462
saeAuthTimeoutsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.463
saeAuthUnknownTypesClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.470
saeAuthUnknownTypesCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.471
saeAuthUnknownTypesMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.472
saeAuthUnknownTypesMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.473
saeAuthPcktsDroppedClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.480
saeAuthPcktsDroppedCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.481
saeAuthPcktsDroppedMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.482
saeAuthPcktsDroppedMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.483
copsManagedIntfClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.600
copsManagedIntfCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.601
copsManagedIntfMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.602
copsManagedIntfMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.603
copsUserSessionEstabClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.610
copsUserSessionEstabCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.611
copsUserSessionEstabMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.612
copsUserSessionEstabMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.613
copsUserSessionRmvdClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.620
copsUserSessionRmvdCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.621
copsUserSessionRmvdMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.622
copsUserSessionRmvdMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.623
copsErrorsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.630
copsErrorsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.631
copsErrorsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.632
copsErrorsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.633
copsTimeoutsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.640
copsTimeoutsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.641
copsTimeoutsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.642
copsTimeoutsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.643
copsAvgREQHandleTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.650
copsAvgREQHandleTimeCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.651
copsAvgREQHandleTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.652

Table A-12 SDX software (version 1) Juniper Networks traps (continued)

Trap Name	OID
copsAvgREQHandleTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.653
copsJobQueueLengthClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.660
copsJobQueueLengthCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.661
copsJobQueueLengthMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.662
copsJobQueueLengthMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.663
copsAvgQueueTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.670
copsAvgQueueTimeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.671
copsAvgQueueTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.672
copsAvgQueueTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.673
copsAgeOldQueueMemberClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.680
copsAgeOldQueueMemberCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.681
copsAgeOldQueueMemberMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.682
copsAgeOldQueueMemberMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.683
copsClientsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.690
copsClientsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.691
copsClientsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.692
copsClientsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.693
copsIgnoredRequestsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.700
copsIgnoredRequestsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.701
copsIgnoredRequestsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.702
copsIgnoredRequestsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.703
copsConnectionClosed	.1.3.6.1.4.1.4874.6.1.10.0.715
copsConnectionUp	.1.3.6.1.4.1.4874.6.1.10.0.725
copsConnectionDown	.1.3.6.1.4.1.4874.6.1.10.0.735
copsConnectionRejected	.1.3.6.1.4.1.4874.6.1.10.0.745
copsOverload	.1.3.6.1.4.1.4874.6.1.10.0.751
wkfInstanceSizeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.900
wkfInstanceSizeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.901
wkfInstanceSizeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.902
wkfInstanceSizeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.903
wkfEventSizeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.910
wkfEventSizeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.911
wkfEventSizeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.912
wkfEventSizeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.913

Table A-12 SDX software (version 1) Juniper Networks traps (continued)

Trap Name	OID
wkfReportSizeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.920
wkfReportSizeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.921
wkfReportSizeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.922
wkfReportSizeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.923
wkfPersistentSizeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.930
wkfPersistentSizeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.931
wkfPersistentSizeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.932
wkfPersistentSizeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.933
wkfCancelledClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.940
wkfCancelledCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.941
wkfCancelledMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.942
wkfCancelledMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.943
wkfPendingEventsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.950
wkfPendingEventsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.951
wkfPendingEventsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.952
wkfPendingEventsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.953
wkfActiveClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.960
wkfActiveCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.961
wkfActiveMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.962
wkfActiveMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.963
wkfRunningClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.970
wkfRunningCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.971
wkfRunningMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.972
wkfRunningMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.973
agentStarted	.1.3.6.1.4.1.4874.6.1.10.0.1105
agentRestartFailed	.1.3.6.1.4.1.4874.6.1.10.0.1111
agentShutdown	.1.3.6.1.4.1.4874.6.1.10.0.1125
agentLdapLimitClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1130
agentLdapLimitCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1131
agentLdapLimitMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1132
agentLdapLimitMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1133
componentUp	.1.3.6.1.4.1.4874.6.1.10.0.1145
componentDown	.1.3.6.1.4.1.4874.6.1.10.0.1155
dirConnected	.1.3.6.1.4.1.4874.6.1.10.0.1305

Table A-12 SDX software (version 1) Juniper Networks traps (continued)

Trap Name	OID
dirConnectionFailure	.1.3.6.1.4.1.4874.6.1.10.0.1311
dirNotAvail	.1.3.6.1.4.1.4874.6.1.10.0.1321
penAvgPGModProcTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1500
penAvgPGModProcTimeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1501
penAvgPGModProcTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1502
penAvgPGModProcTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1503
penAvgICMModProcTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1510
penAvgICMModProcTimeCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1511
penAvgICMModProcTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1512
penAvgICMModProcTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1513
pdpErrorsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1520
pdpErrorsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1521
pdpErrorsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1522
pdpErrorsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1523

Table A-13 SDX software (version 2) Juniper Networks traps

Trap Name	OID
saeHeapUsedClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.10.10
saeHeapUsedCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.11.11
saeHeapUsedMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.12.12
saeHeapUsedMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.13.13
saeLoginsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.20.20
saeLoginsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.21.21
saeLoginsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.22.22
saeLoginsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.23.23
saeLogoutsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.30.30
saeLogoutsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.31.31
saeLogoutsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.32.32
saeLogoutsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.33.33
saeServiceActClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.40.40
saeServiceActCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.41.41
saeServiceActMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.42.42
saeServiceActMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.43.43

Table A-13 SDX software (version 2) Juniper Networks traps (continued)

Trap Name	OID
saeServiceDeactClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.50.50
saeServiceDeactCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.51.51
saeServiceDeactMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.52.52
saeServiceDeactMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.53.53
saeCurrentUsersClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.60.60
saeCurrentUsersCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.61.61
saeCurrentUsersMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.62.62
saeCurrentUsersMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.63.63
saeUserNumLicClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.70.70
saeUserNumLicCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.71.71
saeUserNumLicMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.72.72
saeUserNumLicMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.73.73
saeUserLicExpiryClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.80.80
saeUserLicExpiryCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.81.81
saeUserLicExpiryMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.82.82
saeUserLicExpiryMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.83.83
licenseNetworkCapacityTrap	.1.3.6.1.4.1.4874.6.1.10.0.90.90
serviceLicenseClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.100.100
serviceLicenseCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.101.101
serviceLicenseMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.102.102
serviceLicenseMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.103.103
serviceSessionLicenseClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.110.110
serviceSessionLicenseCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.111.111
serviceSessionLicenseMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.112.112
serviceSessionLicenseMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.113.113
saeAccInvSvrAddrClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.200.200
saeAccInvSvrAddrCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.201.201
saeAccInvSvrAddrMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.202.202
saeAccInvSvrAddrMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.203.203
saeAccRoundTripTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.210.210
saeAccRoundTripTimeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.211.211
saeAccRoundTripTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.212.212
saeAccRoundTripTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.213.213
saeAccRetransClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.220.220

Table A-13 SDX software (version 2) Juniper Networks traps (continued)

Trap Name	OID
saeAccRetransCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.221.221
saeAccRetransMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.222.222
saeAccRetransMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.223.223
saeAccMalformedRespClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.230.230
saeAccMalformedRespCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.231.231
saeAccMalformedRespMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.232.232
saeAccMalformedRespMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.233.233
saeAccBadAuthentClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.240.240
saeAccBadAuthentCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.241.241
saeAccBadAuthentMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.242.242
saeAccBadAuthentMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.243.243
saeAccPendingsReqsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.250.250
saeAccPendingsReqsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.251.251
saeAccPendingsReqsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.252.252
saeAccPendingsReqsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.253.253
saeAccTimeoutsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.260.260
saeAccTimeoutsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.261.261
saeAccTimeoutsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.262.262
saeAccTimeoutsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.263.263
saeAccUnknownTypesClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.270.270
saeAccUnknownTypesCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.271.271
saeAccUnknownTypesMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.272.272
saeAccUnknownTypesMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.273.273
saeAccPktsDroppedClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.280.280
saeAccPktsDroppedCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.281.281
saeAccPktsDroppedMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.282.282
saeAccPktsDroppedMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.283.283
saeAuthInvSvrAddrClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.400.400
saeAuthInvSvrAddrCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.401.401
saeAuthInvSvrAddrMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.402.402
saeAuthInvSvrAddrMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.403.403
saeAuthRoundTripTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.410.410
saeAuthRoundTripTimeCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.411.411
saeAuthRoundTripTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.412.412

Table A-13 SDX software (version 2) Juniper Networks traps (continued)

Trap Name	OID
saeAuthRoundTripTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.413.413
saeAuthRetransClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.420.420
saeAuthRetransCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.421.421
saeAuthRetransMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.422.422
saeAuthRetransMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.423.423
saeAuthMalformedRespClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.430.430
saeAuthMalformedRespCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.431.431
saeAuthMalformedRespMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.432.432
saeAuthMalformedRespMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.433.433
saeAuthBadAuthentClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.440.440
saeAuthBadAuthentCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.441.441
saeAuthBadAuthentMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.442.442
saeAuthBadAuthentMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.443.443
saeAuthPendingReqsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.450.450
saeAuthPendingReqsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.451.451
saeAuthPendingReqsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.452.452
saeAuthPendingReqsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.453.453
saeAuthTimeoutsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.460.460
saeAuthTimeoutsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.461.461
saeAuthTimeoutsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.462.462
saeAuthTimeoutsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.463.463
saeAuthUnknownTypesClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.470.470
saeAuthUnknownTypesCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.471.471
saeAuthUnknownTypesMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.472.472
saeAuthUnknownTypesMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.473.473
saeAuthPcktsDroppedClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.480.480
saeAuthPcktsDroppedCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.481.481
saeAuthPcktsDroppedMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.482.482
saeAuthPcktsDroppedMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.483.483
copsManagedIntfClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.600.600
copsManagedIntfCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.601.601
copsManagedIntfMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.602.602
copsManagedIntfMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.603.603
copsUserSessionEstabClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.610.610

Table A-13 SDX software (version 2) Juniper Networks traps (continued)

Trap Name	OID
copsUserSessionEstabCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.611.611
copsUserSessionEstabMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.612.612
copsUserSessionEstabMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.613.613
copsUserSessionRmvdClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.620.620
copsUserSessionRmvdCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.621.621
copsUserSessionRmvdMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.622.622
copsUserSessionRmvdMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.623.623
copsErrorsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.630.630
copsErrorsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.631.631
copsErrorsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.632.632
copsErrorsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.633.633
copsTimeoutsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.640.640
copsTimeoutsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.641.641
copsTimeoutsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.642.642
copsTimeoutsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.643.643
copsAvgREQHandleTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.650.650
copsAvgREQHandleTimeCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.651.651
copsAvgREQHandleTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.652.652
copsAvgREQHandleTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.653.653
copsJobQueueLengthClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.660.660
copsJobQueueLengthCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.661.661
copsJobQueueLengthMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.662.662
copsJobQueueLengthMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.663.663
copsAvgQueueTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.670.670
copsAvgQueueTimeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.671.671
copsAvgQueueTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.672.672
copsAvgQueueTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.673.673
copsAgeOldQueueMemberClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.680.680
copsAgeOldQueueMemberCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.681.681
copsAgeOldQueueMemberMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.682.682
copsAgeOldQueueMemberMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.683.683
copsClientsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.690.690
copsClientsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.691.691
copsClientsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.692.692

Table A-13 SDX software (version 2) Juniper Networks traps (continued)

Trap Name	OID
copsClientsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.693.693
copsIgnoredRequestsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.700.700
copsIgnoredRequestsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.701.701
copsIgnoredRequestsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.702.702
copsIgnoredRequestsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.703.703
copsConnectionClosed	.1.3.6.1.4.1.4874.6.1.10.0.715.715
copsConnectionUp	.1.3.6.1.4.1.4874.6.1.10.0.725.725
copsConnectionDown	.1.3.6.1.4.1.4874.6.1.10.0.735.735
copsConnectionRejected	.1.3.6.1.4.1.4874.6.1.10.0.745.745
copsOverload	.1.3.6.1.4.1.4874.6.1.10.0.751.751
wkfInstanceSizeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.900.900
wkfInstanceSizeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.901.901
wkfInstanceSizeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.902.902
wkfInstanceSizeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.903.903
wkfEventSizeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.910.910
wkfEventSizeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.911.911
wkfEventSizeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.912.912
wkfEventSizeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.913.913
wkfReportSizeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.920.920
wkfReportSizeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.921.921
wkfReportSizeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.922.922
wkfReportSizeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.923.923
wkfPersistentSizeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.930.930
wkfPersistentSizeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.931.931
wkfPersistentSizeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.932.932
wkfPersistentSizeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.933.933
wkfCancelledClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.940.940
wkfCancelledCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.941.941
wkfCancelledMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.942.942
wkfCancelledMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.943.943
wkfPendingEventsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.950.950
wkfPendingEventsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.951.951
wkfPendingEventsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.952.952
wkfPendingEventsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.953.953

Table A-13 SDX software (version 2) Juniper Networks traps (continued)

Trap Name	OID
wkfActiveClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.960.960
wkfActiveCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.961.961
wkfActiveMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.962.962
wkfActiveMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.963.963
wkfRunningClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.970.970
wkfRunningCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.971.971
wkfRunningMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.972.972
wkfRunningMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.973.973
agentStarted	.1.3.6.1.4.1.4874.6.1.10.0.1105.1105
agentRestartFailed	.1.3.6.1.4.1.4874.6.1.10.0.1111.1111
agentShutdown	.1.3.6.1.4.1.4874.6.1.10.0.1125.1125
agentLdapLimitClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1130.1130
agentLdapLimitCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1131.1131
agentLdapLimitMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1132.1132
agentLdapLimitMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1133.1133
componentUp	.1.3.6.1.4.1.4874.6.1.10.0.1145.1145
componentDown	.1.3.6.1.4.1.4874.6.1.10.0.1155.1155
dirConnected	.1.3.6.1.4.1.4874.6.1.10.0.1305.1305
dirConnectionFailure	.1.3.6.1.4.1.4874.6.1.10.0.1311.1311
dirNotAvail	.1.3.6.1.4.1.4874.6.1.10.0.1321.1321
penAvgPGModProcTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1500.1500
penAvgPGModProcTimeCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1501.1501
penAvgPGModProcTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1502.1502
penAvgPGModProcTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1503.1503
penAvgICMModProcTimeClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1510.1510
penAvgICMModProcTimeCritAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1511.1511
penAvgICMModProcTimeMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1512.1512
penAvgICMModProcTimeMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1513.1513
pdpErrorsClearAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1520.1520
pdpErrorsCriticalAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1521.1521
pdpErrorsMajorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1522.1522
pdpErrorsMinorAlarm	.1.3.6.1.4.1.4874.6.1.10.0.1523.1523

