

JUNOScope 7.4 Software Release Notes

Release 7.4R4
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These release notes accompany Release 7.4R4 of the JUNOScope software. They describe the key features, documentation, and known problems with the software. The JUNOScope software is a network management application that provides router configuration management, inventory management, operational status, and troubleshooting tools for Juniper Networks J-series, M-series, and T-series routing platforms.

You can also find these release notes on the Juniper Networks Technical Publications Web page, which is located at <http://www.juniper.net/techpubs/>.

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Release 7.4 Features

The following features have been added to JUNOScope Release 7.4:

- **Exporting JUNOScope Inventory Data to External Inventory Applications**—External Inventory applications can connect to the JUNOScope Inventory Management System database and extract inventory data scanned from Juniper Networks devices via a Structured Query Language (SQL) interface. MySQL database, an open source relational database management system (RDBMS), is bundled with the JUNOScope software. The JUNOScope administrator must configure a unique username and password during the JUNOScope software installation to enable read-only access to the Inventory Management System database. The Inventory Management System database also includes a demo database that is populated with sample data so the user can generate sample reports without actually scanning inventory data on the production network. For more information, see the *JUNOScope Software User Guide*.
- **Multirouter Operations Labels**—The JUNOScope administrator can use labels to statically define a group of devices on which to perform JUNOScope operations, such as archive, restore, and inventory scanning. A label, consisting of a unique name and category (Label name: Category), provides a way to define static associations with a group of devices, such as 'Region: North', 'Customer: Important', and so on. You can associate a label with multiple devices, associate devices with labels, and use labels as criteria for creating a device group. Labels complement the existing Groups feature in JUNOScope, which provides a way to define dynamic associations with a group of devices. For more information, see the *JUNOScope Software User Guide*.

Current Software Release

The current JUNOScope software release is Release 7.4R4. For information about installing the software release, see “Installation, Reinstallation, Upgrade, Deinstallation, and Uninstallation Instructions” on page 3.

Resolved Issues

The following issues have been resolved since the previous software release. The identifier following the description is the tracking number in our bug database.

JUNOScope RADIUS Authentication now uses backup RADIUS servers for authentication. (PR 69900)

Installation, Reinstallation, Upgrade, Deinstallation, and Uninstallation Instructions

Before installing the JUNOScope software, ensure that your network meets the requirements described in the following sections:

- System Requirements on page 3
- JUNOScope Client Workstation Requirements on page 3
- RADIUS Server Requirements on page 3

To install, reconfigure, reinstall or upgrade, or deinstall the JUNOScope software, see the following sections:

- Installing the JUNOScope Software on page 4
- Reconfiguring the JUNOScope Software on page 5
- Reinstalling or Upgrading the JUNOScope Software on page 6
- Deinstalling the JUNOScope Software on page 6
- Uninstalling the JUNOScope Software on page 6

System Requirements

Before you install the JUNOScope software, ensure that the UNIX server workstation on which you install the software meets the system requirements shown in Table 1.

Table 1: JUNOScope Software Minimum System Requirements

System	Minimum Requirement
Workstation	UltraSPARC III or equivalent
Operating system	Solaris 5.8 or later
RAM	1 GB
Disk space	750 MB

JUNOScope Client Workstation Requirements

Ensure that the client workstation from which you connect to the JUNOScope software is running either Microsoft Internet Explorer 6 or Netscape Navigator 6 or later with JavaScript enabled.

RADIUS Server Requirements

Ensure that the RADIUS server complies with RFC 2865, Remote Authentication Dial-In User Service.

Installing the JUNOScope Software

You can install the JUNOScope software in one of the following ways:

- Installing the JUNOScope Software from the CD-ROM on page 4
- Downloading the JUNOScope Software from the Software Download Page on page 5

To upgrade the JUNOScope software, see “Reinstalling or Upgrading the JUNOScope Software” on page 6.

For more information about installing the JUNOScope software, see the *JUNOScope Software User Guide*.

Installing the JUNOScope Software from the CD-ROM

To install the JUNOScope software from the product CD-ROM, follow these steps:

1. Insert the JUNOScope software CD-ROM into the CD-ROM drive of the server workstation.
2. Mount the CD-ROM.

If the volume management (volmgt) daemon, vold, is running on your server, the CD-ROM automatically mounts itself. To mount the CD-ROM manually, follow the procedure for your operating system.

3. Start the JUNOScope installation:

```
hostname% cdrom-mount-directory/jtk-installer install-directory
```

Replace *cdrom-mount-directory* with the directory on which the CD-ROM is mounted: /mnt, /cdrom, or /cdrom/JUNOScope, depending on your host setup.

Replace *install-directory* with the directory in which to install the JUNOScope software. If you do not specify an installation directory, the software is installed in the current directory.

For more information about installing the JUNOScope software, see the *JUNOScope Software User Guide*.

Downloading the JUNOScope Software from the Software Download Page

To download the JUNOScope software from the Juniper Networks Web site and start the JUNOScope installation, follow these steps:

1. Using a Web browser, go to the following location:

```
https://www.juniper.net/junos/swdist/encryption/index.htm
```

2. Log in to the Juniper Networks authentication system using the username (generally your e-mail address) and password supplied by a Juniper Networks representative.
3. Download the JUNOScope software to the server workstation.
4. Start the JUNOScope installation program:

```
hostname% download-directory/jtk-install-7.4R4.X-sunos5-sparc.sh install-directory
```

Replace *download-directory* with the directory into which you downloaded the JUNOScope software from the software download page.

jtk-install-7.4R4.X-sunos5-sparc.sh is the JUNOScope software file. Replace *X* with the software version to download.

Replace *install-directory* with the directory in which to install the JUNOScope software. If you do not specify an installation directory, the software is installed in the current directory.

Reconfiguring the JUNOScope Software

You can change the following JUNOScope software installation settings without rerunning the installation program. For more information about these settings, see the *JUNOScope Software User Guide*.

- HTTPS and HTTP ports on which the JUNOScope Web server should listen
- Port on which the JUNOScope server listens for control messages
- HTTP port on which the JUNOScope report server should listen
- Java Database Connectivity (JDBC) URL for accessing the JUNOScope database and demo database
- Enable or disable access for SQL interface to Inventory Management System
- Debug logging
- Idle session timeout
- Licensed software modules

You cannot change some settings, such as passwords.

To change JUNOScope software settings, use the following command:

```
hostname% <install-directory>/jtk/bin/jtk-setup.sh
```

Reinstalling or Upgrading the JUNOScope Software

The process for reinstalling or upgrading the JUNOScope software is the same as for installing the software. To install the JUNOScope software, see “Installing the JUNOScope Software from the CD-ROM” on page 4 or “Downloading the JUNOScope Software from the Software Download Page” on page 5.

To reinstall or upgrade JUNOScope software, you must use the same user ID as the one used for the currently installed software.

Deinstalling the JUNOScope Software

Deinstalling the JUNOScope software means that you can uninstall the current version of the JUNOScope software, then install an older version separately. The software features of the older version will apply, but the database contents, such as device configurations and Inventory Management System scan data, will be lost.

To deinstall the JUNOScope software, you must use the same user ID as the one used for the currently installed software.

To deinstall the JUNOScope software and install an older version, follow these steps:

1. Export all of the configurations stored in the CVS repository from the current version using Settings > Import/Export Data.
2. Uninstall the current JUNOScope software. (For more information about uninstalling JUNOScope, see the *JUNOScope Software User Guide*.)
3. Reinstall the older version of JUNOScope. See the installation instructions for the older version of JUNOScope.
4. Import all the configurations again using Settings > Import/Export Data.

Uninstalling the JUNOScope Software

To uninstall the JUNOScope software, follow these steps:

1. Stop the JUNOScope software and database by changing to the directory where you installed the JUNOScope software and typing the following command:

```
hostname% <install-directory>/jtk/rc.d/jtk stop
```

2. Remove the JUNOScope software by typing the following command:

```
hostname% rm -rf <install-directory>
```



WARNING: This command removes the JUNOScope <install-directory>, including all data.

Related Juniper Networks Documentation

Table 2 lists the software and hardware guides and release notes for Juniper Networks J-series, M-series, and T-series routing platforms and describes the contents of each document. Table 3 lists the books included in the *Network Operations Guide* series.

Table 2: Technical Documentation for J-series, M-series, and T-series Routing Platforms (Sheet 1 of 3)

Document	Description
JUNOS Internet Software for J-series, M-series, and T-series Routing Platforms Configuration Guides	
<i>Class of Service</i>	Provides an overview of the class-of-service (CoS) functions of the JUNOS software and describes how to configure CoS features, including configuring multiple forwarding classes for transmitting packets, defining which packets are placed into each output queue, scheduling the transmission service level for each queue, and managing congestion through the random early detection (RED) algorithm.
<i>Feature Guide</i>	Provides a detailed explanation and configuration examples for several of the most complex features in the JUNOS software.
<i>JUNOS-FIPS</i>	(M-series and T-series routing platforms only) Provides an overview of JUNOS-FIPS 140-2 concepts and describes how to install and configure the JUNOS-FIPS software. Describes FIPS-related commands and how to configure, authorize, and zeroize the Adaptive Services (AS) II FIPS Physical Interface Card (PIC).
<i>MPLS Applications</i>	Provides an overview of traffic engineering concepts and describes how to configure traffic engineering protocols.
<i>Multicast Protocols</i>	Provides an overview of multicast concepts and describes how to configure multicast routing protocols.
<i>Network Interfaces</i>	Provides an overview of the network interface functions of the JUNOS software and describes how to configure the network interfaces on the routing platform.
<i>Network Management</i>	Provides an overview of network management concepts and describes how to configure various network management features, such as SNMP and accounting options.
<i>Policy Framework</i>	Provides an overview of policy concepts and describes how to configure routing policy, firewall filters, forwarding options, and cflowd.
<i>Routing Protocols</i>	Provides an overview of routing concepts and describes how to configure routing, routing instances, and unicast routing protocols.
<i>Services Interfaces</i>	Provides an overview of the services interfaces functions of the JUNOS software and describes how to configure the services interfaces on the routing platform.
<i>System Basics</i>	Provides an overview of the JUNOS software and describes how to install and upgrade the software. This guide also describes how to configure system management functions and how to configure the chassis, including user accounts, passwords, and redundancy.
<i>VPNs</i>	Provides an overview and describes how to configure Layer 2 and Layer 3 virtual private networks (VPNs), virtual private LAN service (VPLS), and Layer 2 circuits. Provides configuration examples.
JUNOS References	
<i>Interfaces Command Reference</i>	Describes the JUNOS software operational mode commands you use to monitor and troubleshoot interfaces.
<i>Routing Protocols and Policies Command Reference</i>	Describes the JUNOS software operational mode commands you use to monitor and troubleshoot routing protocols and policies, including firewall filters.

Table 2: Technical Documentation for J-series, M-series, and T-series Routing Platforms (Sheet 2 of 3)

Document	Description
<i>System Basics and Services Command Reference</i>	Describes the JUNOS software operational mode commands you use to monitor and troubleshoot system basics, including commands for real-time monitoring and route (or path) tracing, system software management, and chassis management. Also describes commands for monitoring and troubleshooting services such as CoS, IP Security (IPSec), stateful firewalls, flow collection, and flow monitoring.
<i>System Log Messages Reference</i>	Describes how to access and interpret system log messages generated by JUNOS software modules and provides a reference page for each message.
J-Web User Guide	
<i>J-Web Interface User Guide</i>	Describes how to use the J-Web GUI to configure, monitor, and manage Juniper Networks routing platforms.
JUNOS API and Scripting Documentation	
<i>JUNOScript API Guide</i>	Describes how to use the JUNOScript application programming interface (API) to monitor and configure Juniper Networks routing platforms.
<i>JUNOS XML API Configuration Reference</i>	Provides reference pages for the configuration tag elements in the JUNOS XML API.
<i>JUNOS XML API Operational Reference</i>	Provides reference pages for the operational tag elements in the JUNOS XML API.
<i>JUNOS Configuration and Diagnostic Automation Guide</i>	Provides an overview, instructions for using, and examples of the commit script and self-diagnosis features of the JUNOS software. This guide explains how to enforce custom configuration rules defined in scripts that run at commit time, how to use commit script macros to provide simplified aliases for frequently used configuration statements, and how to configure diagnostic event policies and actions associated with each policy.
<i>NETCONF API Guide</i>	Describes how to use the NETCONF API to monitor and configure Juniper Networks routing platforms.
JUNOS Comprehensive Index and Glossary	
<i>Comprehensive Index and Glossary</i>	Provides a complete index of all JUNOS software books and the <i>JUNOScript API Guide</i> . Also provides a comprehensive glossary.
JUNOScope Documentation	
<i>JUNOScope Software User Guide</i>	Describes the JUNOScope software GUI, how to install and administer the software, and how to use the software to manage routing platform configuration files and monitor routing platform operations.
J-series Services Router Documentation	
<i>J-series Services Router Getting Started Guide</i>	Provides an overview, basic instructions, and specifications for J-series Services Routers. The guide explains how to prepare your site for installation, unpack and install the router and its components, install licenses, and establish basic connectivity.
<i>J-series Services Router Basic LAN and WAN Access Configuration Guide</i>	Explains how to configure the interfaces on J-series Services Routers for basic IP routing with standard routing protocols, ISDN backup, and digital subscriber line (DSL) connections.
<i>J-series Services Router Advanced WAN Access Configuration Guide</i>	Explains how to configure J-series Services Routers in virtual private networks (VPNs) and multicast networks, configure data link switching (DLSw) services, and apply routing techniques such as policies, stateless and stateful firewall filters, IP Security (IPSec) tunnels, and class-of-service (CoS) classification for safer, more efficient routing.
<i>J-series Services Router Administration Guide</i>	Shows how to manage users and operations, monitor network performance, upgrade software, and diagnose common problems on J-series Services Routers.
M-series and T-series Hardware Documentation	

Table 2: Technical Documentation for J-series, M-series, and T-series Routing Platforms (Sheet 3 of 3)

Document	Description
<i>Hardware Guide</i>	Describes how to install, maintain, and troubleshoot routing platforms and components. Each platform has its own hardware guide.
<i>PIC Guide</i>	Describes the routing platform PICs. Each platform has its own PIC guide.
Release Notes	
<i>JUNOS Release Notes</i>	Summarize new features and known problems for a particular software release, provide corrections and updates to published JUNOS and JUNOScript manuals, provide information that might have been omitted from the manuals, and describe upgrade and downgrade procedures.
<i>Hardware Release Notes</i>	Describe the available documentation for the routing platform and the supported PICs, and summarize known problems with the hardware and accompanying software. Each platform has its own release notes.
<i>JUNOScope Software Release Notes</i>	Contain corrections and updates to the published JUNOScope manual, provide information that might have been omitted from the manual, and describe upgrade and downgrade procedures.
<i>J-series Services Router Release Notes</i>	Briefly describe the J-series Services Router features, identify known hardware problems, and provide upgrade and downgrade instructions.

Table 3: JUNOS Internet Software Network Operations Guides

Book	Description
JUNOS Internet Software for M-series and T-series Routing Platforms Network Operations Guides	
<i>Baseline</i>	Describes the most basic tasks for running a network using Juniper Networks products. Tasks include upgrading and reinstalling JUNOS software, gathering basic system management information, verifying your network topology, and searching log messages.
<i>Interfaces</i>	Describes tasks for monitoring interfaces. Tasks include using loopback testing and locating alarms.
<i>MPLS</i>	Describes tasks for configuring, monitoring, and troubleshooting an example MPLS network. Tasks include verifying the correct configuration of the MPLS and RSVP protocols, displaying the status and statistics of MPLS running on all routers in the network, and using the layered MPLS troubleshooting model to investigate problems with an MPLS network.
<i>MPLS Log Reference</i>	Describes MPLS status and error messages that appear in the output of the <code>show mpls lsp extensive</code> command. The guide also describes how and when to configure Constrained Shortest Path First (CSPF) and RSVP trace options, and how to examine a CSPF or RSVP failure in a sample network.
<i>Hardware</i>	Describes tasks for monitoring M-series and T-series routing platforms.

How To Request Support

For technical support, open a support case using the Case Manager link at <http://www.juniper.net/support/> or call 1-888-314-JTAC (from the United States, Canada, or Mexico) or 1-408-745-9500 (from elsewhere).

For documentation issues, fill out the bug report form located at <https://www.juniper.net/techpubs/docbug/docbugreport.html>.

Revision History

24 October 2005—Revision 1, JUNOScope Release 7.4R1

20 January 2006—Revision 2, JUNOScope Release 7.4R2

1 May 2006—Revision 3, JUNOScope Release 7.4R3

11 August 2006—Revision 4, JUNOScope Release 7.4R4

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