

Junos[®] Space Security Director 14.1R3

Release Notes

Release 14.1R3
May 2015

The Junos Space Network Management Platform provides network administrators with the essential tools for automating network operations, including device discovery and management, topology visualization, device image and script deployment, network monitoring, job operations and user account management, audit logging, and network administration. Network administration tasks include management of the Junos Space fabric (comprising one or more IP-connected nodes), databases, licenses, applications, authorization servers, tags, permission labels, and DMI schemas, along with troubleshooting.

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Security Director Release Notes

The Junos Space Security Director application is a powerful and easy-to-use solution that lets you secure your network by creating and publishing firewall policies, IPsec VPNs, NAT policies, IPS policies, and application firewalls. (To push IPS and application firewall signatures to a device, you also need IPS and application firewall licenses.)

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Installing Security Director

In Junos Space Security Director 14.1R3, a single image (Security-Director.14.1R3.x.img) installs Security Director, Log Director, and the Security Director Logging and Reporting module. Installing Security Director Release 14.1R3 image installs all three applications. You must deploy the Log Collector and then add the Log collector to Junos Space Network Management Platform fabric to view the log data in Dashboard, Event Viewer, Reports, and Alerts.

Instructions for Validating the Log Collector OVA Image

In Junos Space Security Director 14.1R3, Log Collector open virtual appliance (OVA) image is securely signed. You can validate the image by performing the following tasks:



NOTE:

- Validating the OVA image is optional; you can install or upgrade Log Collector without validating the OVA image.
- Before you validate the OVA image, ensure that the PC on which you are performing the validation has the following utilities available: tar, openssl, and ovftool (VMWare Open Virtualization Format [OVF] Tool). You can download the VMWare OVF Tool from the following location:
<https://my.vmware.com/web/vmware/details?productId=353&downloadGroup=OVFTOOL351>

- Download the Log Collector OVA image and the Juniper Networks Root certificate file (**JuniperRootRSACA.pem**) from the Junos Space Security Director 14.1R1 download page at <http://www.juniper.net/support/downloads/?p=spacesecdir#sw>.



NOTE: You need to download the Juniper Networks Root certificate file only once; you can use the same file to validate OVA images for future releases of Junos Space Network Management Platform.

- (Optional) If you download the OVA image and the certificate file to a PC running Windows, copy the two files to a temporary directory on a PC running Linux or UNIX. You can also copy the OVA image and the certificate file to a temporary directory (**/var/tmp** or **/tmp**) on a Junos Space node.



NOTE: Ensure that the OVA image file and the Juniper Networks Root certificate file are not modified during the validation procedure. You can do this by providing write access to these files only to the user performing the validation procedure. This is especially important if you use a generally accessible temporary directory, such as **/tmp** or **/var/tmp**, because such directories can be accessed by several users. Make sure to take precautions to ensure that the files are not modified by other users during the validation procedure.

- Navigate to the directory containing the OVA image.
- Unpack the OVA image by executing the following command:

```
tar xf ova-filename
```

where *ova-filename* is the filename of the unpacked OVF file contained within the previously downloaded OVA image.

- After the unpacked OVF file is validated, validate the signing certificate with the Juniper Networks Root CA file by executing the following command:

```
openssl verify -CAfile JuniperRootRSACA.pem -untrusted Certificate-Chain-File  
Signature-file
```

where **JuniperRootRSACA.pem** is the Juniper Networks Root CA file, *Certificate-Chain-File* is the filename of the unpacked certificate chain file (extension **.pem**), and *Signature-file* is the filename of the unpacked signature file (extension **.cert**).

If the validation is successful, a message indicating that the validation is successful is displayed.

A sample of the validation procedure is as follows:

```
[user@host ~]# ovftool /root/Log-Collector.14.1.ovf
OVF version: 1.0
VirtualApp: false
Name: Log-Collector.14.1
```

```
Download Size: 1.22 GB
```

```
Deployment Sizes:
```

```
Flat disks: 564.00 GB
```

```
Sparse disks: 2.98 GB
```

```
Networks:
```

```
Name: VM Network
```

```
Description: The VM Network network
```

```
Virtual Machines:
```

```
Name: Log-Collector.14.1
```

```
Operating System: centos64guest
```

```
Virtual Hardware:
```

```
Families: vmx-07
```

```
Number of CPUs: 2
```

```
Cores per socket: 1
```

```
Memory: 8.00 GB
```

```
Disks:
```

```
Index: 0
```

```
Instance ID: 8
```

```
Capacity: 64.00 GB
```

```
Disk Types: SCSI-lsilogic
```

```
Index: 1
```

```
Instance ID: 9
```

```
Capacity: 500.00 GB
```

```
Disk Types: SCSI-lsilogic
```

```
NICs:
```

```
Adapter Type: E1000
```

```
Connection: VM Network
```

```
Adapter Type: E1000
```

```
Connection: VM Network
```

```
Adapter Type: E1000
```

```
Connection: VM Network
```

```
[root@NWAPPLIANCE24079 ~]# openssl verify -CAfile JuniperRootRSACA.pem
-untrusted junos-space-certchain.pem Log-Collector-ESX.14.1R1.9.cert
Log-Collector-ESX.14.1R1.9.cert: OK
```

6. (Optional) If the validation is not successful, perform the following tasks:
 - a. Determine if the contents of the OVA image have been modified. If the contents have been modified, download the OVA image from the Junos Space Network Management Platform downloads page.

- b. Determine whether the Juniper Networks Root CA file is corrupted or modified. If it was corrupted or modified, download the certificate file from the Junos Space Network Management Platform downloads page.
- c. Retry the preceding validation steps using one or both new files.

Upgrading Prerequisites

To upgrade Security Director, Log Director, and Security Director Logging and Reporting the following prerequisites must be met:

- Upgrade Network Management Platform to Network Management Platform Release 14.1R3.x before upgrading Security Director, Log Director, and Security Director Logging and Reporting.
- In Junos Space Security Director 14.1R3, a single image upgrades Security Director, Log Director, and Security Director Logging and Reporting module. Upgrading to Security Director Release 14.1R3, upgrades all three applications.



NOTE: The procedure is the same for virtual environments and JA2500 appliances.

Upgrading Security Director

To upgrade Security Director Release 14.1R3, perform the following steps:

1. Download the **Security-Director.14.1R3.x.img** file from the [Download Site](#).
2. Select **Administration > Applications > Security Director**. Right-click and select **Upgrade Application**.

Upload the image using the **Upload via HTTP** or **Upload via SCP** option.

3. Click **Upgrade**.

The Job Management tab shows the upgrade status.

You can directly upgrade to Security Director Release 14.1R3 from the following earlier Security Director releases:

- 14.1R1 (Security Director running on the Network Management Platform Release 14.1R1)
- 14.1R2 (Security Director running on the Network Management Platform Release 14.1R2)

Installing Virtual Log Collectors

1. Download the **Log-Collector-ESX.14.1R2.12.ova** file from the [Download Site](#).
2. Install the OVA image to deploy a Log Collector or Log Concentrator on to ESX server.
3. Add the Log Collector subsystem as a specialized node on the Junos Space Network Management Platform Fabric. For more information, see Chapter 2 of the [Getting Started Guide](#) for instructions on adding the Log Collector nodes as a specialized node.



NOTE: The virtual logging nodes can be added to Junos Space Network Management Platform running on both a virtual and a JA2500 environment.

Installing JA2500 Appliance as a Log Collector

Beginning with Release 14.1R2, you can use a JA2500 appliance as a Log Collector and a Log Concentrator.

To install JA2500 appliance as a Log Collector or a Log Concentrator, perform the following steps:

1. Create a bootable USB drive. You can use any third party conversion software tool (for example, Rufus) to perform image conversion.



NOTE: DISCLAIMER: Juniper does not endorse any particular conversion tool. Juniper disclaims any and all assurances, representations and warranties of any kind, express or implied, including without limitation any warranty as to quality, merchantability or non-infringement, as to any third party software tools. Your use of such software is entirely at your own risk.

- . For more information, see Chapter 2 of the [Getting Started Guide](#) for instructions on Installing a JA2500 Log Collector appliance image using a USB drive.
2. Ensure that the appliance's BIOS boots from the USB drive instead of the appliance's hard disk.
3. Download the **Log-Director-JA2500.14.1R2.2.iso** file from the [Download Site](#) and then install the ISO image on the JA2500 appliance.
4. Select the node type as a Log Collector or a Log Concentrator.
5. Add the Log Collector subsystem as a specialized node on the Junos Space Network Management Platform Fabric. For more information, see Chapter 2 of the [Getting Started Guide](#) for instructions on adding the Log Collector nodes as a specialized node.



NOTE: The JA2500 logging nodes can be added to Junos Space Network Management Platform running on both virtual and JA2500 environment.

Installing the Integrated Log Collector on JA2500 Appliance

In this section, the JA2500 as an integrated deployment runs Junos Space, Security Director, Log Director, and Log Collector VM.

To install the Log Collector VM application on the Junos Space Network Management Platform:

1. Log in to the Junos Space Network Management Platform user interface.

The box at the top of the task tree displays Junos Space Network Management Platform by default.

2. Select **Network Management Platform > Administration > Applications**.
3. Click the **Add Application** icon.
4. Upload the Log Collector VM image (Log-Collector-JA.14.1R2.X-VM.img) by performing either of the following steps:
 - a. Click **Upload via SCP**.

The Upload Software via SCP dialog box appears. You must provide the following Secure Copy remote machine credentials:

- Add your username.
- Add your password.
- Confirm by adding your password again.
- Add the host IP address.
- Add the local pathname of the Junos software application file.
- Click **Upload**.

5. To verify that the Upload Application job is complete, click **Job ID** on the Jobs > Job Management inventory page. Wait until the job is completed and to ensure that the job is successful.



NOTE: If the upload is successful, Log Collector VM is displayed on the Add Application page. The details of the application title, filename, version, release type, and the required Junos Space Network Management Platform version are also displayed.

6. Click the Add Application icon to install the Log Collector VM application.
7. Select the Log Collector VM image.
8. Click **Install**.

The Application Configuration dialog box is displayed.

9. Enter the IP address, subnet mask, default gateway, and the password for the Log Collector VM application. You are also prompted to configure the IP address for eth1 and eth2 interfaces.



NOTE: You will be prompted twice to enter the password. Use this password while adding a Log Collector virtual machine as a specialized node in the Junos Space Fabric.

10. Click **OK** to proceed.

The Application Management Job Information dialog box appears.

11. In the Application Management Job Information dialog box, click **Job ID** to see the Add Application job on the Jobs > Job Management inventory page. Wait until Log Director is fully deployed to ensure that the job is successful.
12. Log out from and log in to the Junos Space Network Management Platform for the changes to take effect.



NOTE: Ensure that you can ping the Log Collector subsystem using the configured IP address.

Upgrading the Log Collector

There is no special upgrade package for Log Collector 14.1R3. The latest version of Log Collector remains as 14.1R2.x for 14.1R3 release.

Supported Devices

Security Director 14.1R2 is supported on the following SRX Series hardware devices and LN Series hardware device:

- SRX100
- SRX110
- SRX210
- SRX220
- SRX240
- SRX240H
- SRX550
- SRX650
- SRX1400
- SRX3400
- SRX3600
- SRX5400
- SRX5600
- SRX5800
- LN1000-V
- LN2600

Supported Junos OS Releases

- Security Director 14.1R3 supports the following Junos OS branches:
 - 10.4
 - 11.4
 - 12.1
 - 12.1X44
 - 12.1X45
 - 12.1X46
 - 12.1X47
- SRX Series devices require Junos OS Release 12.1 and later releases to synchronize the Security Director description field with the device.
- The logical systems feature is supported on devices running Junos OS Release 11.4 and later.
- Junos OS Release 11.4 or a later release is required for AppFW feature support.



NOTE: Before you can manage an SRX Series device using Security Director, we recommend that you have the exact matching Junos OS schema installed on the Junos Space Network Management Platform. If there is a mismatch, a warning message is displayed during the publish preview workflow.

Supported Browsers

Security Director is best viewed on the following browsers:

- Mozilla Firefox
- Chrome
- Internet Explorer 8.0 and 9.0

Management Scalability

Security Director has been tested with a variety of customer configurations. A retail or branch configuration was tested with 10,000 devices and 100 firewall rules per device. Similarly, a data center scenario was tested with 10,000 rule policies, 20,000 address objects, and 3,000 custom service objects. Object Builder scale testing was performed with 50,000 address objects.

New Features

Beginning with Release 14.1R3, Security Director extends the Application Firewall (AppFW) support proven on SRX service gateways to vSRX virtual firewall. This capability allows

you to create application-control policies based on dynamic application name or group names.

Known Issues

- You must delete the Log Concentrator first in a set up having both Log Collector and Log Concentrator. Otherwise, the Log Concentrator does not function while re-adding to the Junos Space fabric. [PR 1090600]
- The Network Management Platform enables users to manage objects from all the allowed domains in the aggregated view. However, Security Director does not support this functionality. [PR 1053883]
- On upgrading Security Director from the Release 13.1 to 14.1R1, the Compare Snapshots shows the domain diff for almost all the rules even though the rules are same. [PR 1025719]
- The hub-and-spoke numbered (P2P) are imported as multiple S2S VPNs unlike UnNumbered HnS VPN. [PR 1026290]
- Dual hub-and-spoke VPN import is not supported. If the spoke has identical configuration pointing to both the hub devices, such as same IKE IDs, dual hub-and-spoke might not be imported completely. [PR 1058451]
- The End-Point Tunnel settings additional columns selection for view is not saved; moved to another endpoint or you must select them again. [PR 1028744]
- Security Director ignores the import of certain VPNs when the IKE ID combination is local or remote DN, and remote or local hostname for RSA Authentication and Main Mode. [PR 1028849]
- The Select Devices page during the VPN import does not scroll down completely till the end; it goes up automatically in Firefox and IE browsers. [PR 1048727]
- Not able to delete the special node when one of the nodes in two node setup is down. [PR 1047967]
- Not able to upgrade the Network Management Platform from the Release 14.1R1 to 14.1R2 in JA1500 appliance because of the constraints in /tmp directory in the Platform. [PR 1050091]
- Modifying a hub-and-spoke or full-mesh VPNs which were imported with different external Interfaces will not be able to change the external Interface. [PR 710963]
- Log Collector VM is not removed on uninstalling LC application. [PR 1068933]
- Adding a new Log Concentrator to a setup with an existing Log Collector shows a backlog of logs on the Log Concentrator from the Log Collector. [PR 1057423]
- When alert definitions are defined without a filter condition, you will see a backlog of logs on the Log Concentrator at high EPS rates. [PR 1057425]
- A Log Collector added after the EPS threshold is exceeded will not be functional.
- For Security Intelligence filters in the Event Viewer, all the applicable columns are displayed in the Event Viewer table but the column set is shown as default. [PR 1025152]

- Logging and Reporting feeds do not get updated in case of more than 1000 managed devices while upgrading from 14.1R1 to 14.1R2. [PR 1058702]



NOTE: Issue is applicable only if managed devices in SD is more than 1000 and you are upgrading from older versions of SD to 14.1R2.

Follow the below steps, after upgrading space platform & Log Director, Security Director, Security Director Logging & Reporting to 14.1R3.

1. Delete all the existing Log Collectors from **Network Management Platform > Administration > Fabric**
 2. Log in to Space Console through SSH as user "admin"
 3. Navigate to /var/cache/jboss/ECM
 4. Delete all contents in this folder `rm -rf *`
 5. Add all the collectors which were deleted in step 1.
- Audit logs shows a message "User does not have API Access" while loading Dashboard, Event Viewer and Alerts, if user does not have permission for User management or Device management. [PR 1058675]

- Scenario: In 14.1R1 version, there are more than one Log Collector [with a Log Concentrator] and the Log Database Password was changed.

Issue: Upgrading Log Collectors from 14.1R1 to 14.1R2 by installing the "Log-Collector-Upgrade.14.1R2.2.img" image, Log Concentrator will not aggregate logs from Log Collectors.

While upgrading the Log Collectors using **Log-Collector-Upgrade.14.1R2.2.img** from Release 14.1R1 to 14.1R2 sometimes the Log Concentrator will not aggregate logs from Log Collectors. [PR 1057416]

Workaround: Select **Network Management Platform > Administration > Global Settings > Change Password**— Change the Log Database Password after the upgrade of Log Collectors.

- Route-based, site-to-site, and hub-and-spoke VPNs in aggressive mode are not displayed on the VPN monitor. [PR 976745]
- The VPN monitor does not update to display the deletion of a VPN from Junos Space Security Director. [PR 971453]
- VPN monitors do not display policy-based VPN information. [PR 971450]
- When multiple log collectors and one log concentrator is added and all the log collectors go down, dashboard and event viewer does not show message indicating the same. [PR 1053795]

Known Behavior

1. To import more devices at a time, increase the transaction timeout using the following instructions. In the Junos Space server console, go to `/usr/local/jboss/bin/jboss-cli.sh --controller=<WEBIP>:9999 --connect</WEBIP> >`.

You will get a new prompt `[domain@<WEBIP>:9999 /]`

2. Under this prompt, enter the following command:

```
/profile=full-ha/subsystem=transactions/:write-attribute(name=default-timeout,value=8000).
```

The *value* parameter is configurable.

The Outcome tag in the output must read "success". The sample output is as shown in the following snippet:

```
{
  "outcome" => "success",
  "result" => undefined,
  "server-groups" => {"platform" => {"host" => {"dev" => {"server1" =>
{"response" => {
  "outcome" => "success",
  "response-headers" => {
    "operation-requires-restart" => true,
    "process-state" => "restart-required"
  }
}}}
}}}
}
```

3. Enter the following command again:

```
/profile=full-ha
/subsystem=transactions/:write-attribute(name=enable-statistics,value=true)
```

4. Once Step 2 and Step 3 are successful (the outcome shows "success"), restart the jboss by issuing the **service jboss restart** command.

Addressed Issues

- The hidden flag option does not function properly when Security Director pushes signature database data to SRX devices. [PR 1087633]
- When updating a device, disable the post processing step to avoid a time-out issue. [PR 1078657]
- NAT zones are empty after Security Director is upgraded from Release 13.1P1 to Release 14.1R2. [PR 1081813]
- You cannot import policies from device to Security Director along with import Firewall policy task. [PR 1087486]
- You cannot add a service to a service group if the service count in Security Director is greater than 7,000. [PR 1079012]
- The filter box does not function in Object Builder while a service group is being created. [PR 1066013]
- Address persistent exception while deleting addresses. [PR 1080337]

- A Create or Save Static NAT Rule operation automatically assigns 'Any-IPv4' to source or destination addresses without a provision to unassign. [PR 1061130]
- Policy Analysis Report: The rule number is wrong in the analysis report, if the policy has disabled rules. [PR 1062382]
- Predefined templates are not visible in the upgrade setup. [PR 1062945]
- After being upgraded to Security Director 14.1R2, Security Director pushes mapped ports for static NAT rules even if it is not configured, if the device supports mapped ports and publish of NAT policy before the upgrade. [PR 1062802]
- The Custom User Publish Preview job was canceled and the following message appears: "The owner doesn't have rights to execute the job". [PR 1060962]
- During NSM migration, Security Director converts asterisks (*) to spaces in the comment field. [PR 1064894]
- The child domain logs were seen in the global domain because of an issue related to feeds in devices that support IPv6. [PR 1064306]
- An Import CSV operation fails for a host address when the hostname contains an integer value. [PR 1067333]
- A Publish VPN operation fails and returns an error stating that Suite-B proposal settings are not supported for the sha-256 authentication-algorithm. [PR 1072698]
- The newly added columns, such as host name, object name, and logical system name, are not shown when the default filter view is selected in Event Viewer. [PR 1058410]
- Zone-based nested address-group support must be added in Security Director. [PR 774466]
- Need validation for monitor, event filter, and report definition names. [PR 1064916]
- Security Director 14.1R2 cannot import policies from an SRX Series chassis cluster running Junos OS Release 12.1X44-D35.5. [PR 1066657]
- An import takes a long time when there are large numbers of address objects in the database. [PR 1068042]
- The Log Source IPV6 column is not shown after a predefined filter is selected in Event Viewer. [PR 1070742]
- When a Group By operation is performed in Event Viewer, the group by field is appended as a new column to the Default column set. [PR 1070816]
- The Log Source IPv6 does not appear in the Group By selection and Export CSV file. [PR 1070872]
- A Show logs from Alerts request showed the default logs in Event Viewer. [PR 1071234]
- Search functionality is not working in Object Builder for services and addresses. [PR 1071585]
- Bulk addresses (more than 100,000 in Security Director) in the Drag and Drop panel causes the system performance to be unstable and operations to slow down. [PR 1072278]

- Publish VPN generates local-identity, remote-identities for Imported VPNs with empty local and/or remote identities which can potentially cause VPNs to re-negotiate. [PR 1072700]
- The session ID variable causes an exception to occur for large values of session ID. [PR 1062810]

Junos Space Documentation and Release Notes

For a list of related Junos Space documentation, see <http://www.juniper.net/techpubs/>.

If the information in the latest release notes differs from the information in the documentation, follow the *Junos Space Release Notes*.

To obtain the most current version of all Juniper Networks® technical documentation, see the product documentation page on the Juniper Networks website at <http://www.juniper.net/techpubs/>.

Juniper Networks supports a technical book program to publish books by Juniper Networks engineers and subject matter experts with book publishers around the world. These books go beyond the technical documentation to explore the nuances of network architecture, deployment, and administration using the Junos operating system (Junos OS) and Juniper Networks devices. In addition, the Juniper Networks Technical Library, published in conjunction with O'Reilly Media, explores improving network security, reliability, and availability using Junos OS configuration techniques. All the books are for sale at technical bookstores and book outlets around the world. The current list can be viewed at <http://www.juniper.net/books>.

Documentation Feedback

We encourage you to provide feedback, comments, and suggestions so that we can improve the documentation. You can provide feedback by using either of the following methods:

- Online feedback rating system—On any page of the Juniper Networks TechLibrary site at <http://www.juniper.net/techpubs/index.html>, simply click the stars to rate the content, and use the pop-up form to provide us with information about your experience. Alternately, you can use the online feedback form at <http://www.juniper.net/techpubs/feedback/>.
- E-mail—Send your comments to techpubs-comments@juniper.net. Include the document or topic name, URL or page number, and software version (if applicable).

Requesting Technical Support

Technical product support is available through the Juniper Networks Technical Assistance Center (JTAC). If you are a customer with an active J-Care or Partner Support Service support contract, or are covered under warranty, and need post-sales technical support, you can access our tools and resources online or open a case with JTAC.

- JTAC policies—For a complete understanding of our JTAC procedures and policies, review the *JTAC User Guide* located at <http://www.juniper.net/us/en/local/pdf/resource-guides/7100059-en.pdf>.
- Product warranties—For product warranty information, visit <http://www.juniper.net/support/warranty/>.
- JTAC hours of operation—The JTAC centers have resources available 24 hours a day, 7 days a week, 365 days a year.

Self-Help Online Tools and Resources

For quick and easy problem resolution, Juniper Networks has designed an online self-service portal called the Customer Support Center (CSC) that provides you with the following features:

- Find CSC offerings: <http://www.juniper.net/customers/support/>
- Search for known bugs: <http://www2.juniper.net/kb/>
- Find product documentation: <http://www.juniper.net/techpubs/>
- Find solutions and answer questions using our Knowledge Base: <http://kb.juniper.net/>
- Download the latest versions of software and review release notes: <http://www.juniper.net/customers/csc/software/>
- Search technical bulletins for relevant hardware and software notifications: <http://kb.juniper.net/InfoCenter/>
- Join and participate in the Juniper Networks Community Forum: <http://www.juniper.net/company/communities/>
- Open a case online in the CSC Case Management tool: <http://www.juniper.net/cm/>

To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: <https://tools.juniper.net/SerialNumberEntitlementSearch/>

Opening a Case with JTAC

You can open a case with JTAC on the Web or by telephone.

- Use the Case Management tool in the CSC at <http://www.juniper.net/cm/>.
- Call 1-888-314-JTAC (1-888-314-5822 toll-free in the USA, Canada, and Mexico).

For international or direct-dial options in countries without toll-free numbers, see <http://www.juniper.net/support/requesting-support.html>.

Revision History

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