

# JCS1200 Control System and Protected System Domains Release Notes

## August 2013

These release notes accompany the release of the Juniper Networks JCS1200 Control System and Protected System Domains (PSDs). They describe known issues with the hardware and accompanying software.

For the latest, most complete information about outstanding and resolved issues with the Junos OS, see the Juniper Networks online software defect search application at <http://www.juniper.net/prsearch>.

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## New Features in Junos 12.3R1 for the JCS1200 Platform

The following new hardware feature has been added to Junos OS Release 12.3:

- **RE-JCS-1X2400-48G-S Routing Engine**—The JCS1200 Control System now supports the RE-JCS-1X2400-48G-S Routing Engine. The RE-JCS-1X2400-48G-S Routing Engine requires the enhanced management module (model number MM-E-JCS-S). The RE-JCS-1X2400-48G-S Routing Engine provides a 2.4-GHz dual core Xeon processor, 48 GB of memory, and two 128-GB hot-pluggable solid state drives. The RE-JCS-1X2400-48G-S Routing Engine supports the same functionality as the other Routing Engines supported on the JCS1200.

See [JCS1200 Control System Hardware Guide](#).

## Outstanding Issues with the JCS1200 Platform

Before connecting a T Series router to the JCS1200 platform, ensure that the bootROM version for all FPCs is ROM Monitor Version 6.4 or later. If an FPC bootROM version is earlier than Version 6.4, the FPC will not come online. To upgrade the firmware, you must contact your Juniper Networks customer support representative.

To determine if you need to upgrade the FPC firmware, display the version of the firmware on all FPCs by issuing the **show chassis firmware** command:

```
user@host> show chassis firmware
Part      Type      Version
FPC 0     ROM       Juniper ROM Monitor Version 7.5b4
           O/S       Version 9.1-20080222.0 by builder on 2008-0
FPC 1     ROM       Juniper ROM Monitor Version 6.4b18
           O/S       Version 9.1-20080222.0 by builder on 2008-0
FPC 2     ROM       Juniper ROM Monitor Version 7.5b4
           O/S       Version 9.1-20080222.0 by builder on 2008-0
FPC 4     ROM       Juniper ROM Monitor Version 6.4b18
           O/S       Version 9.1-20080222.0 by builder on 2008-0
FPC 5     ROM       Juniper ROM Monitor Version 6.4b20
           O/S       Version 9.1-20080222.0 by builder on 2008-0
FPC 6     ROM       Juniper ROM Monitor Version 7.5b4
           O/S       Version 9.1-20080222.0 by builder on 2008-0
FPC 7     ROM       Juniper ROM Monitor Version 6.4b20
           O/S       Version 9.1-20080222.0 by builder on 2008-0
SPMB 0    ROM       Juniper ROM Monitor Version 6.4b18
           O/S       Version 9.1-20080222.0 by builder on 2008-0
SPMB 1    ROM       Juniper ROM Monitor Version 6.4b18
           O/S       Version 9.1-20080222.0 by builder on 2008-0
```



**CAUTION:** By default, SNMP is enabled on the management module. Do not disable SNMP. If you disable SNMP, you might not be able to access the management module.

## Interfaces and Chassis

The following problems currently exist in the Juniper Networks JCS1200 platform. The identifier following the description is the tracking number in the Juniper Networks Problem Report (PR) tracking system.

- When you change the baydata on the Advanced Management Module (AMM), you must power cycle the JCS1200 RE-JCS-1X2400-48G-S Routing Engine so it will read the new baydata information. This was not the case with the other Routing Engines supported on the JCS1200 platform. [PR753586]
- On the RE-JCS-1X2400-48G-S Routing Engine, configuration of the MAC address on the external interfaces **em0** and **em1** is not allowed. You cannot configure the MAC address on **fxp0** on the other routing engines supported on the JCS1200 as well. Therefore, the Junos CLI to configure the MAC address on **em0** and **em1** interfaces has been disabled. [PR770899] This issue has been resolved in Junos OS 13.1R2.
- The RE-JCS-1X2400-48G-S Routing Engine does not support an MTU size larger than 1500 bytes. [PR774380]
- The RE-JCS-1X2400-48G-S Routing Engine does not support the Input and Output byte counters. When you use the **show interfaces em0** (or **em1**) **extensive** command, the Input and Output Bytes counter field is always displayed as zero (0). [PR783974]

### Related Documentation

- [Errata with the JCS1200 Platform Documentation on page 4](#)

## Supported PICs for Shared Interfaces with the JCS1200 Platform

Table 1 on page 3 shows the PICs that support shared interfaces:

**Table 1: PICs Supporting Shared Interfaces**

PIC Name	PIC Model Number	First Junos OS Release Supported
<b>Gigabit Ethernet PICs</b>		
Gigabit Ethernet, SFP	PC-10GE-SFP	9.4
<b>10-Gigabit Ethernet PICs</b>		
10-Gigabit Ethernet, DWDM	PC-1XGE-DWDM-CBAND	9.4
10-Gigabit Ethernet, LAN/WAN, XFP	PD-4XGE-XFP	9.6
10-Gigabit Ethernet, XENPAK	PC-1XGE-XENPAK	9.4
<b>SONET/SDH PICs</b>		
4-port OC48 SONET, SFP	PC-4OC48-SON-SFP	9.3
1-port OC192 SONET, XFP	PC-1OC192-SON-SFP	9.3

Table 1: PICs Supporting Shared Interfaces (*continued*)

PIC Name	PIC Model Number	First Junos OS Release Supported
4-port OC192 SONET, XFP	PD-4OC192-SON-XFP	9.3
1-port OC768 SONET, SR	PD-1OC768-SON-SR	9.3



**NOTE:** Only SONET PICs that are installed on an Enhanced Services (ES) FPC on a T320 router or on a T1600 router can support shared interfaces.

#### Related Documentation

- [JCS1200 Platform Description](#)
- [Protected System Domains](#)
- [Before You Configure Shared Interfaces](#)

## Errata with the JCS1200 Platform Documentation

This section lists outstanding issues with the documentation.

- There are currently no outstanding issues for the JCS1200 platform documentation.

#### Related Documentation

- [Outstanding Issues with the JCS1200 Platform on page 2](#)

## Upgrading the JCS1200 Route Engine Software

- [Upgrading to Junos OS Release 12.3 on page 4](#)
- [Downgrading from Release 12.3 on page 5](#)
- [Installing Linux on the RE-JCS-1X2400-48G-S Routing Engine on page 5](#)

### Upgrading to Junos OS Release 12.3

The RE-JCS-1X2400-48G-S Routing Engine is shipped with the latest Junos OS installed. To upgrade the RE-JCS-1X2400-48G-S Routing Engine to 64-bit Junos OS Release 12.3 or later, follow the instructions in the Junos OS Release Notes for the T Series routers. For more information on configuring the Routing Engines on the JCS1200 platform, see the [JCS1200 \(Protected System Domain\) Feature Guide for Routing Devices](#).

When upgrading or downgrading Junos OS, always use the **jinstall** package. Use other packages (such as the **bundle** package) only when so instructed by a Juniper Networks support representative. For information about the contents of the **jinstall** package and details of the installation process, see the [Junos OS Installation and Upgrade Guide](#).



**NOTE:** Installation of Junos OS on the RE-JCS-1X2400-48G-S Routing Engine takes approximately 40 minutes to complete.

Before upgrading, back up the file system and the currently active Junos OS configuration so that you can recover to a known, stable environment in case the upgrade is unsuccessful. Issue the following command:

```
user@host> request system snapshot
```

The installation process rebuilds the file system and completely reinstalls Junos OS. Configuration information from the previous software installation is retained, but the contents of log files might be erased. Stored files on the routing platform, such as configuration templates and shell scripts (the only exceptions are the `juniper.conf` and `ssh` files) might be removed. To preserve the stored files, copy them to another system before upgrading or downgrading the routing platform. For more information, see the [Junos OS Installation and Upgrade Guide](#).



**NOTE:** After you install a Junos OS Release 12.3 `jinstall` package, you cannot issue the `request system software rollback` command to return to the previously installed software. Instead you must issue the `request system software add validate` command and specify the `jinstall` package that corresponds to the previously installed software.

## Downgrading from Release 12.3

To downgrade from Release 12.3 to another supported release, follow the procedure for upgrading, but replace the 12.3 `jinstall` package with one that corresponds to the appropriate release.



**NOTE:** You cannot downgrade more than three releases. For example, if your routing platform is running Junos OS Release 11.4, you can downgrade the software to Release 10.4 directly, but not to Release 10.3 or earlier; as a workaround, you can first downgrade to Release 10.4 and then downgrade to Release 10.3.

For more information, see the [Junos OS Installation and Upgrade Guide](#).

## Installing Linux on the RE-JCS-1X2400-48G-S Routing Engine

The RE-JCS-1X2400-48G-S Routing Engine is shipped with the latest Linux installed. If the solid-state drive (SSD) on the RE-JCS-1X2400-48G-S Routing Engine becomes corrupt, you can use the USB storage media provided with your system to install Linux on the RE-JCS-1X2400-48G-S Routing Engine. Reinstall each RE-JCS-1X2400-48G-S Routing Engine separately to avoid disrupting network operation as follows:

1. Insert the USB media into the media tray in the JCS1200 chassis.
2. Use the web UI to log in to the Advanced Management Module (AMM) and run the remote console.

**Blade Tasks > Remote Control > Start Remote Control**

3. From the remote console, click on the media tray icon located at the top of the menu, and select the slot number of the RE-JCS-1X2400-48G-S Routing Engine you want to install the software on.
4. Open a separate terminal and telnet into the serial console of the RE-JCS-1X2400-48G-S Routing Engine.
5. From the remote console, power on the RE-JCS-1X2400-48G-S Routing Engine. The RE-JCS-1X2400-48G-S Routing Engine will boot from the USB media.

**Blade Tasks > Power/Restart Menu**

6. Type **y** and press Enter when you see the following message on the serial console:  
**WARNING: The installation will erase the contents of your disks. Do you wish to continue (y/n)? Type "y" and hit [Enter]**
7. Wait for the installation to complete. When the installation is complete, you should see the following message:  
**Eject the installation media and Hit [Enter] to reboot?**
8. Press Enter to reboot the RE-JCS-1X2400-48G-S Routing Engine. Wait 10 seconds and then reassign the media tray to a different RE-JCS-1X2400-48G-S Routing Engine or to **None**.
9. Remove the USB media from the media tray in the JCS1200 chassis.

For more information, see the [Junos OS Protected System Domain Configuration Guide](#).

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## Junos OS Documentation and Release Notes

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

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

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

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## 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 JNASC support contract, or are covered under warranty, and need postsales 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/>
- 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: <https://www.juniper.net/alerts/>
- 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, visit us at <http://www.juniper.net/support/requesting-support.html>

## Revision History

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August 2013—Updated references.

June 2013—Updated “Outstanding Issues with the JCS1200 Platform” on page 2 section to resolve PR770899 and correct the MTU byte size in PR774380. Added a note to “Upgrading the JCS1200 Route Engine Software” on page 4 about the installation time.

January 2013—Added new features, updated outstanding issues, and added USB installation procedure.

August 2010—Minor updates.

20 July 2009—Added PICs supporting shared interfaces for Junos OS Release 9.6

26 January 2009—530-023235-01. Revision 3. Added supported PICs for Junos OS Release 9.4.

27 October 2008—530-023235-01. Revision 2. Added information about supported PICs and platforms for shared interfaces.

18 April 2008—530-023235-01. Revision 1.

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