C-series Platforms C2000 and C4000 Field Replaceable Unit Installation Instructions

This document describes how to remove and install a fan, power supply, and hard drive on a Juniper Networks C–series platform.

Contents

Removing and Installing a Fan

Both C-series models have two cooling fans that provide forced air cooling for components in the system. Each fan is hot-swappable; you can replace it without powering down the system. You can monitor fan status by observing the TEMP LED.

☞ **NOTE:** If the red TEMP LED is illuminated, either a critical or noncritical failure exists.

⚠ **CAUTION:** If the TEMP LED is illuminated and none of the fans is spinning, quickly power down the system until a new set of fans is available. Operating a system with inadequate air circulation can damage the components.

To remove a fan:

1. Unlock or loosen the fan from the system.

   ■ For the C2000 model, press the locking tab and rotate the fan away from the system.

   ■ For the C4000 model, loosen the thumb screw in the top-left and lower-right of the fan.

2. Pull the fan out and remove it from the system.

   Use two hands to hold the fan after it comes out of the chassis.

⚡ **WARNING:** Do not place your fingers near the fans when removing the unit. The blades might still be moving.

⚠ **CAUTION:** Do not use the fan tray handle to carry the fan. Use the handle only to push the tray into the chassis or pull it out.

To install a fan, reverse the steps taken to remove the fan.

Removing and Installing a Power Supply Module

☞ **NOTE:** If your system is powered on, see the *SRC–PE CLI User Guide, Chapter 5, Using CLI Operational Commands to Monitor the SRC Software* for commands to run before performing these steps.

To remove a power supply module:

1. Unplug the power cord.

2. Slide the locking tab (ejector button) to the left to release the module. See Figure 1 and Figure 2.

3. Hold the tab to the left, and using the handle, slowly pull the power supply module out.

To install a power supply module:

1. Hold the locking tab (ejector button) to the left, and slowly slide the module into the chassis until it clicks into place.

2. Insert the power cord into the AC power IEC receptacle.
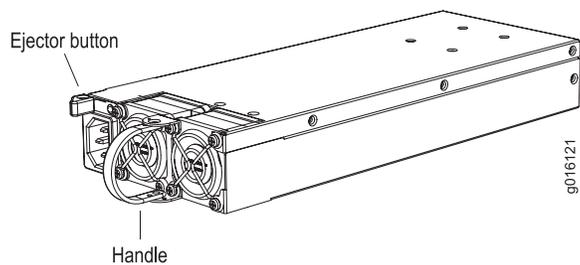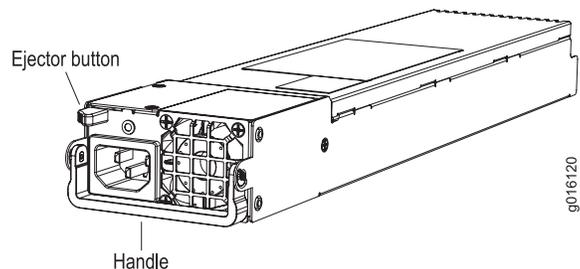
Figure 1: C2000 Power Supply

Figure 2: C4000 Power Supply

Removing and Installing a Hard Drive

☞ **NOTE:** If your system is powered on, see the *SRC–PE Getting Started User Guide* for commands to run before performing these steps.

To remove a hard drive:

1. Slide the locking tab in the bottom-right corner to the right to release the hard drive.

2. Hold the tab to the right and slowly pull the unit out.

To install a hard drive, hold the locking tab to the right and slowly slide the unit into the chassis until it clicks into place.

Product Reclamation and Recycling Program

Juniper Networks is committed to environmentally responsible behavior. As part of this commitment, we continually work to comply with environmental standards such as the European Union's *Waste Electrical and Electronic Equipment* (WEEE) Directive and *Restriction of Hazardous Substances* (RoHS) Directive.

These directives and other similar regulations from countries outside the European Union regulate electronic waste management and the reduction or elimination of specific hazardous materials in electronic products. The WEEE Directive requires electrical and electronics manufacturers to provide mechanisms for the recycling and reuse of their products. The RoHS Directive restricts the use of certain substances that are commonly found in electronic products today. Restricted substances include heavy metals, including lead, and polybrominated materials. The RoHS Directive, with some exemptions, applies to all electrical and electronic equipment.

In accordance with Article 11(2) of Directive 2002/96/EC (WEEE), products put on the market after 13 August 2005 are marked with the following symbol or include it in their documentation: a crossed-out wheeled waste bin with a bar beneath.

Juniper Networks provides recycling support for our equipment worldwide to comply with the WEEE Directive. For recycling information, go to http://www.juniper.net/environmental, and indicate the type of Juniper Networks

equipment that you wish to dispose of and the country where it is currently located, or contact your Juniper Networks account representative.

Products returned through our reclamation process are recycled, recovered, or disposed of in a responsible manner. Our packaging is designed to be recycled and should be handled in accordance with your local recycling policies.

Related Juniper Networks Documentation

With each SRC software release, we provide the *SRC Documentation CD*, which contains the documentation described in Table 1 on page 5.

With each SRC Application Library release, we provide the *SRC Application Library CD*. This CD contains both the software applications and the *SRC Application Library Guide*.

The C-Web interface, which is based on the J-Web interface, is available for monitoring the C-series platforms and the SRC software. For general information about the J-Web interface, see the *J-Web Interface User Guide*.

A complete list of abbreviations used in this document set, along with their spelled-out terms, is provided in the *SRC Getting Started Guide*.

Table 1: Juniper Networks C-series and SRC Technical Publications

Document	Description
Core Documentation Set	
C-series Hardware Guide	Describes the hardware platforms and how to install, maintain, replace, and troubleshoot them. The guide also includes specifications.
SRC-PE Getting Started Guide	Describes the SRC software and explains how to set up an initial configuration and manage a C-series platform. The guide describes how to set up and start the SRC CLI and C-Web, as well as other SRC configurations. It provides information about setting up an initial SRC configuration on a Solaris platform. The guide also describes how to upgrade the SRC software and how to use the SRC configuration tools. It includes reference material for the SRC documentation.
SRC-PE CLI User Guide	Describes how to use the SRC CLI, configure and monitor the platform with the CLI, and control the CLI environment. The guide also describes how to manage SRC components with the CLI.
SRC-PE Network Guide: SAE, Juniper Networks Routers, and NIC	Describes how to use and configure the SAE and the NIC. This guide also provides detailed information for using JUNOSe routers and JUNOS routing platforms in the SRC network.
SRC-PE Integration Guide: Network Devices, Directories, and RADIUS Servers	Describes how to integrate external components—network devices, directories, and RADIUS servers—into the SRC network. The guide provides detailed information about integrating specific models of the external components.

Table 1: Juniper Networks C-series and SRC Technical Publications *(continued)*

Document	Description
SRC-PE Services and Policies Guide	Describes how to work with services and policies. The guide provides an overview, configuration procedures, and management information. The guide also provides information about the SRC tools for configuring policies.
SRC-PE Subscribers and Subscriptions Guide	Describes how to work with residential and enterprise subscribers and subscriptions. The guide provides an overview, configuration procedures, and management information. This guide also provides information about the sample residential portals and enterprise service portals, including the Enterprise Manager Portal.
SRC-PE Monitoring and Troubleshooting Guide	Describes how to use logging, the SNMP agent, the SRC CLI, and the C-Web interface to monitor and troubleshoot SRC components. This guide also describes the SNMP traps.
SRC-PE Solutions Guide	Provides high-level instructions for SRC implementations. The guide documents the following scenarios: managing QoS services on JUNOSe routers; managing subscribers in a wireless roaming environment; providing voice over IP (VoIP) services; integrating the SRC software in a PCMM environment, including the use of the Juniper Policy Server (JPS); mirroring subscriber traffic on JUNOSe routers; demonstrating network resource management features in a sample IP television (IPTV) application; and demonstrating the integration of prepaid services in a sample application.
SRC-PE CLI Command Reference, Volume 1 *SRC-PE CLI Command Reference, Volume 2*	Together provide information about command and statement syntax; descriptions of commands, configuration statements, and options; editing level of statement options; and a history of when a command was added to the documentation.
SRC-PE Comprehensive Index	Provides a complete index of the SRC guides, excluding the *C-series Hardware Guide* and the *SRC-PE Command Reference*.
J-Web User Interface Guide	Provides general information about the J-Web interface.
Application Library	
SRC Application Library Guide	Describes how to install and work with applications that you can use to extend the capabilities of the SRC software. The guide documents the following applications: SRC-SG (SOAP Gateway) Web applications, applications to integrate the Juniper Networks Intrusion Detection and Protection (IDP) software into an SRC-managed environment, an application to provide endpoint security by integrating Juniper Networks Instant Virtual Extranet (IVE) Host Checker, a traffic-mirroring Web application, an application to integrate IP address managers with the SAE, an application to provide tracking and QoS control at the application level by integrating the SRC software with the Ellacoya deep packet inspection (DPI) platform, an application to control volume usage, and the SRC-ACP (Admission Control Plug-In) application.
Release Notes	

Table 1: Juniper Networks C-series and SRC Technical Publications *(continued)*

Document	Description
SRC-PE Release Notes *SRC Application Library Release Notes*	In the *Release Notes*, you will find the latest information about features, changes, known problems, resolved problems, supported platforms and network devices (such as Juniper Networks routers and CMTS devices), and third-party software. If the information in the *Release Notes* differs from the information found in the documentation set, follow the *Release Notes*. Release notes are included in the corresponding software distribution and are available on the Web.

Requesting Support

For technical support, open a support case with 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).

Revision History

4 May 2007—Revision 1.