

# Managing Hardware

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## SYSTEM ADMINISTRATOR GUIDE

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# 1 Overview

This document describes the operation and administration of mass storage and compact flash on the SmartEdge router and describes how to use the commands that monitor and administer the hardware components of the system. These components include controller and carrier cards, and traffic cards, services cards, and media interface cards (MICs).

This document applies to both the Ericsson SmartEdge® and SM family routers. However, the software that applies to the SM family of systems is a subset of the SmartEdge OS; some of the functionality described in this document may not apply to SM family routers.

For information specific to the SM family chassis, including line cards, refer to the SM family chassis documentation.

For specific information about the differences between the SmartEdge and SM family routers, refer to the Technical Product Description *SM Family of Systems* (part number 5/221 02-CRA 119 1170/1) in the **Product Overview** folder of this Customer Product Information library.

The configuration tasks and commands described in this document allow you to perform other types of general system-wide monitoring and testing tasks, such as enabling power-on diagnostics and alarms.

**Note:** Unless explicitly stated in the command descriptions, the SmartEdge 100 router supports all operations commands in this document.

## 1.1 Terminology

The term controller card refers to the Cross-Connect Route Processor (XCRP4) Controller card, including the controller carrier card, unless otherwise noted.

The term controller carrier card refers to the controller functions on the circuit board within the SmartEdge 100 chassis. The term I/O carrier card refers to the traffic card functions on the circuit board; these functions are compatible with the similar functions that are implemented on all SmartEdge 400 and SmartEdge 800 traffic cards.

The term chassis refers to any SmartEdge chassis; the term SmartEdge 800 refers to any version of the SmartEdge 800 chassis; the term SmartEdge 800s refers only to the SmartEdge 800s chassis.

The term traffic card refers to either a SmartEdge 100 MIC or a traffic card installed in any other SmartEdge chassis, unless otherwise noted.





## 2 Configuration and Operations Tasks

### 2.1 Mass-Storage and Compact-Flash Card Operations Tasks

Each controller card has an internal compact-flash card used to store the operating system, configuration, and other system files. You can also install an optional mass-storage device in the external slot of a controller card.

**Note:** If you install a mass-storage device in the active controller card, you must also install one in the standby controller card.

To monitor and administer the internal compact-flash card and the mass-storage device in the external slot, perform one or more of the tasks described in Table 1. Enter the `format`, `mount`, and `unmount` commands in exec mode; enter the `show` commands in any mode.

Table 1 Mass-Storage Device and Compact-Flash Card Operations Tasks

Task	Root Command
Mount the mass-storage device in the external slot in the controller card.	<code>mount /md</code>
Display storage information for the internal compact-flash or the mass-storage device.	<code>show disk</code>
Prepare the mass-storage device installed in the external slot before its physical removal from the controller card.	<code>unmount</code>

**Note:** To reformat the mass-storage device installed in the standby controller card, you must be connected to the Craft 2 port on the standby controller card.

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### Caution!

Risk of equipment failure. Removing the mass-storage device without first unmounting it can permanently damage the device and cause the kernel to crash. To reduce the risk, always enter the `unmount /md` command (in exec mode) before removing the device.

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### Caution!

Risk of data loss. You can lose data that is being transferred to the mass-storage device if you enter the `unmount /md` command (in exec mode) before the data transfer operation is complete. To reduce the risk, do not enter the `unmount /md` command while the CF ACTIVE LED is blinking. When the operation is complete, the LED is turned off.

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## 2.2 Hardware Monitoring and Administration Tasks

To monitor or administer one or more devices, perform one or more of the tasks described in Table 2. Enter the `service air-filter` command in exec mode; enter the `show` commands in any mode.

Table 2 Hardware Monitoring and Administration Tasks

Task	Root Command
Update the air-filter service date in the EEPROM of the fan tray in a SmartEdge 400 chassis.	<code>service air-filter</code>
Display chassis installed and configured cards and their status.	<code>show chassis</code>
Display chassis power data for the installed cards.	<code>show chassis power</code>
Display information about the system hardware.	<code>show redundancy</code>
Display the state of the standby controller card and verify whether it is ready to become active.	<code>show redundancy</code>
Display system-, card-, port-, channel-, or subchannel-level alarms.	<code>show system alarm</code>

**Note:** To enable the alarm for the air filter in the chassis, enter the `service alarm` command (in global configuration mode).





## 3 Configuration Examples

The following example shows how to enable the air filter alarm and specify a three-month service interval:

```
[local]Redback(config)#system alarm air-filter 3
```