



# SAM21 Shelf Controller Security and Administration

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## What's new for SN08

The SAM21 Shelf Views have been updated to reflect the shelf configuration in the NTRX51TA Call Control Frame (CCF). In the NTRX51TA CCF, the SAM21 shelf does not contain a STORage Management (STORM) card. A redundant pair of SAM-XTS servers, referred to as the STORM Integrated Array (STORM-IA), support STORM functionality. For more information, refer to the following documents:

- *SAM21 Shelf Controller Basics*, NN10025-111
- *STORM Basics*, NN10024-111

## What's new for SN07

Logins are allowed from console access and secure shell (ssh) clients. Direct root login is not available on those interfaces though. To gain super user privilege, login as a maintenance level user, and then use the **su** command to gain super user privilege. Trying to log in as the root user on network and console interfaces is rejected. The SAM21 Shelf Controllers allow logins from the CS 2000 Core Manager and the CS 2000 Management Tools host.

## What's new for SN06

Even though local logins to the SAM21 Shelf Controllers are not needed for operations, maintenance, administration or provisioning (OAM&P), security of logins to the SAM21 Shelf Controller operating system is improved. Access is denied from all hosts except the mate SAM21 Shelf Controller, the CS 2000 Core Manager, and the host that provides the CS 2000 Management Tools. Access requires the use of the secure shell (ssh). Remote shell (rsh) access is permitted from the mate SAM21 Shelf Controller.

Local passwords are enabled. Once logged in, password changes are enabled with the **passwd** command. However, password changes do not persist after locking the SAM21 Shelf Controller. Contact your Nortel account representative for information about passwords.

Since login access to the SAM21 Shelf Controller is not needed to perform OAM&P, this document only discusses the OAM&P operations available from the CS 2000 SAM21 Manager client.

## Security and administration strategy

Security for the SAM21 Shelf Controllers is implemented according to the items in the following list:

- physical security of the client workstation
- physical security of the SAM21 shelf
- security mechanisms available through the client workstation operating system
- SAM21 Shelf Controllers only allow login connections from the CS 2000 Core Manager, the host that provides the CS 2000 Management Tools, and the mate SAM21 Shelf Controller

## Tools and utilities

There are no tools or utilities for security. The CS 2000 SAM21 Manager client is the interface for administration of the SAM21 Shelf Controllers.

**Note:** If a Card View window is opened and a task or maintenance is completed, close the window rather than minimize the window. Memory consumption is kept to a minimum, but several unused and open Card View windows can consume memory on the CS 2000 SAM21 Manager client workstation.

## User administration

The SAM21 Shelf Controllers do not implement any custom security features. The CS 2000 SAM21 Manager client authenticates users when the application is started.

### Adding a user

The SAM21 Shelf Controllers do not provide user administration. The CS 2000 SAM21 Manager provides authentication, but not user administration. For procedures on how to add a user to the CS 2000 SAM21 Manager client workstation, contact your system administrator or refer to the operating system reference documentation.

### Setting privileges

The SAM21 Shelf Controllers and the CS 2000 SAM21 Manager client do not implement user privilege administration.

### Removing a user

To prevent user access to the CS 2000 SAM21 Manager client, contact your system administrator to disable the user account on the workstation.

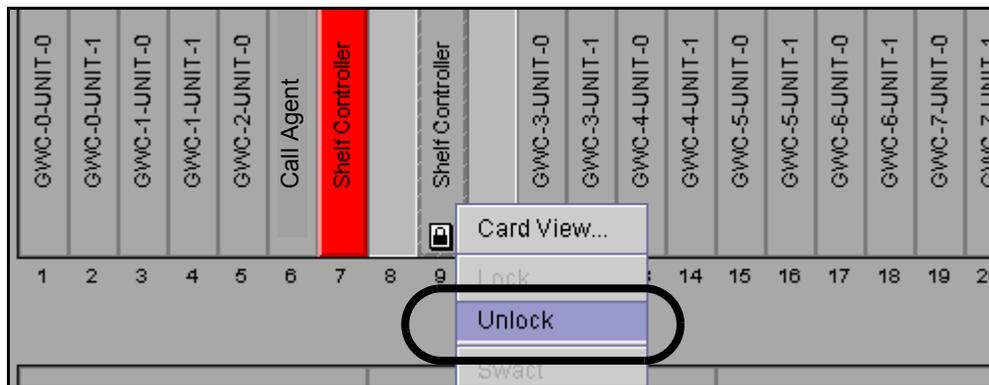
## Device administration

Administration of the SAM21 Shelf Controllers is done through the CS 2000 SAM21 Manager client.

### Unlocking a SAM21 Shelf Controller

#### *At the CS 2000 SAM21 Manager client workstation*

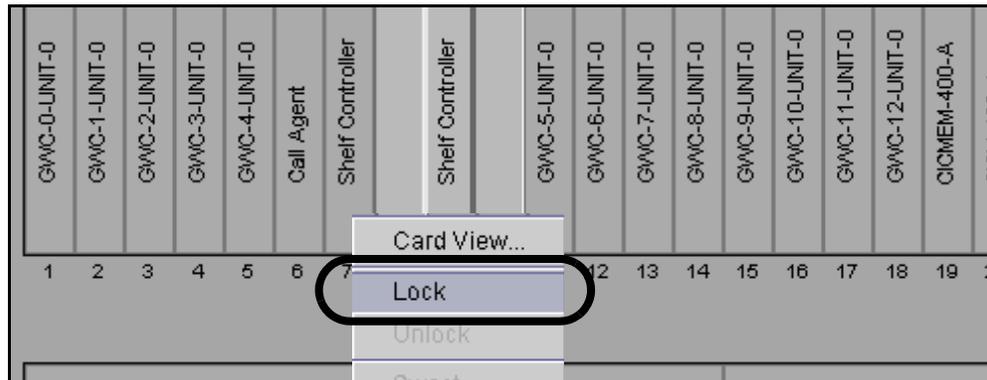
- 1 From the Shelf View, right click on the SAM21 Shelf Controller and select Unlock from the context menu.



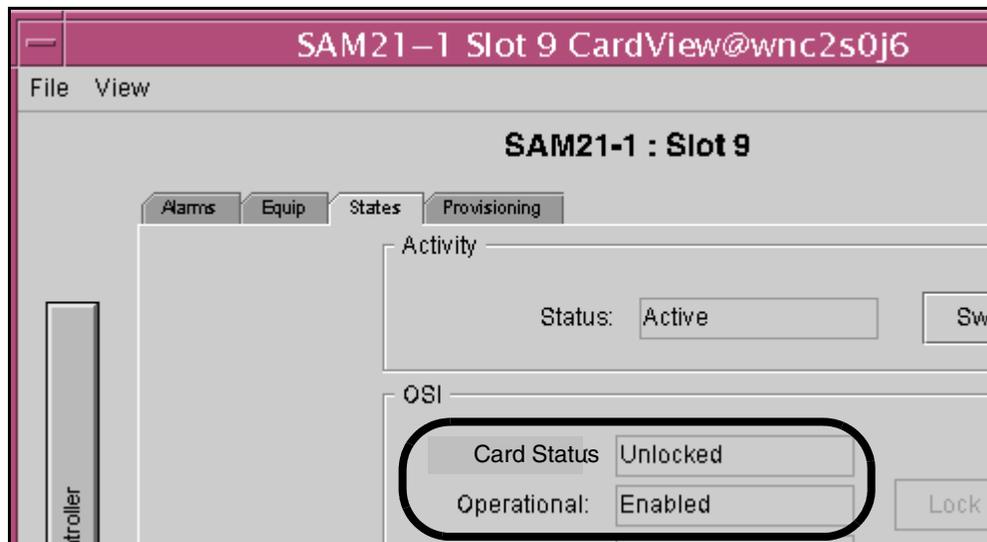
## Locking a SAM21 Shelf Controller

### *At the CS 2000 SAM21 Manager client workstation*

- 1 From the Shelf View, right click on the SAM21 Shelf Controller and select Lock from the context menu.



**Note:** Only lock a circuit pack that is in service. If a SAM21 Shelf Controller is unlocked and then relocked before the SAM21 Shelf Controller boots, flash memory can be corrupted and require a replacement SAM21 Shelf Controller. Check that a SAM21 Shelf Controller is Unlocked and Enabled from the Status tab of the Card View window.

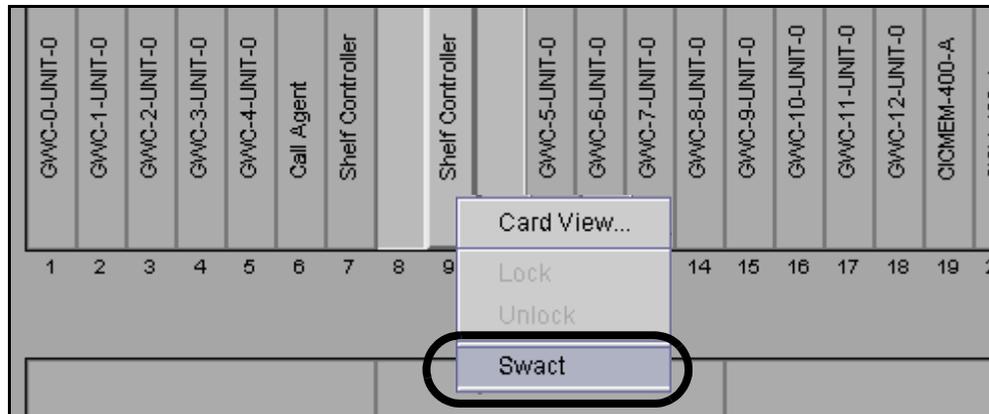


## Invoking manual protection switch

### *At the CS 2000 SAM21 Manager client workstation*

- 1 From the Shelf View, right click on the SAM21 Shelf Controller and select Swact from the context menu.

**Note:** Swact is available on the active SAM21 Shelf Controller only.



## Replacing air filters

Replace the three air filters from the front of the fan sleds on the SAM21 shelf with part number A0828397. This part number includes three air filters. Replace these air filters every 10 000 hours. When performing the replacement, replace one air filter at a time and do not leave a fan uninserted for more than one minute. For detailed steps, refer to procedure [SAM21 fan filter replacement on page 6](#).

## SAM21 fan filter replacement

Use this procedure to replace the fan filter on the front of a power supply and fan unit located on the bottom of the SAM21 frame. Replace one filter at a time and do not leave a fan uninserted for more than one minute.

**Note:** The power supply and fan unit is also known as a sled.

### **At the SAM21 frame**

- 1 Obtain replacement fan filters with part number A0828397. This part number includes three fan filters.
- 2 Loosen the two captive screws located at the bottom of the power supply and fan unit using a Phillips screwdriver.
- 3 Use the handle on the front of the power supply and fan unit to partially slide it out of its slot.
- 4 Wait for the fan to stop rotating.
- 5 Locate the tab on the filter frame, which will be either in the upper-left corner or lower-right corner of the frame.

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#### **WARNING**

#### **Equipment damage**

Do not operate the chassis for more than one minute without a power supply and fan unit.

Using the tab, gently pull the filter frame from the power supply and fan unit, guiding the filter frame over the handle of the power supply and fan unit.

- 7 Remove the old filter from the frame and replace it with the new filter.
- 8 Using the tab on the filter frame, located in the upper-left or lower-right corner, reinsert the filter frame into the power supply and fan unit, and press gently to secure the filter into position.
- 9 Slide the power supply and fan unit into the chassis using a single and steady motion.
- 10 Tighten the two captive screws located at the bottom of the power supply and fan unit using a Phillips screwdriver.

This procedure is complete.

