

SCOPIA Elite 5200 Series MCU

Maintenance Guide



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Maintenance Guide for SCOPIA Elite 5200 Series MCU , May 2011

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Performing Hardware Maintenance

The SCOPIA Elite 5200 Series MCU contains field-replaceable units (FRUs), which allows for a quick and efficient maintenance of the system.

Before starting the maintenance, carefully read the *Safety Guide for the SCOPIA Elite MCU* for detailed safety and electrostatic discharge (ESD) precautions.

Inspect the spare parts package for any damages and unpack taking into consideration the lifting guidelines detailed in the user guide. Compare the package contents with the packing list, and immediately report any discrepancy or damage to the insurance company.

These sections detail the procedures for replacing and maintaining the FRUs:

- [Replacing the MCU Chassis](#) page 2
- [Replacing the MCU Media Blade](#) page 3
- [Replacing the MCU Control Blade](#) page 5
- [Replacing the MCU Fan Drawer](#) page 5
- [Cleaning or Replacing the MCU Air Filter](#) page 8
- [Installing or Replacing the MCU Redundant Power Supply Unit](#) page 9

Replacing the MCU Chassis

The chassis of the MCU comprises the outer covering of the device, its single power supply, its two fan trays and its control blade.

Before You Begin

To order a replacement chassis, contact your local RADVISION representative using the part number listed in this table.

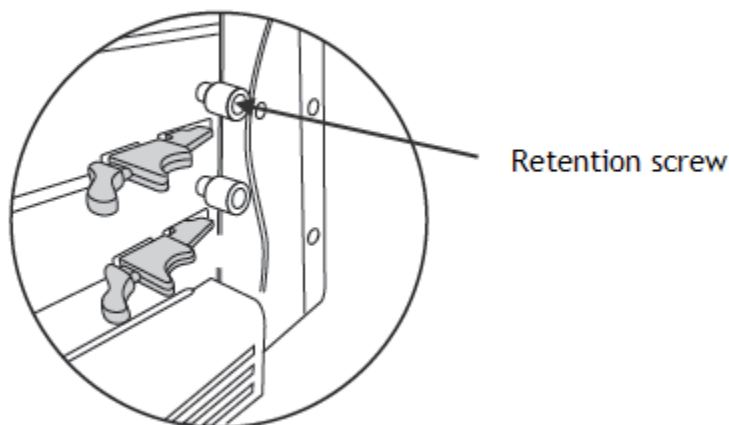
Table 1-1 Ordering a replacement chassis for SCOPIA Elite 5200 Series MCU

Name	Part number
SCOPIA Elite 5200 Series MCU Chassis	55546-00603

Procedure

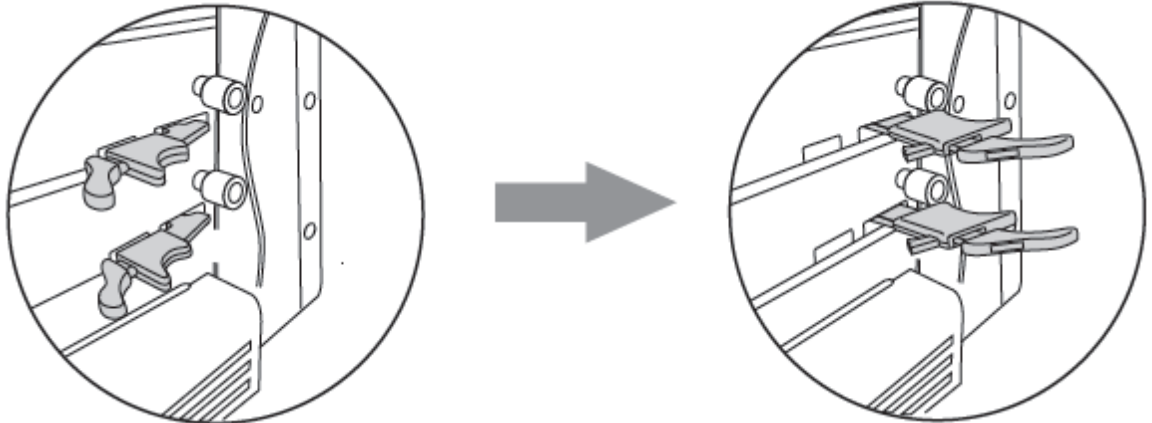
- Step 1** Power off the MCU and disconnect it from the power outlet.
- Step 2** Take the required antistatic precautions to avoid static electricity damages. This includes reading the *Safety Guide for the SCOPIA Elite 5200 Series MCU* and among other precautions wearing a wrist strap.
- Step 3** Remove the grounding cable from the MCU chassis and disconnect all other connections.
- Step 4** Release the retention screws of the lower media blade if it is installed in the model (see [Figure 1-1 on page 2](#)). Use a Phillips screwdriver if required. Repeat this step for the retention screws of the primary (upper) media blade.

Figure 1-1 Releasing the retention screw



- Step 5** Rotate the latch outward and slide the lower media blade out of the slot (see [Figure 1-2 on page 3](#)). Repeat for the upper media blade.

Figure 1-2 Rotating the latch to remove the media blade



- Step 6** If the chassis includes a redundant power supply, remove it as explained in [Installing or Replacing the MCU Redundant Power Supply Unit page 9](#).
- Step 7** Remove the chassis from the rack. Install and fasten the replacement chassis to the rack as explained in the *Installation Guide for SCOPIA Elite 5200 Series MCU*.
- Step 8** Slide the upper media blade into the chassis slot until the outer panel of the media blade is aligned with the chassis panel. Rotate the latch inward to secure the blade connections inside the chassis. Repeat for the lower media blade.
- Step 9** Tighten the retention screws.
- Step 10** If required, reinstall the redundant power supply as explained in [Installing or Replacing the MCU Redundant Power Supply Unit page 9](#).
- Step 11** Connect the MCU to power. Install the grounding wire and perform other connections as required. Power on and test the MCU functioning.

Replacing the MCU Media Blade

Always insert the primary media blade into the upper tray, and the secondary media blade into the lower tray.

Before You Begin

You can order a replacement media blade by contacting your local RADVISION representative. Use the part number listed in this table, and state the version of your MCU.

The replacement blade must be programmed with a software version compatible with the one used in the media blade currently installed in the MCU.

Table 1-2 Ordering a replacement SCOPIA Elite Media Blade

Name	Part Number	Description
SCOPIA Elite 5200 Series MCU Primary Media Blade	55546-00602	Upper blade
SCOPIA Elite 5200 Series MCU Secondary Media Blade	55546-00604	Lower blade

Procedure

- Step 1** Backup the current configuration as explained in [“Backing Up Your SCOPIA Elite MCU Configuration” on page 13](#).
- Step 2** Power off the MCU. Disconnect it from the power outlet. Disconnect all other cables.
- Step 3** Take the required antistatic precautions to avoid static electricity damages. This includes reading the *Safety Guide for the SCOPIA Elite 5200 Series MCU* and among other precautions wearing a wrist strap.
- Step 4** Unscrew the retention screws of the media blade (see [Figure 1-1 on page 2](#)). Use a Phillips screwdriver if required.
- Step 5** Rotate the latch and slide the media blade out of its slot (see [Figure 1-2 on page 3](#)).
- Step 6** Slide the replacement media blade into the slot until the outer panel of the media blade is aligned with the chassis panel. Rotate the latch inward to secure the blade connections inside the chassis.
- Step 7** Tighten the media blade retention screws.
- Step 8** Reconnect the MCU to the power outlet. Reconnect all the other cables as required. Power on the MCU.
- Step 9** Set the IP address for both blades. For more information, see the *Installation Guide for SCOPIA Elite 5200 Series MCU*.
- Step 10** Restore the configuration as explained in [“Restoring Your SCOPIA Elite MCU Configuration” on page 13](#).

Replacing the MCU Control Blade

You can replace the control blade while the SCOPIA Elite MCU is functioning. Perform the replacement immediately after removing the faulty control blade.

Before You Begin

To order, contact your local RADVISION representative using the part number listed in this table.

Table 1-3 Ordering a replacement control blade

Name	Part Number
SCOPIA Elite 5200 Series MCU Control Blade	55546-00612

Procedure

- Step 1** Take the required antistatic precautions to avoid static electricity damages. This includes reading the *Safety Guide for the SCOPIA Elite 5200 Series MCU* and among other precautions wearing a wrist strap.
- Step 2** Unscrew the retention screws of the control blade (see [Figure 1-1 on page 2](#)). Use a Phillips screwdriver if required.
- Step 3** Rotate the latch and slide the control blade out of its slot (see [Figure 1-2 on page 3](#)).
- Step 4** Slide the replacement control blade into the chassis slot until the outer panel of the control blade is aligned with the chassis panel. Rotate the latch inward to secure the blade connections inside the chassis.
- Step 5** Tighten the blade retention screws.
- Step 6** Check that the fans function and that the MCU interface screen does not display any alarm.

Replacing the MCU Fan Drawer

The fan drawers are located on each side of the MCU chassis. The fan drawers must be installed when the system is operational. The right-side fan draws the cooling air inside the chassis through a filter. The cooling air circulates inside the card cage and the left-side fan blows the air outside the chassis.

The filter that is attached to the right fan drawer can be cleaned or replaced as explained in [“Cleaning or Replacing the MCU Air Filter” on page 8](#).



Warning

You can replace the fan drawers without powering off the MCU only if you are able to do so within five minutes. Otherwise, we recommend that you power off the MCU before replacing a fan drawer.

The fans have high speed modes. By default, the fans start at high speed. Speed is gradually reduced to fit environmental temperature during the first 30 minutes of operation.

The MCU raises fan speed when:

- It senses high temperatures within the chassis.
- One or more fans fail.
- One of the fan drawer is removed.

The MCU returns fan speed to normal (low) when:

- Temperatures within the chassis falls to acceptable levels.
- A missing fan drawer is returned to the chassis.

Before You Begin

To install or replace the fan drawer, you need these parts and tools:

- A grounding strap
- A replacement fan drawer. To order, contact your local RADVISION representative using the reference listed in this table.

Table 1-4 Ordering a replacement fan drawer for SCOPIA Elite 5200 Series MCU

Name	Part number
SCOPIA Elite 5200 Series MCU Fan Drawer	55546-00611

Procedure

Step 1

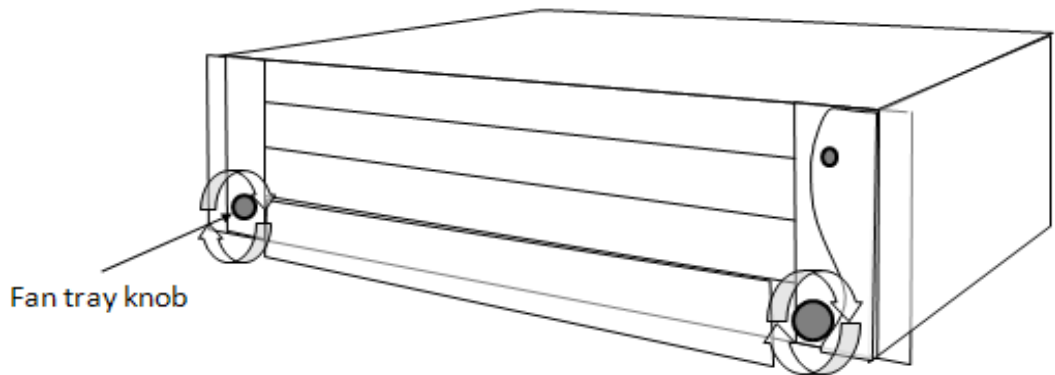
If you do not have the replacement fan drawer at hand, power off the MCU.

Step 2

Remove the fan drawer:

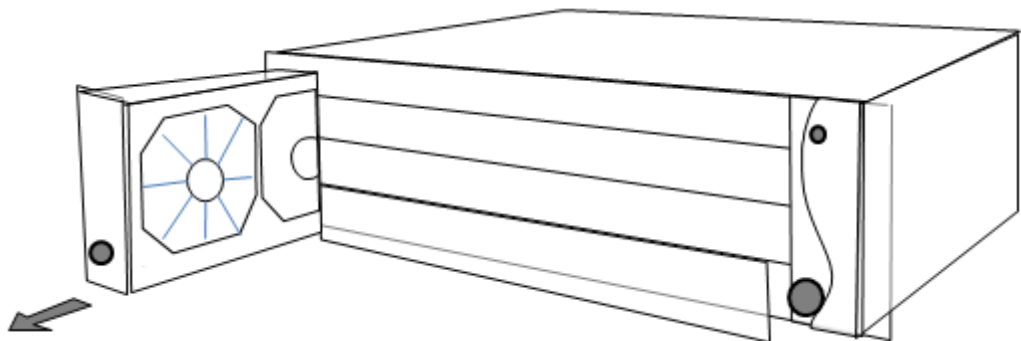
- a. Connect a grounding strap to the closest electrostatic discharge (ESD) grounding jack on the rack.
- b. Turn the fan drawer knob counterclockwise to unlock the fan drawer (see [Figure 1-3 on page 7](#)).

Figure 1-3 Locating the fan drawer knobs



- c. Use the fan drawer knob as a handle and pull the fan drawer out of the chassis. When you pull the tray out, you disengage it from its power connector and the fans slow down. See [Figure 1-4 on page 7](#).

Figure 1-4 Pulling the fan drawer out of the chassis



Warning

After you pull the fan drawer out of the chassis, the fans continue to rotate at high speed for several seconds. To avoid injury, you must hold the fan drawer by its handle until the fans stop rotating.

Step 3

Install the replacement fan drawer:

- a. Align the fan drawer so that it is in a vertical position on the tray guiding rails.
- b. Hold the tray in vertical position and check you do not insert it at an angle while you slide it slowly and carefully onto the guiding rails.



Caution

Inserting the fan drawer at an angle or pushing the fan drawer into its slot using force can damage the pins on the power connector.

- c. Make sure that the fan drawer is inserted up to the stop.
- d. Turn the fan drawer knob clockwise to lock the fan drawer in the chassis.

Cleaning or Replacing the MCU Air Filter

The air filter is located in the fan drawer chassis airflow intake, at the right side of the right fan drawer.

You must periodically clean or replace the air filter. Once a month (or more often in dusty environments), examine the filter and clean or replace it if it is dirty:

- Keep a log of the date of each filter cleaning and filter replacement.
- You can clean or replace the filters while the MCU is powered on and fully operational.



Caution

You can replace the air filter without powering off the MCU only if you are able to do it within five minutes. Otherwise, we recommend that you power off the MCU before replacing the air filter.

Before You Begin

Make sure you have the following equipment:

- A grounding strap
- A No. 2 Phillips screwdriver
- Filter cleaning resources: vacuum cleaner, plain water, or hot water and milder detergent (if the filter is very dirty).
- A replacement filter, if necessary. Contact customer support to order a new air filter.

Procedure

Step 1

Connect the grounding strap to the electrostatic discharge (ESD) point on the rack.

Step 2

Using the Phillips-head screwdriver, unscrew the screw that secures the filter drawer panel to the right fan drawer panel (Figure 1-5 on page 8) and slide the filter drawer out of the chassis (Figure 1-6 on page 9).

Figure 1-5 Unscrewing the fan drawer panel

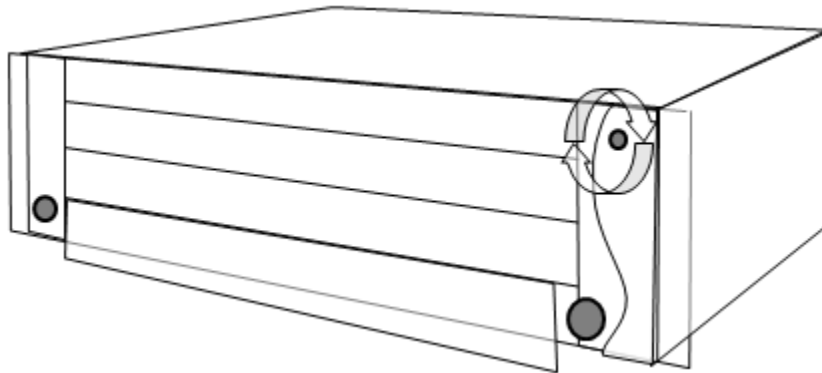
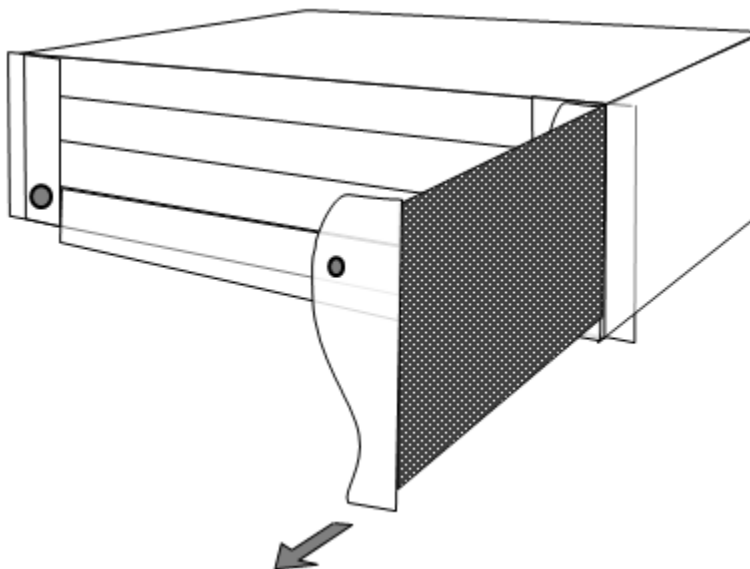


Figure 1-6 Removing the fan drawer from the chassis



Step 3

If you decide to clean the filter, use one of these cleaning methods:

- Vacuum cleaner (preferred). You do not need to dry the filter afterwards. Vacuum the filter until it is clean and free of dust.
- Plain water. Hold the filter under the water with the metal grid facing toward you and let the water flow down through the filter. This orientation causes the water to flow through the filter, in the direction opposite to the usual air flow, so you dislodge rather than embed matter trapped in the filter. Allow the filter to dry thoroughly before reinstalling it.
- Hot water and mild detergent. If the filter is too dirty to be completely cleaned with a vacuum or with plain water, immerse the filter in a solution of hot water and mild detergent. Rinse the filter thoroughly in plain water and allow it to dry completely before reinstalling it.

Step 4

Replace the cleaned filter or install the replacement filter by sliding it into its slot near the right fan tray.

Step 5

Use the Phillips-head screwdriver to tighten the screw and secure the fan drawer panel to the right fan tray panel.

Installing or Replacing the MCU Redundant Power Supply Unit

You can add or remove the redundant power supply unit (PSU) when the MCU is functioning. However, we strongly recommend to turn off the MCU when you perform the procedure for the first time.

Before You Begin

Verify you have the following equipment:

- A cross head screwdriver 2x100mm long (or different length)
- A slot head screwdriver 3.5x100mm (or longer)

- An antistatic wrist strap
- A PSU. To order, contact your local RADVISION representative using the reference listed in this table.

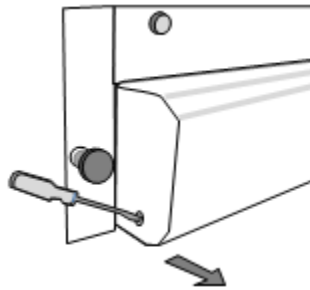
Table 1-5 Replacement power supply for SCOPIA Elite 5200 Series MCU

Name	Part number
SCOPIA Elite 5200 Series MCU AC Power Supply	55546-00613

Procedure

- Step 1** Verify that the redundant PSU switch is turned off.
- Step 2** If you perform this procedure for the first time, turn off the MCU.
- Step 3** Remove the PSU cover (see [Figure 1-7 on page 10](#)):
- Insert the slot head screwdriver into the opening on the left side of the PSU cover and gently push sideways.

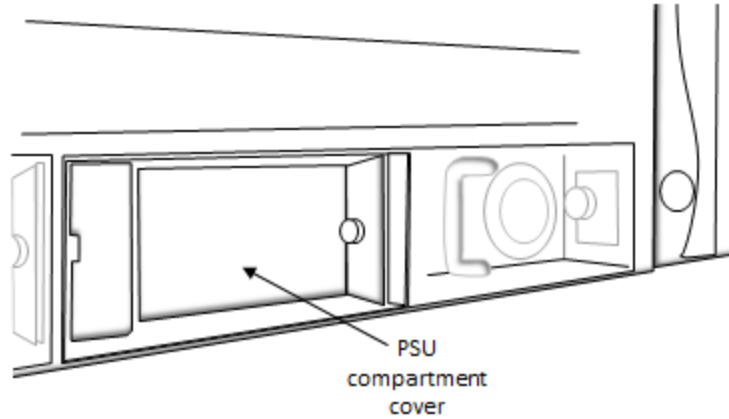
Figure 1-7 Removing the PSU cover



- Insert the slot head screwdriver into the opening on the right side of the PSU cover and gently push sideways.
 - Repeat steps a and b in turn until the PSU cover is released from its clips.
- Step 4** Locate the cover of the PSU compartment which covers the PSU empty slot (see [Figure 1-8 on page 11](#)).

Note: Set the cover of the PSU compartment aside for use as a spare part.

Figure 1-8 Locating the PSU compartment cover



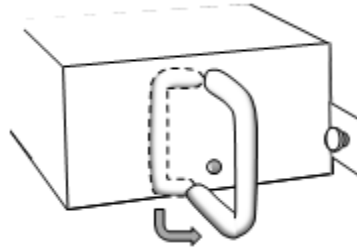
Step 5

Loosen the thumbscrew that secures the filling panel and remove the panel.

Step 6

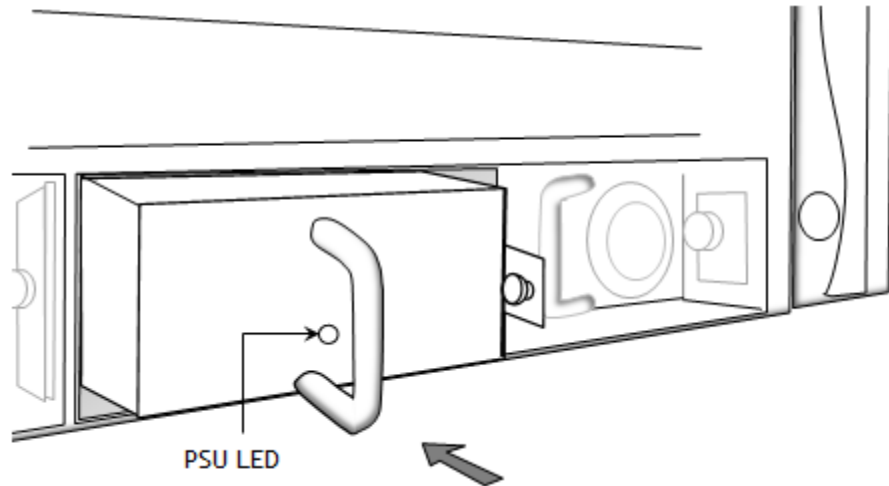
Open the handle of the redundant PSU (see [Figure 1-9 on page 11](#)). Inspect the PSU to verify that it is not damaged and that the blue connector pins are intact.

Figure 1-9 Opening the PSU handle



Step 7 Insert the redundant PSU into the slot (see [Figure 1-10 on page 12](#)). Verify that the blue connector on the rear of the PSU is in the upper position.

Figure 1-10 Inserting the redundant PSU into its slot



Step 8 Slide the redundant PSU until its blue connector is plugged into the corresponding blue connector inside the PSU slot. Secure the PSU to the slot by tightening the thumbscrew.

Step 9 Fold the redundant PSU handle in.

Step 10 On the rear panel, remove the cover of the secondary power inlet using the cross head screwdriver.

Step 11 Plug in the power cord of the redundant PSU.

Step 12 Turn on the redundant PSU switch from the rear panel.

Step 13 On the front panel, check fan operation by verifying that the FAN ALARM L and FAN ALARM R LEDs light green.

Step 14 Verify that the PWR ALARM LED on the front panel of the MCU lights green.

Step 15 Verify that the redundant PSU is installed correctly and is ready for use:

- On the rear panel, turn off the main PSU.
- Verify that the PWR ALARM LED and the main PSU LED light RED.
- Turn the main PSU on again, and then check that its LED lights green.
- Turn off the redundant PSU, and check that its LED lights red. See [Figure 1-10 on page 12](#) for the LED location.
- Turn the redundant PSU on, and check that its LED lights green.


Step 16 Replace the PSU cover.

Backing Up Your SCOPIA Elite MCU Configuration

You can save MCU configuration settings to a file and then export this file to a storage device on your network. You can use the saved configuration file to restore the settings to the current MCU or to configure a similar MCU.

The exported file is a .zip file that includes a .val file and a .xml file.

Procedure


- Step 1** Select the  icon in the MCU administrator interface.
- Step 2** Select **Backup configuration**.
- Step 3** Save the configuration settings file to your chosen location.
The .zip extension is automatically appended to the file name.

Restoring Your SCOPIA Elite MCU Configuration

You can import the settings of a saved MCU configuration file from a storage device on your network. You can use the saved configuration file to restore the settings to the current MCU or to configure another MCU.

The imported file is a .zip file that includes a .val file and a .xml file.

Procedure

- Step 1** Select the  icon in the MCU administrator interface.
- Step 2** Select **Restore configuration**.
- Step 3** Select **Browse**.
- Step 4** Navigate to and select the configuration file (.zip) you want to import.
- Step 5** Select **Restore**.
- Step 6** Select **Continue** to upload the new configuration settings.
The restore procedure causes all current configuration to be permanently lost.
The system restarts automatically.
All active conferences are disconnected.
- Step 7** Select **OK** to complete the restore procedure.



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