SCOPIA 400/1000 MCU Quick Start

Version 5.7

Multipoint Conferencing Unit

SCOPIA

NOTICE

For further information contact RADVISION or your local distributor or reseller.

SCOPIA MCU, June 2008
Publication 11
http://www.radvision.com

62888-00001 Rev A03

Quick Start

13. Change the Configuration Software Password

14. Point the MVP to the Controlling SCOPIA MCU

15. Save MVP Network Configuration Settings

Using the SCOPIA MCU

16. Create a Conference

Note For more detailed information, see the SCOPIA 400/1000 MCU User Guide and the appropriate SCOPIA Platform Guide.

Note If you ordered a non-assembled SCOPIA MCU and MVP, you need to install the SCOPIA MCU and MVP modules in the SCOPIA chassis. See Mount the SCOPIA 1000 Chassis in a 19" Rack (Optional) on page 7

INTRODUCTION The SCOPIA MCU works together with a SCOPIA Media and Video Processor (MVP) module to perform audio and videoconferencing. The SCOPIA MCU is responsible for signaling and audio. The MVP is responsible for video. The SCOPIA MCU and MVP modules connect via the Ethernet.

Each SCOPIA MCU may be registered to up to three MVP modules on the same chassis, or up to four MVP modules on multiple SCOPIA 400 chassis or on a single SCOPIA 1000 chassis.

For correct operation, the MVP card must register with the SCOPIA MCU.
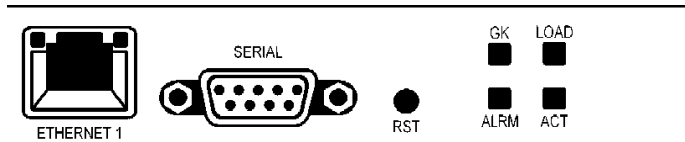
Figure 1   *SCOPIA MCU Front Panel*

MC   LOAD

SERIAL

ETHERNET 1   RST   ALARM   ACT
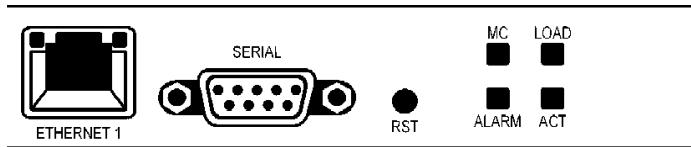
Figure 2   *MVP Front Panel*

COMPONENT	DESCRIPTION
ETHERNET connector	An RJ-45 connector that provides the primary Ethernet connection for the IP network port.
SERIAL connector	A DB-9 connector that allows you to connect a PC terminal for local configuration.
RST button	Allows you to reset the SCOPIA MCU/MVP manually.
GK LED (on the SCOPIA MCU) MC LED (on the MVP)	Lights green when the SCOPIA MCU/MVP is registered with a gatekeeper, or when there is no gatekeeper registered and the auto attendant feature is enabled.
LOAD LED	Lights green when more than 50% of SCOPIA MCU/MVP resources are in use.
ACT LED	Lights green to indicate that there is at least one currently active conference on the SCOPIA MCU/MVP.

COMPONENT	DESCRIPTION
ALRM LED	Lights green to indicate that an error has occurred and the SCOPIA MCU/MVP requires resetting.
ETHERNET LEDs	The top part of the Ethernet connector contains two LED indicators. The left-hand LED lights green when the local IP network link is active. The right-hand LED lights green if the connection speed is 100 Mbps, and is off when the connection speed is 10 Mbps.
SWAP RDY LED	Hot Swap indication. Lights blue when the latches of a board are unlocked and it is safe to remove the board from the chassis. Goes off when the board is completely detached.

UNPACK AND VERIFY THE EQUIPMENT

The shipping box for a non-assembled SCOPIA MCU and MVP includes the following items:

- SCOPIA MCU module
- SCOPIA MVP module
- 2 LAN cables (1 for the SCOPIA MCU, 1 for the MVP)
- SCOPIA 400/1000 User Guide (in PDF format only)
- SCOPIA 400/1000 Quick Start
- The appropriate SCOPIA Platform Guide (in PDF format only)
- SCOPIA MCU Release Notes
- The appropriate SCOPIA Chassis Release Notes
- Utilities and Documentation CD-ROM containing product documentation, utilities and online help files.

If your SCOPIA MCU and MVP are already assembled on a SCOPIA chassis, or if your order contains an empty chassis, you should also receive the following:

- 2 power cables (1 for each Power Supply Unit)
- Terminal cable
- Rack mounting kit (two brackets and six screws)
- Four rubber feet

PREPARE A CHECKLIST

Before you start configuration, fill in the checklist below:

For the SCOPIA MCU

- IP address: _ _ _. _ _ _. _ _ _. _ _ _
- IP subnet mask: _ _ _. _ _ _. _ _ _. _ _ _
- Router IP address: _ _ _. _ _ _. _ _ _. _ _ _
- Gatekeeper IP address: _ _ _. _ _ _. _ _ _. _ _ _
- SIP Proxy IP address: _ _ _. _ _ _. _ _ _. _ _ _ (optional)

For each MVP

- MVP IP address: _ _ _. _ _ _. _ _ _. _ _ _
- MVP IP subnet mask: _ _ _. _ _ _. _ _ _. _ _ _
- Router IP address: _ _ _. _ _ _. _ _ _. _ _ _

Note Typically, the MVP subnet mask and router IP address are the same as those used for the SCOPIA MCU.

PREPARE THE SITE

When installing the SCOPIA MCU, ensure that:

- There is an IP port available on the switch for the SCOPIA MCU and a separate IP port for each SCOPIA MVP used.
- There is an available H.323 gatekeeper or SIP proxy server with which to register the SCOPIA MCU. (You may choose to work without an H.323 gatekeeper or SIP proxy server in the network. If so, ensure the auto-attendant feature is enabled.)

MOUNT THE SCOPIA 400 CHASSIS IN A 19" RACK (OPTIONAL)

You can optionally mount the SCOPIA 400 chassis in a standard 19-inch rack. Two mounting brackets and a set of screws are included in the SCOPIA 400 chassis shipping box.

☞ **Procedure**

1. Disconnect all cables including the power cables.
2. Place the SCOPIA 400 chassis right-side up on a hard flat surface, with the front panel facing you.
3. Position a mounting bracket over the mounting holes on each side of the SCOPIA 400 chassis.

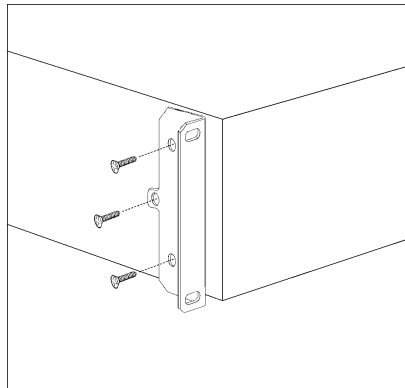*Figure 3*   *Fitting a Bracket for Rack Mounting*

4. Pass the screws through the brackets and tighten them into the screw holes on each side of the SCOPIA 400 chassis using a suitable screwdriver.
5. Insert the SCOPIA 400 chassis into the 19-inch rack.
6. Fasten the brackets to the side rails of the rack.
7. Make sure that the air vents at the sides of the SCOPIA 400 chassis are not blocked.

MOUNT THE SCOPIA 1000 CHASSIS IN A 19" RACK (OPTIONAL)

You can optionally mount the SCOPIA 1000 chassis in a standard 19-inch rack. For more information, see the Installing the SCOPIA MCU chapter in the SCOPIA 400/1000 MCU User Guide.

INSTALL THE SCOPIA MCU AND MVP

This section describes how to insert the SCOPIA MCU into the SCOPIA 400 chassis and into the SCOPIA 1000 chassis.

Before You Begin

Note the following:

- The SCOPIA 400 chassis has four slots. You can install the SCOPIA MCU or the MVP in any of the slots at the front of the chassis.
- Insert the SCOPIA MCU in the top slot at the front of the SCOPIA 400 chassis to view status and identification information via the **System** web user interface.
- The SCOPIA 1000 chassis has 18 payload slots. You can install the MCU or the MVP in any of slots 3-20.

Warning

- During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not directly touch the backplane with your hand or any metal tool, or you could shock yourself.
- Only trained and qualified personnel should be allowed to install, replace, or service this equipment.
- Before working on a system that has an on/off switch, turn OFF the power and unplug the power cord.

☞ **Procedure**

1. On the front of the chassis, loosen the screws of the blank panel covering the slot into which the SCOPIA MCU or the MVP module is to be installed.
2. Remove the blank panel.
3. Remove the new SCOPIA MCU or the MVP module from the antistatic bag.
4. Press the red buttons and open the handles of the SCOPIA MCU or the MVP module.
5. Align the edges of the SCOPIA MCU or the MVP module with the chassis guide rails.
6. Slide the SCOPIA MCU or the MVP module into the chassis until it stops (see Figure 4 for the SCOPIA 400 chassis).
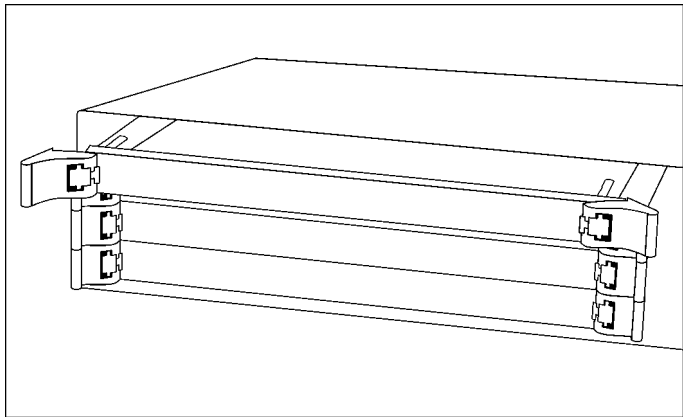
Figure 4   *Inserting the SCOPIA MCU or the MVP Module into the SCOPIA 400 Chassis*

7. Use even pressure to push the module further into the slot.

Caution Do not force the connection. Forcing the connection can bend or damage the pins in the connector inside the chassis.

Note If you are installing the SCOPIA MCU or the MVP module and the power to the chassis is on, the SWAP RDY LED on the module front panel turns blue when you slide the module into the chassis as far as it will go. This means that you can secure the module safely. The LED turns off when the handles are closed.

---

   8. Snap the handles forward to secure the SCOPIA MCU or the MVP module in the slot.
   9. Secure the SCOPIA MCU or the MVP module screws.

Caution Do not operate the system unless all cards, faceplates, front covers and rear covers are in place.

ASSIGN AN IP ADDRESS TO THE SCOPIA MCU

The first time you install the SCOPIA MCU, you assign an IP address using a terminal cable connection to access the boot configuration menu. At power-up, the SCOPIA MCU goes through the following boot phases:

- Auto-boot—The embedded operating system initializes and displays basic information.
- Configuration menu—A six second countdown allows you to enter the configuration menu.

■ Initialization—The SCOPIA MCU completes the boot sequence and is ready for operation.

Note   You can perform serial port configuration of the SCOPIA MCU only at startup, during a short period indicated by a 6-second countdown. Once the initialization phase is complete, the only way you can access the configuration menu is by restarting the SCOPIA MCU.

CONNECT TO A PC   You make the serial connection by connecting a PC terminal equipped with a terminal emulation application to the front panel serial port of the SCOPIA MCU.

☞   **Procedure**

1. Connect the SCOPIA MCU COM port on the front panel to a PC terminal serial port using the supplied terminal cable.
2. Run a terminal emulation application (such as HyperTerminal) on the PC.
3. Configure the PC communication settings for the serial port as follows:
   □ 9600 Baud rate
   □ 8 data bits
   □ 1 stop bit
   □ No parity
   □ No flow control
4. Start the terminal emulation application on the PC.
5. Turn on or reset the SCOPIA MCU.

Note   The debug mode prompt appears before the boot Configuration prompt. Ignore this message and wait for the boot Configuration prompt to appear.

---

6. Press any key at the command prompt to display the network configuration **Main** menu.

```
Press any key to start configuration...
Main menu
N: Configure default network port values
P: Change the configuration software
password
S: Configure network security level
A: Advanced configuration menu
Q: Quit

Select:
```

Figure 5   *Network Configuration Main Menu*

Warning   Configuration of any of the parameters other than **<N>** should not be performed by an unauthorized person.

CONFIGURE THE SCOPIA MCU IP ADDRESS

You set the IP address, default router IP address, and subnet mask as follows:

☞   **Procedure**

1. At the colon, type **N** to configure default network port values and press **Enter**.

The default network port value configuration options display (Figure 6).

```
Enter values for default network
port
Enter IP Address for default
Interface
Without leading zeros
<172.20.27.105>:

Enter Default Router IP Address
for default Interface
Without leading zeros
<172.20.254.254>:

Enter IP Mask for default
Interface
Without leading zeros
<255.255.0.0>:
```

Figure 6   *Configuring Default Network Port
                Values*

2. Type the IP address, default router IP address, and
       IP subnet mask, pressing **Enter** to proceed from
       one parameter to the next.

3. Press **Q** to finalize the new settings and return
       to the main menu.

       The SCOPIA MCU automatically resets itself.

CONNECT TO THE IP NETWORK

Use the supplied LAN cable to connect the Ethernet IP network port on the front panel of the SCOPIA MCU to a 100Base-T IP network connection on your network switch.

CONFIGURE THE SCOPIA MCU

Once you have assigned an IP address to the SCOPIA MCU, you can use the web interface to configure the SCOPIA MCU using the Setup Wizard.

☞ **Procedure**

1. In your web browser, type the IP address of the SCOPIA MCU.

    For example: **http://123.221.23.44**

    Press **Enter** to display the **Login** screen.

2. Click the **Sign In** button to display the **Name** and **Password** fields.

3. Type the administrator user name and password in the **Name** and **Password** fields and click **Go**.

Note The default name is *admin* and the password is null. It is recommended that you change these settings for security reasons. For more information, see Change the Default Administrator Password on page 15.

---

4. The configuration interface displays and automatically launches the **Setup Wizard**.

RUN THE SETUP WIZARD

The SCOPIA MCU Setup Wizard allows you to configure addressing for the SCOPIA MCU IP, H.323 gatekeeper and SIP proxy and enables you to set the SCOPIA MCU to the regional date and time settings of the device on which you are managing the SCOPIA MCU.

The Setup Wizard runs automatically the first time you access the SCOPIA MCU and can be accessed anytime subsequently by selecting the **Setup Wizard** button in the horizontal toolbar of the Board interface.

☞ **Procedure**

1. When the Setup Wizard greeting page launches, click **Next**.

   The **Board Settings** window displays.

2. Type the SCOPIA MCU IP address, subnet mask and Router IP address, if necessary, and click **Next**.

   The **H.323 Settings** window displays.

3. Type the H.323 IP address and port number of the network gatekeeper on which H.323 calls to the SCOPIA MCU are routed and click **Next**.

   The **SIP Settings** window displays.

4. Type the SIP proxy IP, port and default domain address through which SIP calls to the SCOPIA MCU are routed.

5. If the SIP proxy server is a Microsoft Real-Time Communications Server (RTC), select **Microsoft RTC** and click **Next**.

   The **Date and Time Settings** window displays.

6. Set the system time of the SCOPIA MCU board to the local time of the PC on which you are managing the SCOPIA MCU.

CHANGE THE DEFAULT ADMINISTRATOR PASSWORD

The default password of the SCOPIA MCU is set to null. It is recommended that you change the default administrator password.

☞ **Procedure**

1. In the sidebar, click the **Board** button to display the Board configuration tabs.

2. In the **Users** tab select the Administrator user profile and click **Edit**.

   The **Edit User** dialog box displays where you can reset the administrator password.

   The new password is valid the next time you sign in to the SCOPIA MCU after signing out from the current session.

CHECK SCOPIA MCU SERVICE PREFIXES

The SCOPIA MCU includes pre-configured default service prefixes which are combined with a unique number to create the conference ID which you dial to join or create a conference. The default settings are listed in the **Services** tab of the MCU interface. You can modify the existing prefixes to suit your network dialing plan or define new services and add them to the list.

You must ensure that the service prefix numbers are not identical to the first digits of any of your network endpoint phone numbers or aliases.

☞ **Procedure**

1. In the SCOPIA MCU **Services** tab, click **Add** to add a new service, or select a service and click **Edit** to modify that service.

2. Type the prefix number for this service and set or modify additional settings as required and click **OK**.

   After confirming your settings, the SCOPIA MCU is automatically updated with the new service profile settings.

SAVE THE CONFIGURATION

The **Export** button on the toolbar allows you to save the SCOPIA MCU configuration parameters as a file to your local hard disk or a network directory.

☞ **Procedure**

1. In the toolbar, click **Export**.

   The Windows **File Download** dialog is displayed.

2. Check the **Save this file to disk** option in the Windows **File Download** dialog and click **OK**.

   The Windows **Save As** dialog is displayed.

3. In the **File name** text box, type a filename, for example MCU1_NEW and select a location to save this configuration setup.

4. Click **Save**.

ASSIGN AN IP ADDRESS TO THE MVP

The first time you install the MVP, you assign an IP address using a terminal cable connection to access the boot configuration menu. At power-up, the MVP goes through the following boot phases:

■ Auto-boot—The embedded operating system initializes and displays basic information.

■ Configuration menu—A six second countdown allows you to enter the configuration menu.

■   Initialization—The MVP completes the boot sequence and is ready for operation.

Note   You can perform serial port configuration of the MVP only at startup, during a short period indicated by a 6-second countdown. Once the initialization phase is complete, the only way you can access the configuration menu is by restarting the MVP.

CONNECT TO A PC   You make the serial connection by connecting a PC terminal equipped with a terminal emulation application to the front panel serial port of the MVP.

☞   **Procedure**

1. Connect the MVP COM port on the front panel to a PC terminal serial port using the supplied terminal cable.
2. Run a terminal emulation application (such as HyperTerminal) on the PC.
3. Configure the PC communication settings for the serial port as follows:
   □   9600 Baud rate
   □   8 data bits
   □   1 stop bit
   □   No parity
   □   No flow control
4. Start the terminal emulation application on the PC.
5. Turn on or reset the MVP.

Note   The debug mode prompt appears before the boot Configuration prompt. Ignore this message and wait for the boot Configuration prompt to appear.

6. Press any key at the command prompt to display the network configuration **Main** menu.

```
Press any key to start configuration...
Main menu
N: Configure default network port values
P: Change the configuration software
password
S: Configure network security level
A: Advanced configuration menu
Q: Quit

Select:
```

Figure 7   Network Configuration Main Menu

Warning   Configuration of any of the parameters other than **<N>** should not be performed by an unauthorized person.

CONFIGURE THE MVP IP ADDRESS

You set the IP address as follows:

☞   **Procedure**

1. At the colon, type **N**.

The default network properties screen displays.

```
Enter IP Address for default Interface
Without leading zeros
<172.20.35.110:ffff0000>
Enter Default Router IP Address for
default Interface
Without leading zeros
<current default Gateway IP address>:
```

Figure 8   Default Network Properties Screen

2. To modify the IP address, type the new IP address of the card followed by the subnet mask, in the format <IP address:subnet mask> as shown in Figure 8.

3. Press **Enter** to proceed to the next setting; otherwise, just press **Enter** to proceed to the next setting.

4. Type the default Gateway IP address and press **Enter** to proceed to the next setting; otherwise, just press **Enter** to proceed to the next setting.

5. Press any key to return to the main MVP configuration menu.

CHANGE THE CONFIGURATION SOFTWARE PASSWORD

Change the configuration software password as follows:

☞ **Procedure**

1. At the colon, type **P**.

   The user profile screen displays.

   ```
   Enter user name:
   Enter new password:
   ```

   Figure 9   User Profile Screen

2. Type the new user name and press **Enter** to proceed to the next setting.

3. Enter the new password and press any key to return to the main MVP configuration menu.

POINT THE MVP TO THE CONTROLLING SCOPIA MCU

Point the MVP to the controlling SCOPIA MCU as follows:

☞ **Procedure**

1. At the colon, type **M**.

The SCOPIA MCU IP address screen displays.

```
Enter MCU ip address
Without leading zeros
<current IP address>:
```

Figure 10   *SCOPIA MCU IP Address Screen*

2. Type the new SCOPIA MCU IP address and press any key to return to the main MVP configuration menu.

Ensure that you use the same IP address as the one you configured at

SAVE MVP NETWORK CONFIGURATION SETTINGS

Modified network configuration settings are automatically saved when you exit the main MVP configuration menu.

☞ **Procedure**

◎ At the colon, type **Q**.

```
Main menu
N: Configure default network port
values
P: Change the configuration software
password
S: Configure network security level
M: Change MCU ip address
A: Advanced configuration menu
Q: Quit

Select: Q
```

Figure 11   Main MVP Configuration Menu

The MVP configuration menu closes and your machine
will automatically reboot.

**CREATE A
CONFERENCE**

The following is a brief introduction for setting up your first
conference. It includes examples of the dialing sequences used
to join a conference or to invite others into the conference.

REQUIREMENTS

The following information is necessary for dialing into and
monitoring a conference:

- A conference ID number composed of a valid service
  prefix number and unique conference number.
- The web address of the SCOPIA MCU hosting the
  conference.

START A CONFERENCE

You can initiate a conference by dialing to the SCOPIA MCU directly from an H.323 or SIP terminal or through a gateway from an H.320 terminal, a 3G-H.324M terminal or a regular telephone.

Upon conference initiation, the conference manager can either invite other participants into the conference or supply each participant with the conference ID number for dialing directly into the conference.

☞   **Procedure**

1. Compose a conference ID number using an appropriate service prefix and a unique ID number up to 256 characters long.

2. Notify all conference participants of the conference ID number. Users joining the conference via gateways also need to know a gateway phone number.

3. To start the conference dial the following:

    <service prefix>+<unique ID number>.

    For example, **605793**, where **60** is the service prefix, and **1234** is the unique ID number.

    As soon as the SCOPIA MCU accepts the call, the conference is established.