RADVISION®
an Avaya company

Scopia XT5000 Series

User Guide

Version 3.2

For Solution 7.7, 8.0.x, 8.2

3.2

© 2000-2013 RADVISION Ltd. All intellectual property rights in this publication are owned by RADVISION Ltd and are protected by United States copyright laws, other applicable copyright laws and international treaty provisions. RADVISION Ltd retains all rights not expressly granted.

All product and company names herein may be trademarks of their registered owners.

This publication is RADVISION confidential. No part of this publication may be reproduced in any form whatsoever or used to make any derivative work without prior written approval by RADVISION Ltd.

No representation of warranties for fitness for any purpose other than what is specifically mentioned in this guide is made either by RADVISION Ltd or its agents.

RADVISION Ltd reserves the right to revise this publication and make changes without obligation to notify any person of such revisions or changes. RADVISION Ltd may make improvements or changes in the product(s) and/or the program(s) described in this documentation at any time.

If there is any software on removable media described in this publication, it is furnished under a license agreement included with the product as a separate document. If you are unable to locate a copy, please contact RADVISION Ltd and a copy will be provided to you.

Unless otherwise indicated, RADVISION registered trademarks are registered in the United States and other territories. All registered trademarks recognized.

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

User Guide for Scopia XT5000 Series Version 3.2 , June 9, 2013

http://www.radvision.com

Table of Contents

Chapter 1: About the Scopia XT Series

About the Models in the Scopia XT Series Product Line 7
Comparing Between Scopia XT Series Models 11

Chapter 2: Getting Started

Initial Workflow for XT Series Users 13
How to Control the XT Series 14
Accessing XT Series Web Interface 14
Accessing the Main Menu of the XT Series 15
Using the XT Remote Control Unit 17
Pairing an XT Remote Control Unit with a XT Codec Unit 20
Performing Basic Configuration 22
Accessing the Quick Setup Procedure 22
Setting the System Name and Language 24
Adjusting the Image Position 25
Configuring Network Settings 27
Configuring Gatekeeper Settings 29
Remotely Setting the System Name and Language 30

Chapter 3: Starting a Videoconference

Preparing for a Videoconference 32
Tips for Participating in a Videoconference 32
Managing the Phone Book 33
Adding and Modifying Contacts in the Phone Book 33
Searching for a Contact in the Phone Book 36
Deleting a Contact from the Phone Book 37
Dialing a Number Directly from the Endpoint 37
Dialing a Number from the XT Series Web Interface 39
Modifying the Default Call Settings 41
Answering and Ending a Video Call 43
Joining a Videoconference 44

Chapter 4: During Your Videoconference

Recording a Videoconference 45
Setting Your Recording Preferences 45
Starting a Recording 47
Viewing a Recording from the Web Interface 50
Controlling your Video and Audio 51
Blocking Video From the Scopia XT Series 51
Moving the Camera's Position 52
Adjusting the Volume 54
Muting the Microphone Pod 55
About Video Layouts 56
Selecting your Video Layout with One Monitor 56
Selecting your Video Layout with Two Monitors 58
Changing the Video Layout During the Call 61
Sharing Content 63
Connecting a Computer to the Scopia XT Series 63
Selecting the Computer Display Resolution 65
Start Sharing Content Automatically 66
Sharing Content in the Local Conference Room 67
Sharing Content during a Call 68

Chapter 5: Hosting Videoconferences with the Built-in MCU

Starting a Locally Hosted Videoconference 71
Hiding your Video and Audio from the Videoconference 73
Changing the Video Layout from the Scopia XT Series MCU Edition 73
Moderating a Hosted Videoconference 75
Moderating a Videoconference Hosted by Another Scopia XT Series 77
Ending a Videoconference 79

Chapter 6: Customizing Your User Experience

Setting the User PIN Code for the Scopia XT Series 81
Setting Call Answering Preferences 82
Confirming Call Disconnections 83
Enabling Do Not Disturb to Block All Incoming Calls 84
Blocking Video Input by Default 86

Activating the Screen Saver 87

Chapter 7: Troubleshooting the Scopia XT Series

Viewing System Information for Customer Support 88
Resolving Monitor Display Problems 90
Resolving Problems with PC Presentations 92
Resolving XT Remote Control Unit Problems 92
Restoring Default User Settings 92
Resolving Video or Audio Disruptions 94

Glossary of Terms for Scopia Solution

Chapter 1 | About the Scopia XT Series

Scopia XT Series endpoints incorporate state-of-the-art video technology for high definition (HD) conferencing. All models of the XT Series include the XT Codec Unit which performs the bulk of the professional videoconferencing, an elegant remote control which gives intuitive access to its features, and a camera, which varies depending on the specific model.

This section provides an overview of the general features and capabilities available in the different Scopia XT Series models (Figure 1: Scopia XT Series products on page 7):

- Ability to host videoconferences locally with a high-capacity embedded MCU, without requiring an external MCU deployment (selected models only).
- Excellent video quality, with resolutions of up to 1080p at an unprecedented 60 frames per second (fps), depending on the model.
- Support for dual HD video streams, allowing presentations and video clips to be shared in resolutions of up to 1080p 60 fps, depending on the model.

  This includes either video input from two cameras, or one video stream from the camera, and one presentation stream from the PC.
- Allows to easily share data and presentations with third-party endpoints.
- DVD-quality audio with up to 48 kHz sampling rate audio encoding capability, depending on the model. The sampling rate is a measure of the accuracy of the audio when it is digitized. As the frequency with which the audio data is collected, or "sampled", increases, so does the audio quality.

  Audio input is provided with either a dedicated 3-way/1-way Microphone Pod, or a microphone embedded in the camera, depending on the model.
- High quality video and audio even with limited bandwidth or poor network conditions, by using two compression methods:
  - H.264 Scalable Video Coding Technology (SVC, in selected models only).

    SVC dramatically increases error resiliency and video quality without the need for higher bandwidth. It is especially effective over networks with high packet loss (like wireless networks) which deliver low quality video.
  - H.246 High Profile, which is a video compression standard used for bandwidth efficiency. This allows quality video at much lower bit rates (selected models only).
- Ability to record videoconferences using a USB drive (may require license, depending on the model).
- For an even better experience, Scopia Control enables you to select and control the camera for the videoconference, by using the pan, tilt, and zoom features, and place a call using the intuitive touch interface of an Apple® iPad® (may require license, depending on the model).
- Secure point-to-point video calls and videoconferences, via encrypted connections or using TLS certificates. You can have up to three remote encrypted participants in a videoconference.

Important:

Using encryption is subject to local regulation. In some countries it is restricted or limited for usage. For more information, consult your local reseller.

Figure 1: Scopia XT Series products on page 7 shows the different Scopia XT Series endpoints available.

Figure 1: Scopia XT Series products

For more information about the specific models in the Scopia XT Series product line:

Navigation

- About the Models in the Scopia XT Series Product Line on page 7
- Comparing Between Scopia XT Series Models on page 11

About the Models in the Scopia XT Series Product Line

Scopia XT Series endpoints incorporate state-of-the-art video technology for high definition (HD) conferencing. All models of the XT Series include the XT Codec Unit which performs the bulk of the professional videoconferencing, an elegant remote control which gives intuitive access to its features, and a camera, which varies depending on the specific model.

This section provides an overview of each model in the Scopia XT Series product line. For more information about the features and capabilities available for Scopia XT Series endpoints, see About the Scopia XT Series on page 6. To easily compare the different Scopia XT Series endpoints, see Comparing Between Scopia XT Series Models on page 11.

The Scopia XT Series includes the following models:

- Scopia XT5000 Series

  With HD video resolution of up to 1080p video at 60 frames per second (fps), Scopia XT5000 sets the standard for an exceptional videoconferencing experience, and is designed for easy setup and control.

The 3-way Microphone Pod provides superb signal-to-noise ratios, which isolates speakers' voices over background noise and gives a crisp high quality sound. You can also add a second microphone for unparalleled large room coverage.

The XT5000 720 provides HD video resolution of 720p at 60 fps and 5x optical zoom, with the option to upgrade to 1080p at 60fps and 10x optical zoom.

Figure 2: Scopia XT5000 Series

- Scopia XT4000 Series

  Experience cost-effective HD videoconferencing with the Scopia XT4000 Series, which was designed specifically for small meeting rooms. The included camera has 5x with an option to upgrade to 10x.

Figure 3: Scopia XT4200

- Scopia XT1200

  The Scopia XT1200 room-system uses the previous generation XT Codec Unit to provide excellent video and audio quality:

  - Includes a high-quality camera (10x optical zoom, and an additional 4x digital zoom)
  - The 3-way Microphone Pod provides superb signal-to-noise ratios. You can also add a second microphone for unparalleled large room coverage.

Figure 4: Scopia XT1200

- Scopia XT Telepresence

  Experience the immersive feeling of telepresence using the Scopia XT Telepresence platform. The excellent video quality in each of the three cameras, combined with high-quality audio, give the feeling of an in-person meeting.

  Depending on the XT Codec Unit used in your XT Telepresence deployment, you can inherit the features of the Scopia XT1200 or the Scopia XT5000.

Figure 5: Scopia XT Telepresence

- Scopia XT Executive

  Designed as a professional personal endpoint, the Scopia XT Executive is an all-in-one HD videoconferencing desktop endpoint and PC monitor. The Scopia XT Executive fully integrates with your PC or Mac. Using a unique control application, you can place calls, join videoconferences, and navigate the system menus with your computer's keyboard and mouse. The XT Remote Control Unit can be used as well.

The Scopia XT Executive has a built-in, high-quality HD camera with a maximum resolution of 1080p at 30 frames per second (fps) together with the display. To fit your videoconferencing needs, you can also connect an optional XT Premium Camera with PTZ capability.

Figure 6: Scopia XT Executive

- Scopia XT Meeting Center

  The Scopia XT Meeting Center is a high performance HD videoconferencing system, designed to quickly convert a regular meeting room into a videoconferencing room: it includes single or dual 55-inch high-quality monitors mounted on a mobile stand. This system uses the powerful XT5000 Series codec.

Figure 7: Scopia XT Meeting Center

The XT5000, Scopia XT1200, and Scopia XT Executive can also locally host HD continuous presence videoconferences with their built-in MCU. You can choose a license of up to 4 or 9 participants.

Depending on your deployment and the model, you can locally host videoconferences with other endpoints (including H.323, SIP, Scopia XT Desktop clients, Scopia Mobile, and ISDN endpoints, if your

deployment includes an ISDN gateway such as Scopia 100 Gateway) without relying on an external MCU. You can locally host videoconferences with the following editions:

- Scopia XT Series MCU Edition

  The Scopia XT Series MCU Edition allows you to host videoconferences with standard H.323, SIP, and ISDN (via Scopia 100 Gateway) endpoints on your chosen XT Series model.

- Scopia XT Series SMB Edition

  The Scopia XT Series SMB Edition allows you to host videoconferences with a variety of different endpoints on your chosen XT Series model: Scopia XT Desktop clients, Scopia Mobile clients, H.323, SIP, and ISDN (via Scopia 100 Gateway) endpoints.

  It includes the software of the Scopia XT Desktop Server which must be deployed in the DMZ.

  Important:

  If your license allows 9 participants, you can include up to 8 remote endpoints.

  If any participants in the videoconference connect from Scopia XT Desktop clients or devices running Scopia Mobile, you can include up to 7 remote endpoints, since one port is reserved for connecting to the Scopia XT Desktop Server.

  For more information on the SMB Solution deployment, see *Solution Guide for Scopia Solution*.

Comparing Between Scopia XT Series Models

Scopia XT Series endpoints incorporate state-of-the-art video technology for high definition (HD) conferencing. All models of the XT Series include the XT Codec Unit which performs the bulk of the professional videoconferencing, an elegant remote control which gives intuitive access to its features, and a camera, which varies depending on the specific model.

This section provides a comparison between the models of the Scopia XT Series product line. For an overview of each model, see About the Models in the Scopia XT Series Product Line on page 7. To see details about the features and capabilities of Scopia XT Series endpoints, see About the Scopia XT Series on page 6.

Table 1: Differences in features for models in the Scopia XT Series on page 11 summarizes the differences between each of the models in the Scopia XT Series.

Table 1: Differences in features for models in the Scopia XT Series

Feature	Scopia XT5000	Scopia XT5000 720	Scopia XT4000 Series	Scopia XT1200	Scopia XT Telepresence	Scopia XT Executive
Maximum HD Resolution	1080p 60fps	720p 60 fps (1080p optional)	720p 60fps	1080p 30fps	1080p x3 at 60 or 30 fps	720p 30fps/60 fps (1080p optional)
Hosting with internal MCU	Can host video-conferences (optional)	Can host video-conferences (optional)	_	Can host video-conferences (optional)	_	Can host video-conferences (optional)

Feature	Scopia XT5000	Scopia XT5000 720	Scopia XT4000 Series	Scopia XT1200	Scopia XT Telepresence	Scopia XT Executive
Camera	PTZ camera	PTZ camera	PTZ camera	PTZ camera	_	Built-in camera (PTZ camera optional)
Optical Zoom	10x optical zoom	5x optical zoom (10x optional)	5x optical zoom (10x optional)	10x optical zoom	10x optical zoom	10x optical zoom for optional camera
Total Zoom (Optical x Digital)	40x total zoom	40x total zoom (optional)	40x total zoom (optional)	10x total zoom (40x optional)	_	40x total zoom for optional camera
Dual Video Resolution	Dual video at 1080p 60 fps	Dual video at 720p 60 fps (1080p optional)	Dual video at 720p 60fps	Dual video at 1080p 30fps	Dual video at 1080p 60/30 fps	Dual video at 1080p 60 fps
High network error resilience	SVC & H.264 High Profile	SVC & H.264 High Profile	SVC & H.264 High Profile	_	SVC & H.264 High Profile (optional)	SVC & H.264 High Profile
High-quality audio	48 kHz sampling rate	48 kHz sampling rate	48 kHz sampling rate	48 kHz sampling rate	48 kHz sampling rate	48 kHz sampling rate
Type of Microphone	3-way Microphone Pod	3-way Microphone Pod	1-way Microphone Pod	3-way Microphone Pod	3-way Microphone Pod	Built-in microphone (Microphone Pod optional)
Additional Ethernet connection speed	10/100/1000 Mbps	10/100/1000 Mbps (optional)	10/100/1000 Mbps (optional)	10/100 Mbps (optional)	10/100 or 10/100/1000 Mbps	10/100/1000 Mbps
Scopia Control	Scopia Control	Scopia Control (optional)	Scopia Control (optional)	Scopia Control (optional)	Scopia Control	Scopia Control (optional)
Recording	Can record on USB disk	Can record on USB disk (optional)	Can record on USB disk (optional)	_	_	Can record on USB disk (optional)

Chapter 2 | Getting Started

To get started with video calls and videoconferences, activate the product and use the quick setup wizard to configure the basic settings of the unit. We recommend following the workflow described in Initial Workflow for XT Series Users on page 13.

Navigation

- Initial Workflow for XT Series Users on page 13
- How to Control the XT Series on page 14
- Performing Basic Configuration on page 22

Initial Workflow for XT Series Users

About this task

To quickly get started with your XT Series, follow the steps in this workflow.

Before you begin

Your system administrator should install and activate your XT Series. For details, see the following documentation:

- *Quick Setup Guide for Scopia XT Series*: Explains the simplest configuration necessary for the system to work properly.
- *Safety Instructions leaflet for Scopia XT Series*
- *Installation Guide for Scopia XT Series*

Your system administrator may have customized certain features described in this guide to suit the environment of your company.

Procedure

1. Turn on the XT Codec Unit by pressing the Power key on the XT Remote Control Unit.
2. Configure the basic settings required to start using the XT Series, as described in Performing Basic Configuration on page 22.

   For details on how to use the XT Remote Control Unit and access both the endpoint interface and the web interface, see How to Control the XT Series on page 14.
3. You can now make point-to-point video calls and videoconferences, as described in Starting a Videoconference on page 32.

Enter the number using your XT Remote Control Unit, and press or **ok/menu**. For other ways to make a call, see Dialing a Number Directly from the Endpoint on page 37 or Dialing a Number from the XT Series Web Interface on page 39.

Before or during the meeting, you can do the following (see During Your Videoconference on page 45 for details):

- Define your video layout
- Share a presentation from your computer
- Record the videoconference

4. If your endpoint has an embedded MCU (license required), you can also host videoconferences, as described in Hosting Videoconferences with the Built-in MCU on page 71.

5. Set up your phonebook to easily dial your contacts, as described in Managing the Phone Book on page 33.

6. Customize XT Series settings to best fit your needs, as described in Customizing Your User Experience on page 81.

   For example, you can block others from seeing your video by default, define when the system answers calls, or request a confirmation prompt before calls are disconnected.

How to Control the XT Series

You can set up and control your XT Series, as well as make calls, in the following ways:

- From the endpoint's main menu, using your XT Remote Control Unit (see Using the XT Remote Control Unit on page 17 and Accessing the Main Menu of the XT Series on page 15).
- From the XT Series's web interface (see Accessing XT Series Web Interface on page 14).

Before performing initial configuration, we recommend reading the following topics to familiarize yourself with how to control the XT Series:

Navigation

- Accessing XT Series Web Interface on page 14
- Accessing the Main Menu of the XT Series on page 15
- Using the XT Remote Control Unit on page 17

Accessing XT Series Web Interface

About this task

This procedure describes how to access the XT Series web interface. The XT Series supports the following internet browsers:

- Internet Explorer version 8 or later
- Google Chrome version 11 or later

- Mozilla Firefox version 3.6 or later
- Apple Safari version 5 or later
- Opera version 11 or later

Procedure

1. Open any of the supported internet browsers and enter the system's IP address.

   For example, *http://1.2.3.4/*.

   The XT Series login page opens.

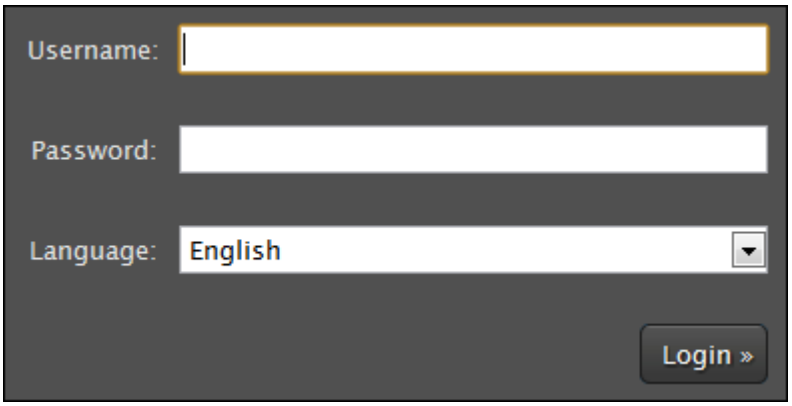


Figure 8: Logging into the XT Series web interface

2. Enter the username and password.

   The default username for the web interface is **Admin** and the default password is **1234**.

   Important:

   We recommend changing the default credentials after logging in for the first time, as described in the *Administrator Guide for Scopia XT Series*.

3. (Optional) Select the web interface language from the **Language** list.

4. Select **Login**.

Accessing the Main Menu of the XT Series

About this task

After switching on the XT Series, the main menu appears and you can do the following:

- Make audio and video calls
- View contacts in the phone book
- Start sharing content from your computer
- Adjust the camera position. You can also store the position to retrieve it later.
- Record your videoconferences

- Perform basic configuration, such as setting the interface language
- Set your preferences, such as activating the Do Not Disturb feature
- Check the system status

You navigate XT Series menus using arrow keys and pressing the **ok/menu** key on the XT Remote Control Unit (for details, see Using the XT Remote Control Unit on page 17).

Procedure

1. Verify that the LED on the front panel of the XT Codec Unit is blinking.
2. Turn on the XT Codec Unit by pressing the Power key on the XT Remote Control Unit.
3. The system home page appears on the monitors, and you can access the following menus:
   - **Call**—make audio and video calls
   - **Contacts**—view, edit, and call contacts in the phonebook
   - **Present**—start sharing content from your computer
   - **Control Camera**—adjust camera position
   - **Recording**—start recording a videoconference
   - **Configure**—perform basic configuration and check the system status

   Important:

   When you access the system for the first time only, the Quick Setup wizard is displayed (for details, see Accessing the Quick Setup Procedure on page 22).

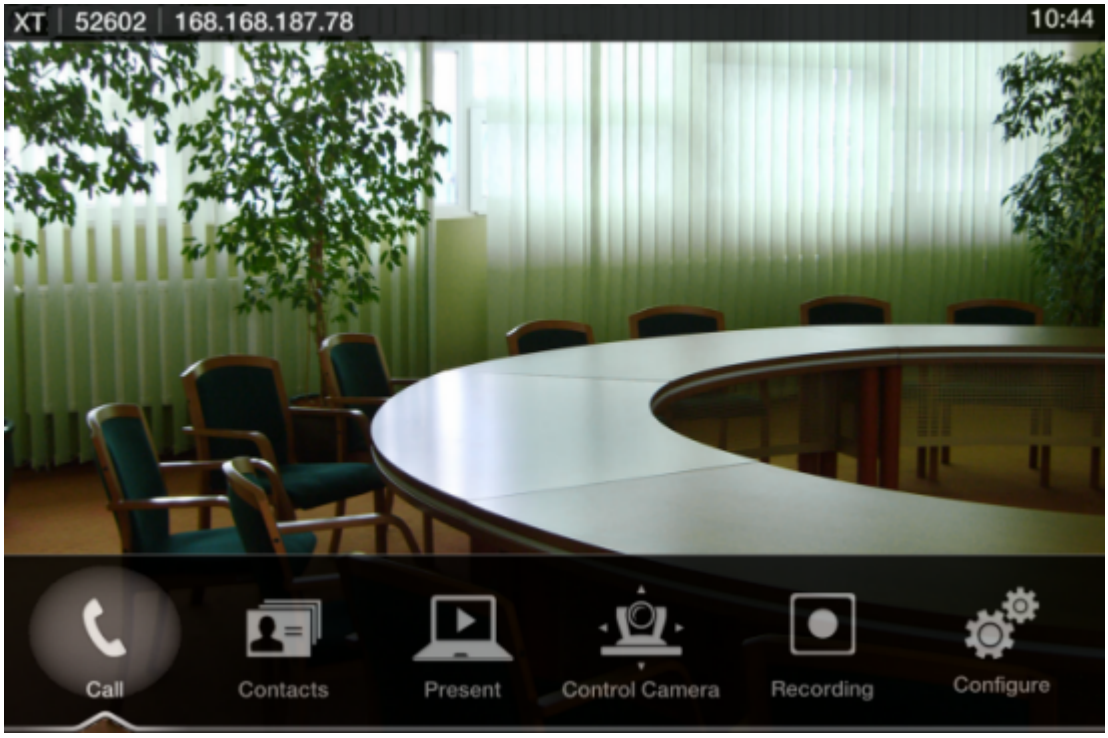


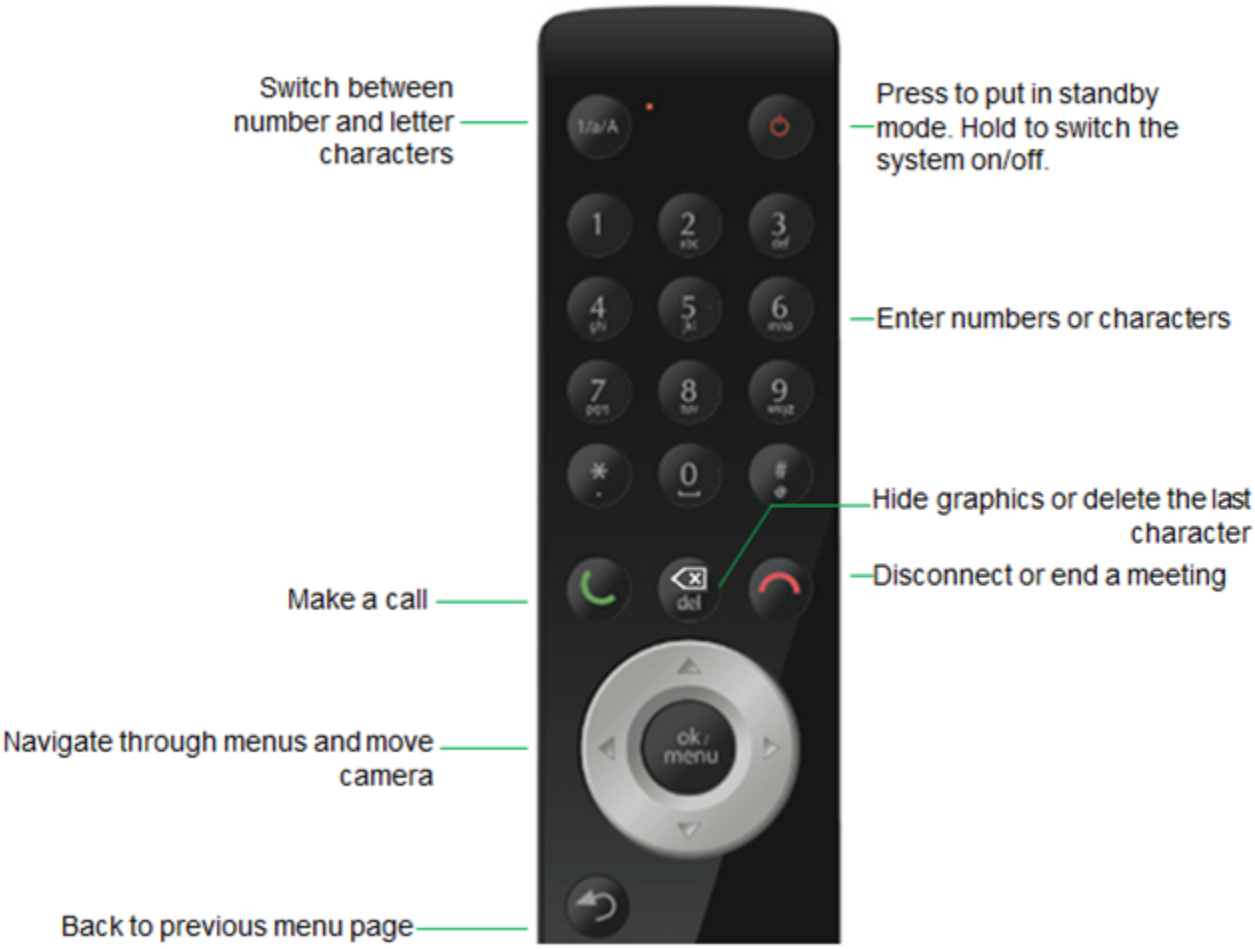
Figure 9: Main menu

4. Select one of the options using the arrow keys of the XT Remote Control Unit.

Using the XT Remote Control Unit

This section explains how to use the XT Remote Control Unit to navigate through the system menus, and lists the function of each key.

The XT Remote Control Unit has an improved design and increases usability to give you a smoother and more efficient videoconferencing experience. Figure 10: The new XT Remote Control Unit on page 18 describes the functions of the XT Remote Control Unit.


Switch between number and letter characters
Press to put in standby mode. Hold to switch the system on/off.
Enter numbers or characters
Hide graphics or delete the last character
Disconnect or end a meeting
Make a call
Navigate through menus and move camera
Back to previous menu page

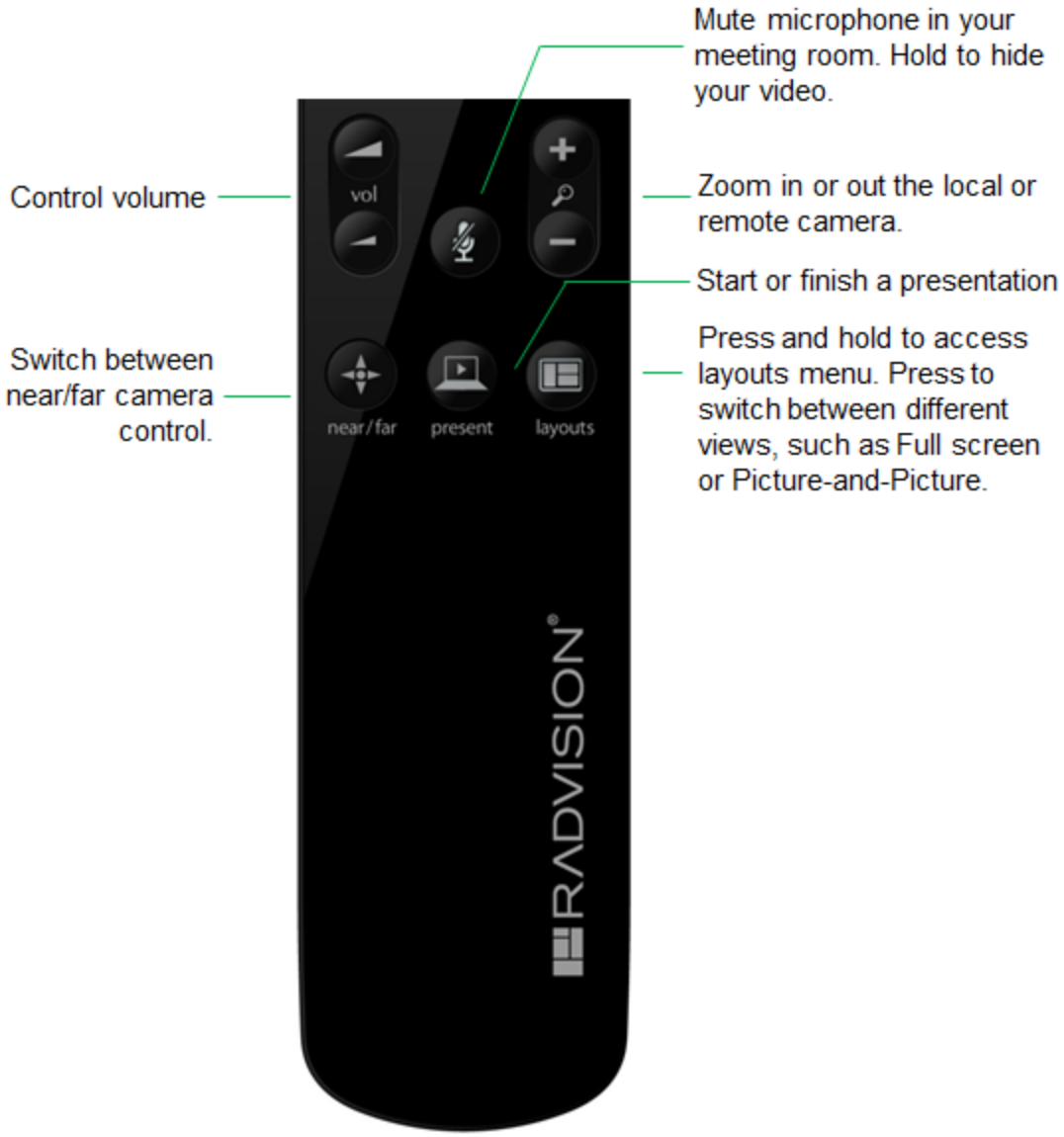


Figure 10: The new XT Remote Control Unit

Use the XT Remote Control Unit to navigate through system menus, as follows:

- Scroll through menus and options using the arrow keys and pressing the **ok/menu** key.

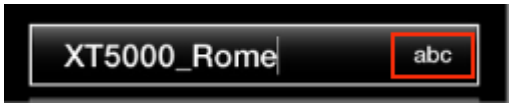
  Important:

  Use the **ok/menu** key to select an item or a specific option, such as when choosing the interface language. If there are less than 5 options in a list, press **ok/menu** repeatedly to scroll through the options.

- Use the XT Remote Control Unit keypad to enter letters and digits.

  The default input method is **abc1**: you must press the required character key on the XT Remote Control Unit repeatedly before entering a digit. To enter text in the XT Series interface, scroll to the input field and enter the required characters.

  The current input method is displayed in the field you are in:



You can also switch between **ABC**, **abc**, and **123** input methods by pressing **1/a/A** repeatedly while the cursor is in the input field.

Pairing an XT Remote Control Unit with a XT Codec Unit

About this task

Multiple XT Codec Units can be set up in the conference room and controlled with different XT Remote Control Units.

Each XT Remote Control Unit is dedicated to one XT Codec Unit by pairing them. This is done by configuring the same numeric code in your XT Remote Control Unit and the system software.

An XT Remote Control Unit is configured with code 01 by default.

Before you begin

Decide what numeric code you want to use for your monitor and the XT Codec Unit. You can choose any value between 1-99.

Procedure

1. Access the general settings, as follows:
   - From the web interface, select **Basic Settings > General**.
   - From the endpoint's Main menu, select **Configure > General**.

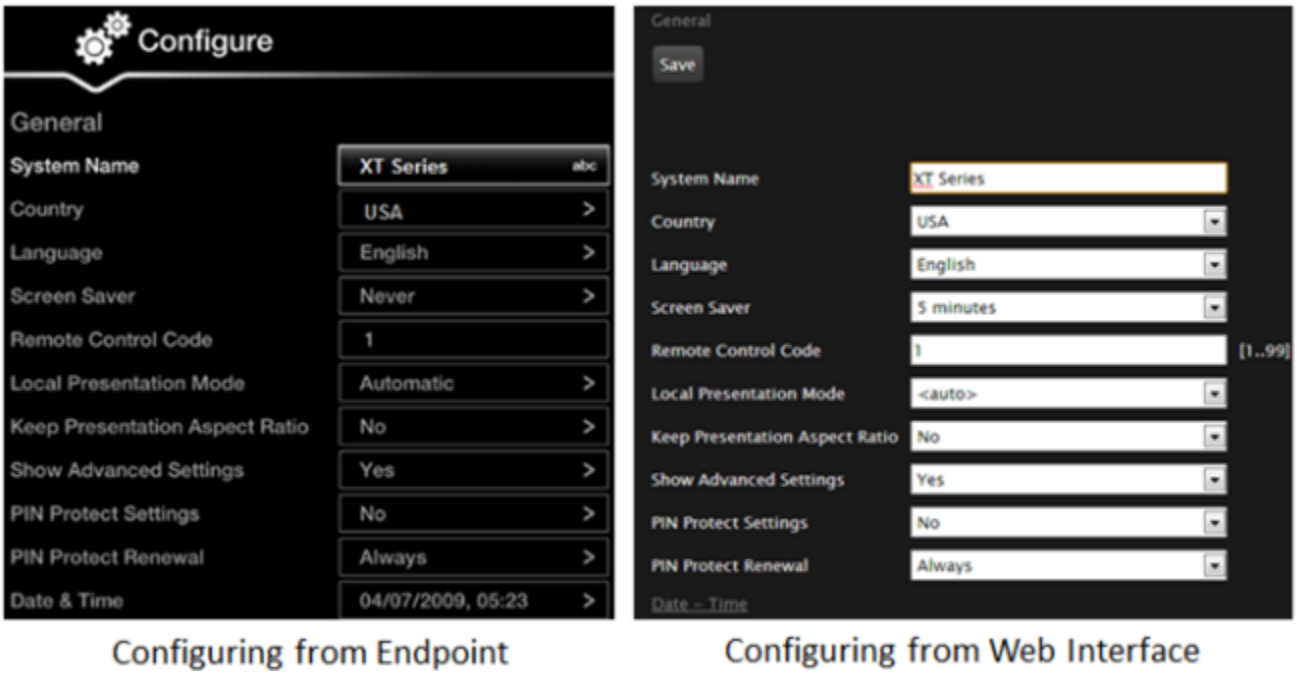


Figure 11: Setting the XT Remote Control Unit Code

2. Enter the numeric code in the **Remote control code** field. You can choose any value between 1-99.

3. From the web interface only, select **Save**.

4. On the XT Remote Control Unit, press the ***** and # keys simultaneously until the red led blinks twice.

Figure 12: Setting the code on the XT Remote Control Unit

5. Using the keypad, type the number you just entered in the **Remote control code** field.

Important:

You must always use two digits for a code. For example, to set the code to “1”, enter “01”.

The code of the XT Remote Control Unit is changed and the Remote Control icon with the new Remote Control code appear at the top-right corner of the screen:

Important:

The code and icon do not appear when the default code, **01**, is used.

6. Set the code and exit by doing one of the following:
   - In the web interface, select **Finish**.
   - In the endpoint, press **OK**.

Performing Basic Configuration

Before you perform basic configuration for the XT Series, your system administrator should install and activate your XT Series (for details, see the *Quick Setup Guide for Scopia XT Series*, the *Installation Guide for Scopia XT Series*, and *Safety Instructions leaflet for Scopia XT Series*.

To start using your XT Series, first define basic settings, such as the system's name, language, and network settings. This is relevant for both new installations, and also after restoring default settings and re-installing software.

Important:

Your system administrator might already have set these parameters for you and customized certain features described in this guide to suit the environment of your company. If your administrator set up PIN protection, you need the PIN number before continuing with the configuration.

You can define these settings as follows:

- Following the quick setup procedure on the XT Series endpoint.

  We recommend this method to quickly start using your XT Series, since the quick setup wizard includes only the basic required settings.

- Remotely defining the settings from the XT Series web interface (see Accessing XT Series Web Interface on page 14).

  Your administrator may define some settings remotely, such as for the network or gatekeeper (see *the Scopia XT Series Installation Guide* for details). The quick setup is available from the web interface if you have not already completed the procedure from the endpoint.

  You cannot remotely set the image on the monitor; this must be done from the endpoint itself.

Navigation

- Accessing the Quick Setup Procedure on page 22
- Remotely Setting the System Name and Language on page 30

Accessing the Quick Setup Procedure

About this task

Access the quick setup procedure to define basic settings for your Scopia XT Series, such as the system's name, language, and network settings. Follow the tasks of the quick setup procedure in the order they are presented.

This is relevant for both new installations, and also after restoring default settings and re-installing software.

You can do this procedure from the endpoint itself or from the XT Series web interface.

Before you begin

Your system administrator might already have set these parameters for you and customized certain features described in this guide to suit the environment of your company. If your administrator set up PIN protection, you need the PIN number before continuing with the configuration.

Procedure

1. The quick setup wizard automatically appears the first time you access the Scopia XT Series, either by turning on the XT Codec Unit or logging in to the web interface.

   If the quick setup wizard is not displayed automatically when you first turn on the XT Codec Unit, select **Configure** > **Quick Setup** from the Main Menu.

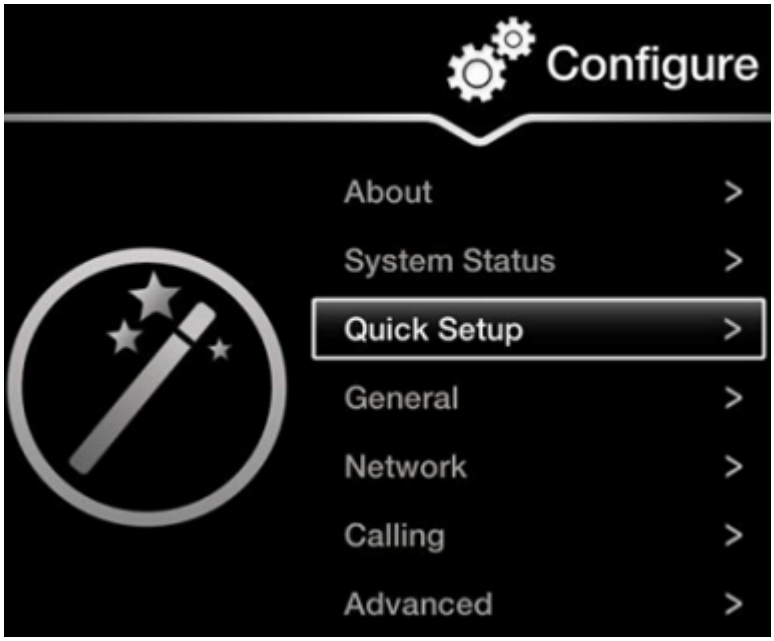


Figure 13: Accessing the Quick Setup

2. The quick setup wizard guides you through these basic configuration tasks:
   - Setting the System Name and Language on page 24: Define your system's name, your country, and preferred language for the interface.
   - Adjusting the Image Position on page 25: Adjust your monitor's image if necessary.

Important:

This task is not available from the web interface. If you are configuring from the web interface, perform this procedure from the endpoint.

- Configuring Network Settings on page 27: Define your system's network settings to allow you to place and receive calls.
- Configuring Gatekeeper Settings on page 29: If your Scopia XT Series works in conjunction with a gatekeeper, configure gatekeeper-related settings.

Setting the System Name and Language

About this task

You can select the name of your XT Codec Unit, to be displayed on the monitors participating in the videoconference call (for example: **Hong-Kong**, or **9th-Floor-Room**, or **NY-Office**), and on the system's titlebar.

There is also a unicode version of the system name for users who want the name displayed on the titlebar to contain non-English characters. For more information, see *Administrator Guide for Scopia XT Series*.

You can also select the country in which the system is located and the language in which the system menus are displayed.

After initial setup, you can modify these settings by selecting **Configure > General** from the **Main** menu, or from the web interface as described in Remotely Setting the System Name and Language on page 30.

Before you begin

Access the quick setup wizard from the endpoint or web interface, as described in Accessing the Quick Setup Procedure on page 22.

Procedure

1. Enter the name of the XT Series in the **System Name** field. This name is also used for the SIP username and the H.323 name, which can be manually changed.

   If you perform this task from the endpoint interface, use the alphanumeric keys of the XT Remote Control Unit (for more information, see Using the XT Remote Control Unit on page 17).

Figure 14: Setting Country and Language

2. Select the required country from the **Country** list. If performing this task from the endpoint interface, use the arrow keys and press **ok/menu**.

   The system menu and the **Language** field automatically change to the language used in the selected country.

3. If you want to change the language of the system menus, select **Language**.

   If performing this task from the endpoint interface, press **ok/menu** to display the list of languages. Scroll to the preferred language and press **ok/menu**.

4. To adjust the image on your monitor, select **Next** and continue with Adjusting the Image Position on page 25.

   If performing the quick setup from the web interface, access the quick setup from the endpoint to adjust the image. This can be done at any time.

Adjusting the Image Position

About this task

If your monitor does not center the image correctly, perform this procedure. This can be done from the endpoint itself only.

Before you begin

This procedure is performed as part of the Quick Setup Wizard, after Setting the System Name and Language on page 24.

Access the quick setup wizard from the endpoint, as described in Accessing the Quick Setup Procedure on page 22.

Procedure

1. Examine the image on the monitor to decide if you need to adjust the image position.

   The triangles in the top left corner and bottom right corner must be fully visible so that the white border of the triangle is fully visible on all sides.

   If the image is centered correctly, skip this procedure and select **Next**.

Figure 15: Examining the image position

2. Press **1** to align the top left corner.

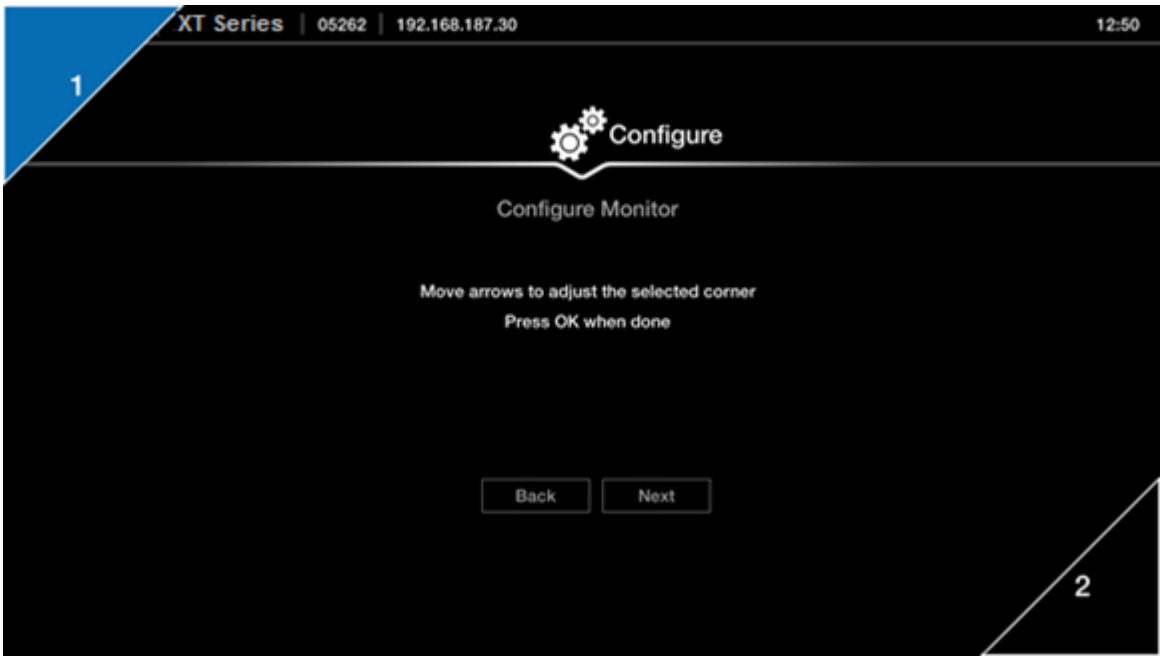


Figure 16: Adjusting the image position

3. Use the arrow keys on the XT Remote Control Unit to position the image, and then press **ok/menu**.
4. Press **2** to align the bottom right corner.
5. Use the arrow keys on the XT Remote Control Unit to position the image, and then press **ok/menu**.
6. To configure network settings, select **Next** and continue with Configuring Network Settings on page 27.

Configuring Network Settings

About this task

This procedure describes how to set up the network settings and the IP address the system uses for placing a call.

If you are modifying the network settings after initial setup, navigate to **Configure** > **Network** > **GLAN 1** from the **Main** menu. For more information, see *Installation Guide for Scopia XT Series*.

Before you begin

This procedure is performed as part of the Quick Setup Wizard, after Adjusting the Image Position on page 25. Consult with your network administrator to configure these fields.

Access the quick setup wizard from the endpoint or web interface, as described in Accessing the Quick Setup Procedure on page 22.

Procedure

1. Press **ok/menu** and select one of the following from the **IP Address Mode** list:
   - **Automatic**: (Default) Select this option if the system gets its IP address automatically (using DCHP).

     The **IP address**, **Subnet mask**, **Gateway**, and **DNS** fields appear as read-only. See Table 2: Configuring IP addresses on page 28 for a description of these fields.
   - **Manual**: Select this option if you require a static IP address. This is required, for example, if the XT Series is connected directly to the Internet, without any address translation, or when other external endpoints need to dial to this endpoint as an MCU. Enter the fields as described in Table 2: Configuring IP addresses on page 28.

     To secure SIP connections using TLS certificates, your system must have a static IP address, since the system generates the certificate request using its IP address as the Common Name (CN). For more information, see *Administrator Guide for Scopia XT Series*.

Figure 17: Defining IP Settings

2. If you selected **Manual**, configure the following, as instructed by the system administrator:

Table 2: Configuring IP addresses

Field Name	Description
IP address	Enter the system static IP address here, used for accessing and managing the system. If the system retrieves its IP address automatically, this field displays the IP address assigned to the system.
Subnet mask	Enter the subnet mask associated with the IP address. If the system retrieves its IP address automatically, this field displays the subnet mask that has been assigned.
Gateway	Enter the default gateway static IP address. The gateway is used to route information between two subnets, for example, between the headquarters and a partner site. If the system gets its IP address automatically, this field displays the gateway IP address assigned to the system.
DNS	Enter the DNS server IP address. The DNS server in your network resolves domain names in your network and translates them into IP addresses. If the system gets its IP address automatically, this field displays the assigned DNS server IP address.

3. To configure your gatekeeper's settings, select **Next** and continue with Configuring Gatekeeper Settings on page 29.

Configuring Gatekeeper Settings

About this task

A gatekeeper routes audio and video H.323 calls by resolving dial strings (H.323 alias or URI) into the IP address of an endpoint, and handles the initial connection of calls. If your Scopia XT Series works in conjunction with a gatekeeper, configure gatekeeper-related settings as described in this procedure.

This procedure completes the basic system configuration.

If you are modifying these settings after initial setup, navigate to **Configure > Network > H.323** from the **Main** menu. For more information, see *Installation Guide for Scopia XT Series*.

Before you begin

This procedure is performed as part of the basic configuration after Configuring Network Settings on page 27. Consult with your network administrator to configure these fields.

Access the quick setup wizard from the endpoint or web interface, as described in Accessing the Quick Setup Procedure on page 22.

Procedure

1. Set the **Use Gatekeeper** list to **Yes**.

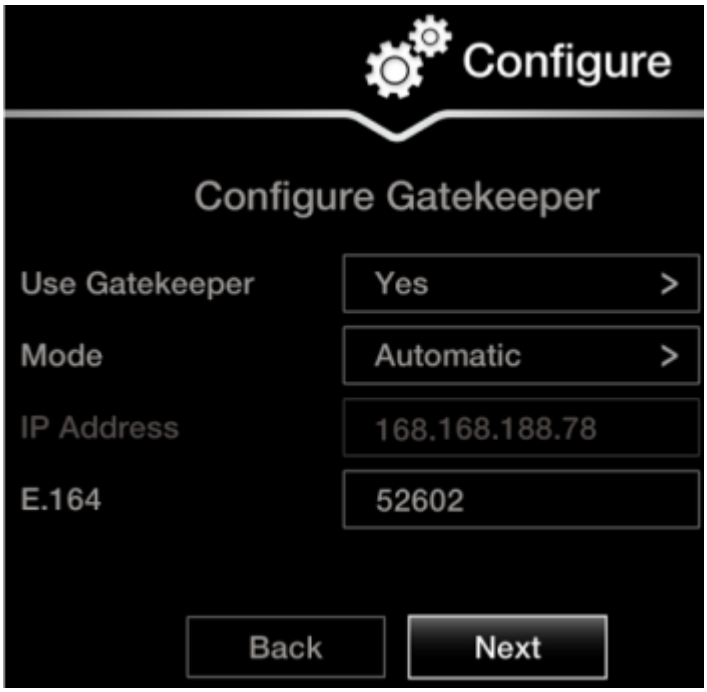


Figure 18: Gatekeeper settings

2. Set the **Mode** list to **Manual**.

Important:

If the gatekeeper is configured to be automatically detected by endpoints, select **Automatic** (depends on the type of gatekeeper). Consult the network administrator.

3. Enter the IP address of the gatekeeper in the **Gatekeeper IP address** field.
4. Enter the H.323 number required to dial the XT Codec Unit in the **E.164** field.
5. Select **Done**.

   The basic configuration of your Scopia XT Series is complete.

Remotely Setting the System Name and Language

About this task

This procedure describes how to set the name and language of the endpoint from the web interface. You can also do this as part of the quick setup from the endpoint itself, as described in Setting the System Name and Language on page 24.

You can also configure the endpoint to use alternate system name, such as the SIP username, on both the titlebar and on the monitors participating in the videoconference call, as described in *Administrator Guide for Scopia XT Series*.

Procedure

1. Access the name and language settings:
   - From the XT Series web interface, select **Basic Settings > Preferences > General**.
   - From the endpoint's main menu, select **Configure > General**.

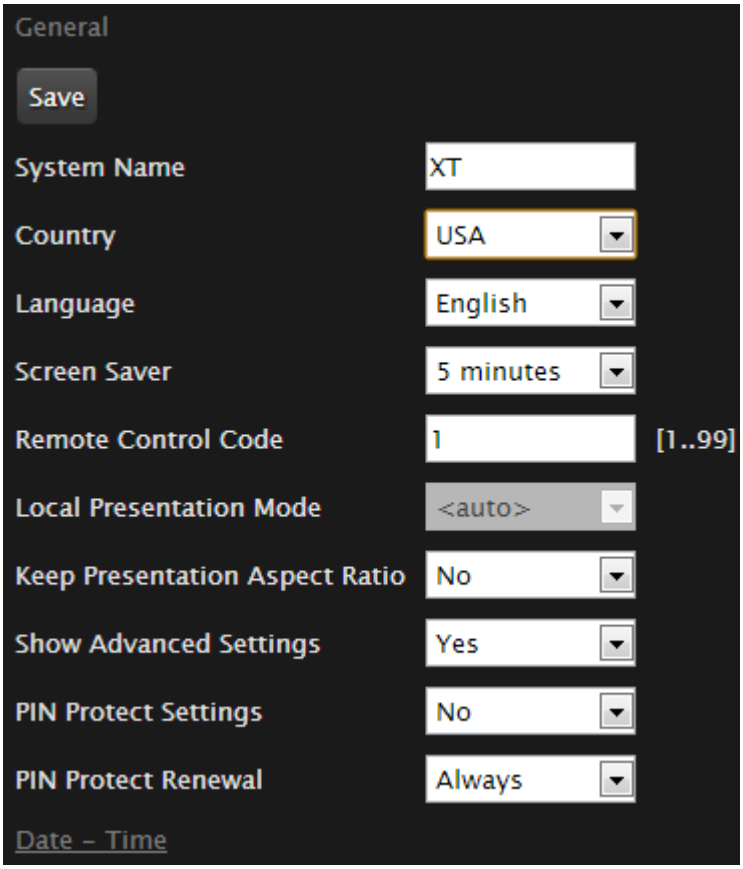


Figure 19: Basic Settings page

2. Enter the name of the XT Series in the **System Name** field.
3. Select the required language from the **Language** list.
4. From the web interface only, select **Save**.

Chapter 3 | Starting a Videoconference

You can start a videoconference on the Scopia XT Series in several ways. This chapter outlines how to dial to other endpoints in different modes, how to answer and end a meeting, and how to perform tasks during a videoconference, such as sharing content or changing your layout.

To quickly dial with the settings best suited for a specific contact, we recommend setting up your phone book to include calling preferences, along with the contact's information. For example, you can set a specific contact to audio-only, and this setting is automatically used when calling this contact.

Navigation

- Preparing for a Videoconference on page 32
- Dialing a Number Directly from the Endpoint on page 37
- Dialing a Number from the XT Series Web Interface on page 39
- Modifying the Default Call Settings on page 41
- Answering and Ending a Video Call on page 43
- Joining a Videoconference on page 44

Preparing for a Videoconference

This section describes how to prepare for a videoconference.

To quickly dial with the settings best suited for a specific contact, we recommend setting up your phone book to include calling preferences, along with the contact's information. For example, you can set a specific contact to audio-only, and this setting is automatically used when calling this contact.

Navigation

- Tips for Participating in a Videoconference on page 32
- Managing the Phone Book on page 33

Tips for Participating in a Videoconference

There are several general recommendations you should follow to optimize your videoconferencing experience.

We recommend that you read this section before participating in a videoconference for the first time.

- Use natural gestures and speak normally as in a real meeting.
- Do not rustle paper or tap on the table or the Microphone Pod.
- Keyboard clicking can be disruptive to the videoconference, so we recommend using the mute when listening but not actively participating.
- Zooming too close can show that your eyes are not looking directly at the camera, in some cases.

- If you are using a laptop during a meeting, do not place it too close to the microphone. Noise produced by the computer cooling system may interfere with audio quality.
- Mute the Microphone Pod before moving it.
- Avoid using your cellular phones during your meeting to avoid electromagnetic interference.

Managing the Phone Book

If you are using the Scopia XT Series's local LDAP server, you can add, edit, delete, and search for contacts, as described in this section.

For other LDAP servers, such as Scopia Management, a third-party LDAP server, or another XT Series, the contact list is predefined and you can only search for contacts.

Contact your administrator for details about your organization's LDAP server.

Navigation

- Adding and Modifying Contacts in the Phone Book on page 33
- Searching for a Contact in the Phone Book on page 36
- Deleting a Contact from the Phone Book on page 37

Adding and Modifying Contacts in the Phone Book

About this task

If you are using the Scopia XT Series's local LDAP server, you can add a new contact to the phonebook and update your phone book with the latest changes in your contact’s information. You can do this procedure from the endpoint itself or from the XT Series web interface.

Procedure

1. Access either the **Recent Calls** list or the **Contacts** list:
   - From the endpoint's main menu, select **Call** to add a recent number. Select the right-arrow next to a number from the list.
   - From the endpoint's main menu, select **Contacts > Add**.
   - From the XT Series web interface, select, **Make your call > Basic Options > Recent Calls** to add a recent number, or select **Make your call > Contacts > Add Contact**.

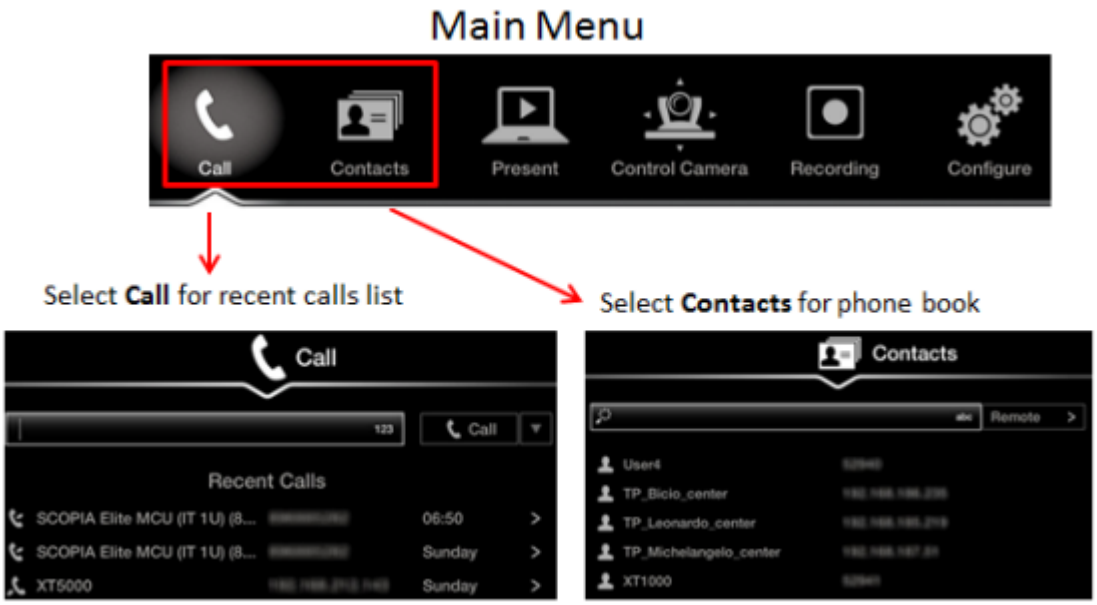


Figure 20: Accessing recent calls and contacts

Important:

You can also choose a contact to edit, from either the **Recent Calls** or **Contact** list.

2. Select the **Plus** icon next to **Insert number**.

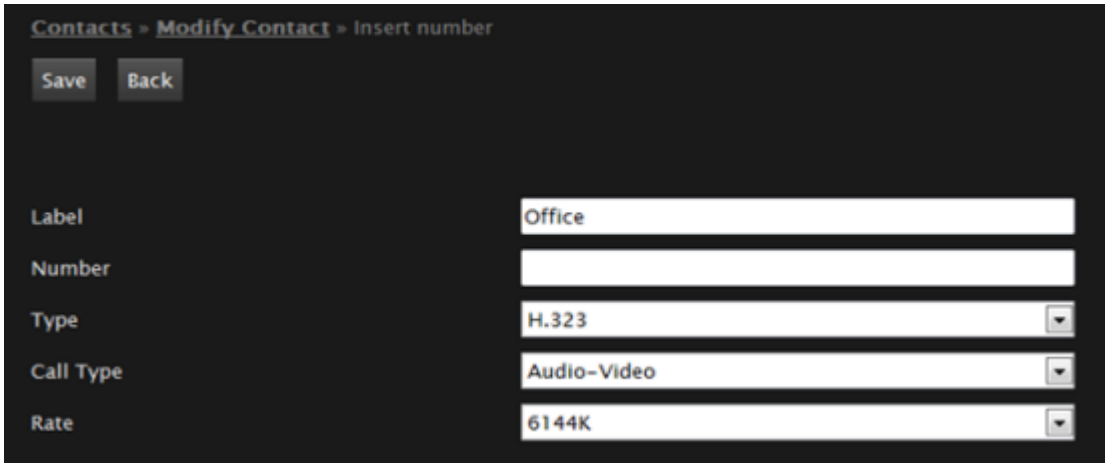


Figure 21: Entering contact dialing information from the web interface

3. Enter the required information, as described in Table 3: Entering contact's basic information on page 35.

Figure 22: Entering general contact information

Table 3: Entering contact's basic information

Field Name	Description
Contact type	Select the type from the list: • **Person/Room**: Select for a personal endpoint or meeting room. • **Meeting Call**: Select to include this endpoint in a predefined set of endpoints to be called together.
Last Name/ Conference Name	Enter a name to identify the contact, either by last name, or conference name.
First Name	This is only relevant if the contact is a person. Enter a first name to identify the contact.
Company	(Optional) Enter the company name.

4. Enter additional information for this contact, such as the number and default call type, as described in Table 4: Entering advanced information for a contact on page 35.

Important:

You can also manually define the Type, Call Type, and Rate each time you place a call, as described in Modifying the Default Call Settings on page 41.

Table 4: Entering advanced information for a contact

Field Name	Description
Label	Define the contact's label to provide a short description of the contact, for example: home, office or virtual room.
Number	Enter the number or alias, to be dialed when contacting this endpoint.

Field Name	Description
Type	If necessary, select the protocol to use when calling this personal endpoint or meeting room: • **H.323**: Select for H.323 endpoints, such as other XT Series endpoints, or when joining a videoconference hosted by a Scopia Elite MCU. • **SIP**: Select for SIP endpoints, such as when calling Microsoft Lync clients. • **ISDN**: If enabled, select to call ISDN endpoints.
Call Type	Select whether the call is **Audio-Video** or **Audio-Only**.
Rate	Select the default call rate to be used when calling this contact. Otherwise, the maximum available bandwidth is used.

5. From the web interface only, select **Save**.

Searching for a Contact in the Phone Book

About this task

You can search by first or last name, or you can display all contacts. You can do this procedure from the endpoint itself or from the XT Series web interface.

Procedure

1. Access the **Contact** list as follows:
   - From the endpoint's main menu, select **Contacts**.
   - From the XT Series web interface, select **Make your call > Basic Options > Contacts**.

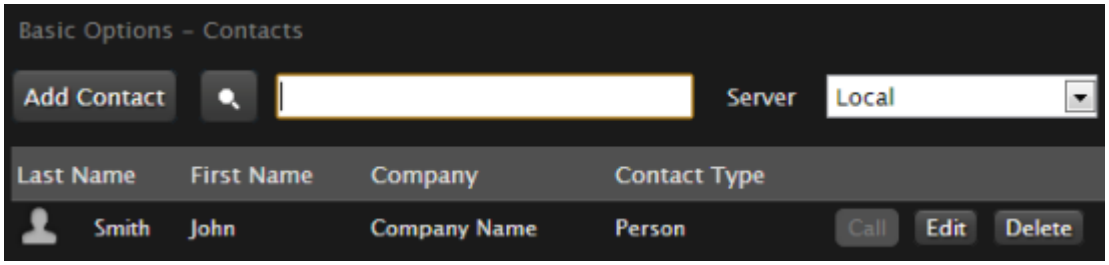


Figure 23: Searching for a contact from the web interface

2. Enter the name or surname of the contact you want to find in the **Search** field, or scroll through the list to find a contact.

3. Select the **Search** icon.

Deleting a Contact from the Phone Book

About this task

If you are using the Scopia XT Series's local LDAP server, you can remove unused contacts from your phone book. You can do this procedure from the endpoint itself or from the XT Series web interface.

Procedure

1. Access the **Contacts** list as follows:
   - From the endpoint's main menu, select **Contacts**.
   - From the XT Series web interface, select **Make your call > Contacts**.

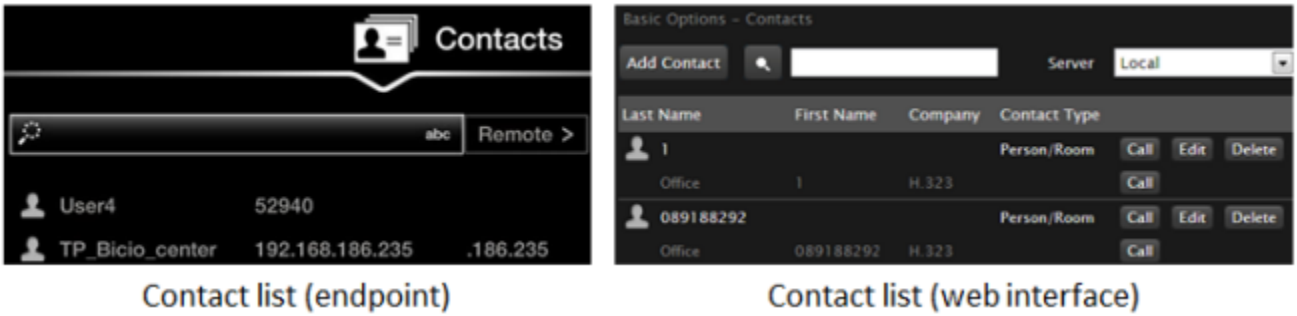


Figure 24: The Contacts page

2. Search for the contact (Searching for a Contact in the Phone Book on page 36) and delete it as follows:
   - From the endpoint, select the right-arrow next to the contact and **Delete Contact**.
   - From the web interface, select **Delete**.
3. Select **Yes** to confirm.

Dialing a Number Directly from the Endpoint

About this task

This section describes how to dial a number from the endpoint itself. This is the most common way to place calls. Alternatively, you can dial a number remotely from the XT Series web interface (see Dialing a Number from the XT Series Web Interface on page 39).

If your system administrator enabled encryption in your system and your call is secured, an icon showing a padlock appears on your display. For more information, see *Administrator Guide for Scopia XT Series*.

Important:

Using encryption is subject to local regulation. In some countries it is restricted or limited for usage. For more information, consult your local reseller.

From your endpoint, you can dial a number in the following ways:

- Dialing a number using the XT Remote Control Unit
- Dialing a contact in the phone book (to add a contact to the phone book, see Adding and Modifying Contacts in the Phone Book on page 33)
- Dialing a number from the recent calls list

The system stores a list of recent calls, and displays these icons appear next to a contact number or name:

- — Received call
- — Dialed call
- — Missed call

Important:

Your organization may also have implemented a dial plan, which defines various dial prefixes to determine the characteristics of a call. For example, you may be able to dial 8 before the videoconference number for a lower bandwidth call, or 6 for an audio-only call. For more information on the dial plan in your organization, contact your system administrator.

Select the number to call in one of the following ways:

- Dial the number using the numeric keys on the XT Remote Control Unit, and press , or select **Call** and press **ok/menu**.
- Dial a contact or recent call from the endpoint's main menu:
  - Dial a contact in the phone book by selecting **Contacts**, and enter the name of the contact.

    Using the XT Remote Control Unit, press , or select **Call** and press **ok/menu**.
  - Dial a number from the list of recent calls by selecting **Call**.

    Using the XT Remote Control Unit, press , or select **Call** and press **ok/menu**.

Important:

To modify advanced calling options, such as the call rate, see Modifying the Default Call Settings on page 41.

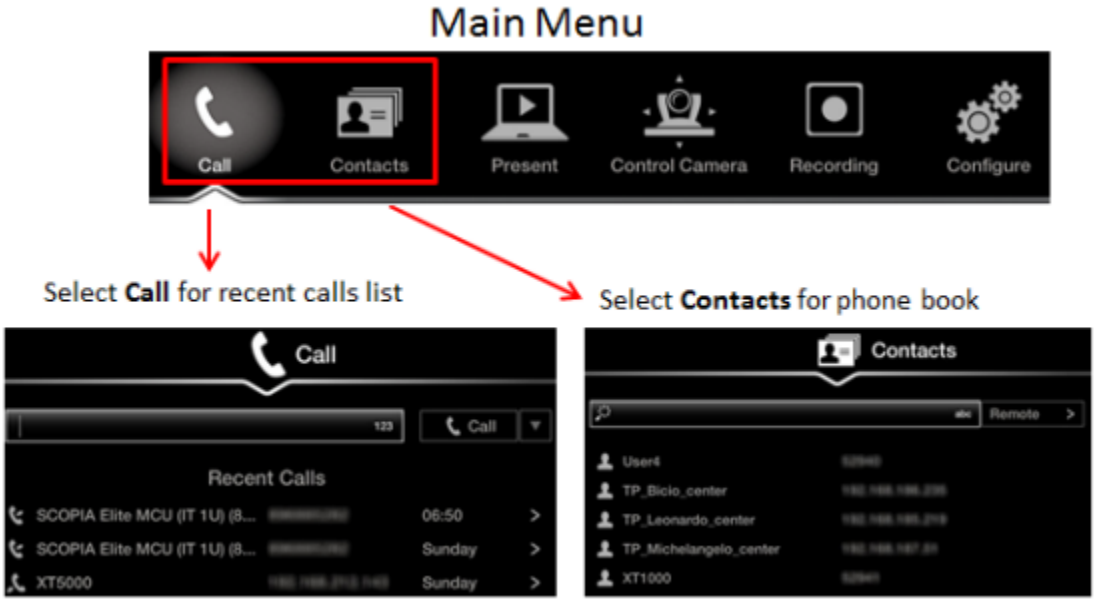


Figure 25: Dialing a number from the endpoint

Dialing a Number from the XT Series Web Interface

About this task

This procedure describes how to dial a number remotely, from the XT Series web interface. This can be useful, for example, when you are moderating a call remotely.

You can also do this from the endpoint interface (see Dialing a Number Directly from the Endpoint on page 37).

If your system administrator enabled encryption in your system and your call is secured, an icon showing a padlock appears on your display. For more information, see *Administrator Guide for Scopia XT Series*.

Important:

Using encryption is subject to local regulation. In some countries it is restricted or limited for usage. For more information, consult your local reseller.

The system stores a list of recent calls, and displays these icons appear next to a contact number or name:

- — Received call
- — Dialed call
- — Missed call

Important:

Your organization may also have implemented a dial plan, which defines various dial prefixes to determine the characteristics of a call. For example, you may be able to dial 8 before the videoconference number for a lower bandwidth call, or 6 for an audio-only call. For more information on the dial plan in your organization, contact your system administrator.

Procedure

1. Access the XT Series web interface, as described in Accessing XT Series Web Interface on page 14.

2. Select the number to call from XT Series web interface (see Figure 26: Dialing from the web interface on page 41):

   Important:

   To modify advanced calling options, such as the call rate, see Modifying the Default Call Settings on page 41.

   - Dial a new number by selecting **Make your call > Basic Options > Direct Call**. Enter the number and select **Call**.
   - Dial a number from the list of recent calls by selecting **Make your call > Recent calls**. Choose the number and select **Call**.
   - Dial a contact in the phone book by selecting **Make your call > Basic Options > Contacts**. Choose the contact and select **Call**.

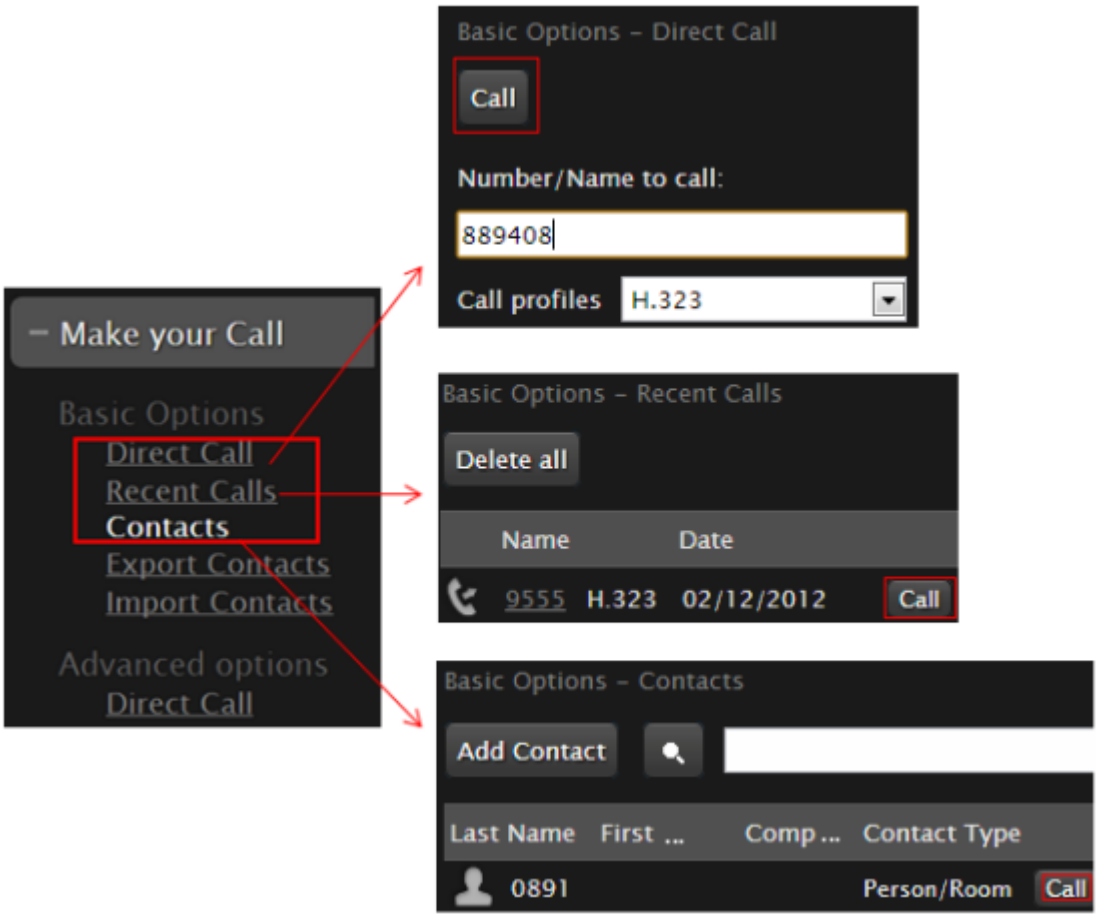


Figure 26: Dialing from the web interface

Modifying the Default Call Settings

About this task

When dialing a number or contact, you can change the default call settings, if necessary. For example, you can set the call as audio only to conserve bandwidth.

You can also modify contacts in your phone book to always use these customized settings, as described in Adding and Modifying Contacts in the Phone Book on page 33.

Procedure

1. Access the **Advanced Calling Options** menu, as follows:
   - From the endpoint, choose the number you are calling and select (for details about selecting the number to dial, see Dialing a Number Directly from the Endpoint on page 37).
   - From the web interface, select **Advanced Calling Options > Direct call**.

If you are dialing from the **Contacts**, **Recent Calls**, or **Direct Call** page, select **Edit** next to the number you are calling (for more information about navigating to these pages, see Dialing a Number from the XT Series Web Interface on page 39).

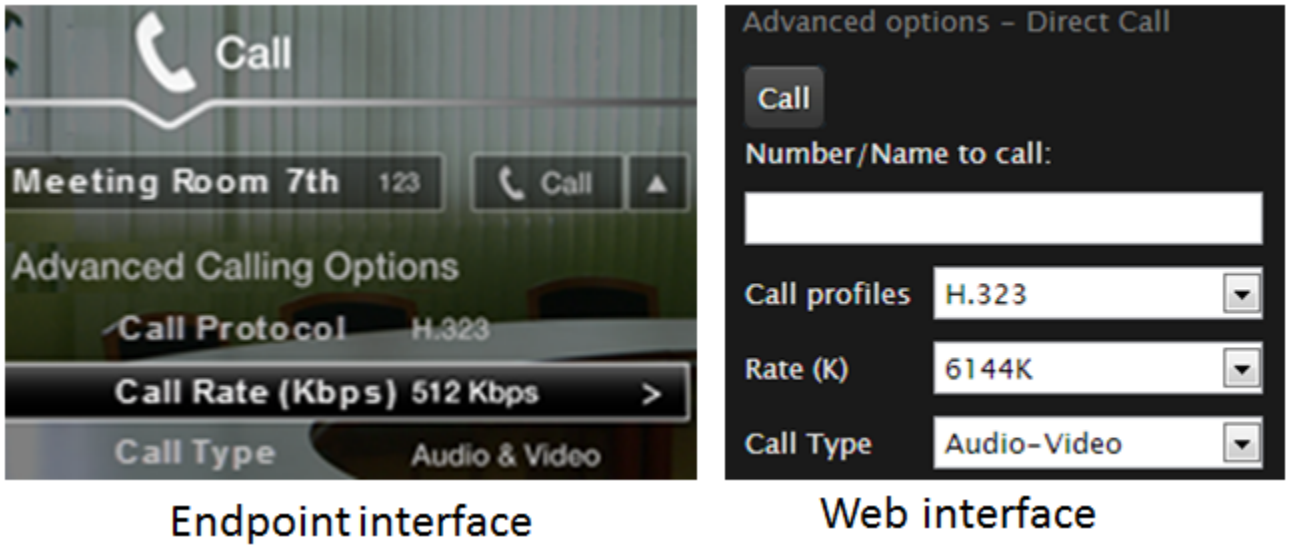


Figure 27: Changing advanced call settings

2. Modify the call settings as described below.

   From the endpoint interface, select options using arrow keys on XT Remote Control Unit and confirm with the **ok/menu** key .

Table 5: Advanced Calling Settings

Field Name	Description
Call protocol	If necessary, select the protocol to use when calling this personal endpoint or meeting room: • **H.323**: Select for H.323 endpoints, such as other XT Series endpoints, or when joining a videoconference hosted by a Scopia Elite MCU. • **SIP**: Select for SIP endpoints, such as when calling Microsoft Lync clients. • **ISDN**: If enabled, select to call ISDN endpoints.
Call rate	By default, the system uses either the maximum available bandwidth or the rate you specified as the default call rate for this contact (for details, see Adding and Modifying Contacts in the Phone Book on page 33).
Call type	Select whether the call is **Audio-Video** or **Audio-Only**.

3. Dial the number, as follows:
   - Using the XT Remote Control Unit, press , or select **Call** and press **ok/menu**.
   - From the web interface, select **Call**.

Answering and Ending a Video Call

You can answer calls manually or set the system to answering the call automatically:

- If you set your system to automatic answering, the endpoint answers after the predefined number of rings (see Setting Call Answering Preferences on page 82 for details).
- If you set your system to manual answering, you can either accept or reject the incoming call. When there is an incoming call, the system displays a window with these options (Figure 28: Answering a video call on page 43):

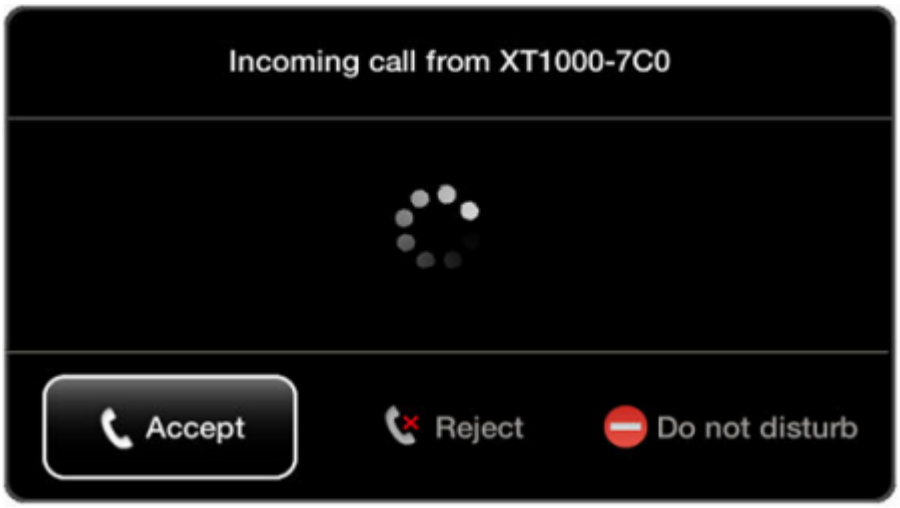


Figure 28: Answering a video call

Table 6: Accepting and rejecting calls using XT Remote Control Unit

Action	Description	Using XT Remote Control Unit
Accept	Select to answer the call.	Press or **ok/menu**.
Reject	Select to reject the call.	Press the right arrow key and **ok/menu**.
Do not disturb	Select to reject the call and set the system to automatically reject all future incoming calls without prompt. For more information, see Enabling Do Not Disturb to Block All Incoming Calls on page 84.	Press the right arrow key twice and **ok/menu**.

Disconnect the call by pressing **Disconnect** on the XT Remote Control Unit. If your system is set to **Confirm disconnection**, select **ok/menu** to confirm (see Confirming Call Disconnections on page 83 for details).

If your system administrator defined a time limit for videoconferences, a message appears when the limit is reached, and you can select one of the following:

Figure 29: Meeting Duration Alert

- **End Meeting** to immediately end the call
- **Do Not Limit** to remove the time limit
- **Snooze** to postpone the reminder and extend the meeting for another hour

If your system administrator enabled encryption in your system and your call is secured, an icon showing a padlock appears on your display. For more information, see *Administrator Guide for Scopia XT Series*.

Important:

Using encryption is subject to local regulation. In some countries it is restricted or limited for usage. For more information, consult your local reseller.

Joining a Videoconference

About this task

To join a videoconference, dial the number of the XT Series hosting the videoconference, or the meeting ID of the videoconference which was given by the meeting's host. For more information, see Dialing a Number Directly from the Endpoint on page 37 or Dialing a Number from the XT Series Web Interface on page 39.

If your system administrator enabled encryption in your system and your call is secured, an icon showing a padlock appears on your display. For more information, see *Administrator Guide for Scopia XT Series*.

Important:

Using encryption is subject to local regulation. In some countries it is restricted or limited for usage. For more information, consult your local reseller.

Chapter 4 | During Your Videoconference

This chapter describes the different actions available during your videoconference, such as recording the videoconference or sharing content with other participants:

Navigation

- Recording a Videoconference on page 45
- Controlling your Video and Audio on page 51
- About Video Layouts on page 56
- Sharing Content on page 63

Recording a Videoconference

This section describes how to record videoconferences. You can define the recording settings, such as the recording bitrate to determine the recording's file size, and how to view recordings from the XT Series web interface.

Navigation

- Setting Your Recording Preferences on page 45
- Starting a Recording on page 47
- Viewing a Recording from the Web Interface on page 50

Setting Your Recording Preferences

About this task

You can record videoconferences and store them to a connected USB storage device. This procedure describes how to configure your recording preferences, such as the video resolution and bitrate. This is useful, for example, to increase the time available for recording on your USB storage device. You can do this procedure from the endpoint itself or from the XT Series web interface.

This may require a license, depending on your model. For more information, see *Installation Guide for Scopia XT Series*.

You can play the recordings using any standard media player. The system saves the file as an MP4, and records the video in H.264 format and audio in AAC-LC format.

You cannot record videoconferences when encryption is enabled. For more information, see *Administrator Guide for Scopia XT Series* or contact your administrator. When recording a videoconference on a system with an embedded MCU, you can include up to 6 remote endpoints. The Scopia XT Series SMB Edition edition can include up to 5 remote endpoints.

Procedure

1. Access the recording settings:
   - From the XT Series web interface, select **Basic Settings > Recording > General.**
   - From the endpoint's main menu, select **Configure > Recording**.

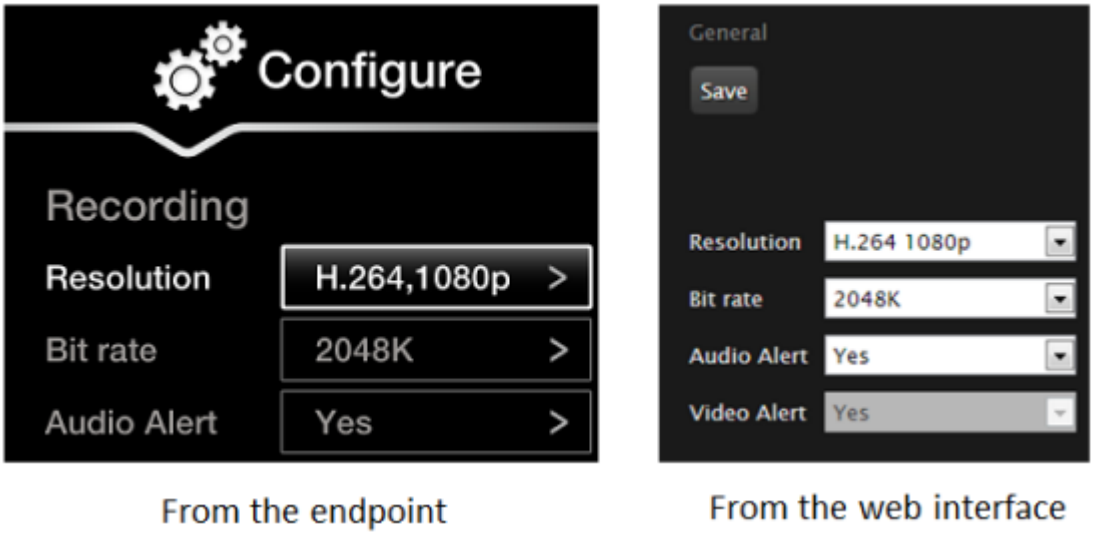


Figure 30: Setting your recording preferences

2. Define the following recording settings:

Table 7: Configuring recording settings

Field	Description
Resolution	Select the video resolution to use for recording from the list. The frame rate is limited to 25 frames per second. For the best quality, we recommend using the default video resolution, 1080p. You can lower the video resolution during a recording if the media player or device used to view recordings does not support all video resolutions. When you change the resolution, the system automatically selects the optimal bitrate for this resolution.
Bit rate	Select the recording bitrate to determine the file size of the recording. To use less space on your USB storage device for recordings, select a lower bitrate. For the best results, use the default value for your chosen resolution. Bitrate measures the speed of data flow, measured in kbps. Higher video resolutions require higher bitrates to ensure the video is constantly updated, thereby maintaining smooth motion. If you lower the bitrate, you lower the quality of the video. In some cases, you can select a lower bitrate without noticing a significant drop in video quality; for example during a presentation or when a lecturer is speaking and there is very little motion. In video recordings, the bitrate determines the file size for each minute of recording. To estimate the space you need for the recording, see Table 8: Typical file sizes based on the bitrate on page 47. You can see how much recording time is available on your USB storage device when you access the **Recording** menu (for details, see Starting a Recording on page 47).
Audio Alert	Select **Yes** to enable an audio message alert at the beginning of the videoconference, indicating to all participants that the meeting is being recorded. This alert is also sent to late participants.

Table 8: Typical file sizes based on the bitrate

Bitrate	File size for 1 minute recording	File size for 30 minute recording	File size for 1 hour recording
6144K	45 MB	1,350 MB	2,700 MB
4096K	30 MB	900 MB	1,800 MB
2048K	15 MB	450 MB	900 MB
1024	7.5 MB	225 MB	450 MB
512	3.75 MB	112.5 MB	225 MB
384	3 MB	85 MB	169 MB

3. From the web interface only, select **Save**.

Starting a Recording

About this task

You can record videoconferences and store them to a connected USB storage device. This section describes how to start, pause, and stop a recording during a videoconference. This may require a license, depending on your model. For more information, see *Installation Guide for Scopia XT Series*.

You can do this procedure from the endpoint itself or from the XT Series web interface.

You can play the recordings using any standard media player. The system saves the file as an MP4, and records the video in H.264 format and audio in AAC-LC format.

You cannot record videoconferences when encryption is enabled. For more information, see *Administrator Guide for Scopia XT Series* or contact your administrator. When recording a videoconference on a system with an embedded MCU, you can include up to 6 remote endpoints. The Scopia XT Series SMB Edition edition can include up to 5 remote endpoints.

You cannot (at present) record to a network disk, or to Scopia Desktop's Recording Server. This is planned for future versions.

Before you begin

- Insert a USB storage device (either an external hard drive or a USB key) into any of the USB ports of the XT Series:

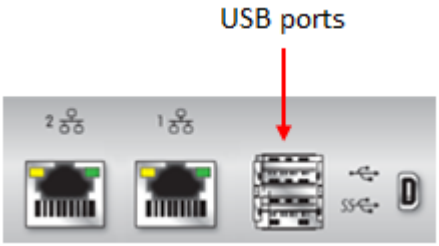


Figure 31: Connecting a USB drive to the XT Series

  You cannot start the recording before connecting a USB storage device.

- (Optional) Customize your recording settings, such as video resolution, as described in Setting Your Recording Preferences on page 45. For example, to increase the recording time allowed, lower the recording bitrate.

  You can see how much recording time is available on your USB storage device when you access the **Recording** menu as described in the procedure below.

Procedure

1. Access the **Recording** menu as follows:
   - From the XT Series web interface, select **More Actions > Recording**.
   - From the endpoint's main menu, select **Recording**.

     During a videoconference, press **ok/menu** on the XT Remote Control Unit, and select **Meeting Options > Recording**.

   The **Recording** menu appears, indicating the amount of time you can record based on the available space on your USB storage device.

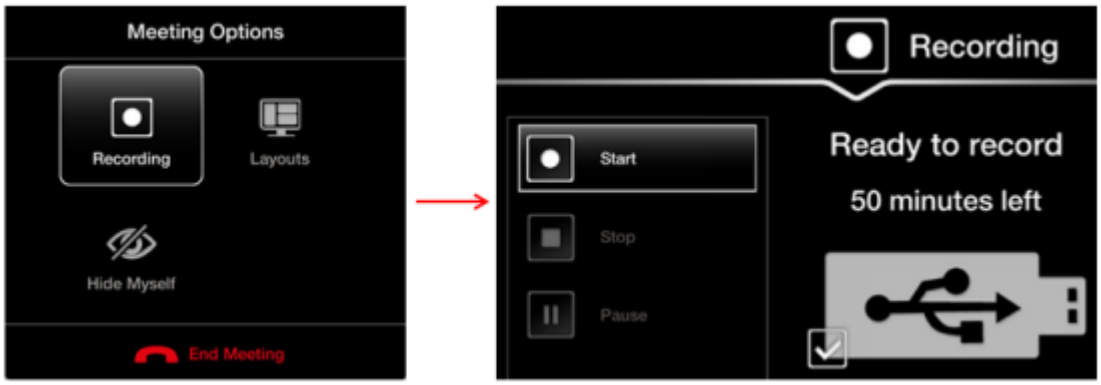


Figure 32: Starting a recording

2. Start your recording by selecting **Start** from the menu on the left.

   The recording icon appears at the top of the endpoint interface, next to the remaining time available for the recording. In the web interface, the remaining time appears at the bottom of the recording page (Figure 35: Viewing a Recording from the Web Interface on page 51).

Figure 33: Recording icon and time remaining on this USB drive

3. To pause the recording during a videoconference, select **Pause** from the **Recording** menu.

4. To stop the recording during a videoconference, select **Stop** from the **Recording** menu.

   If you started the recording at any time after the videoconference started, the recording automatically stops when the videoconference ends. Otherwise, stop the recording by selecting **Stop**.

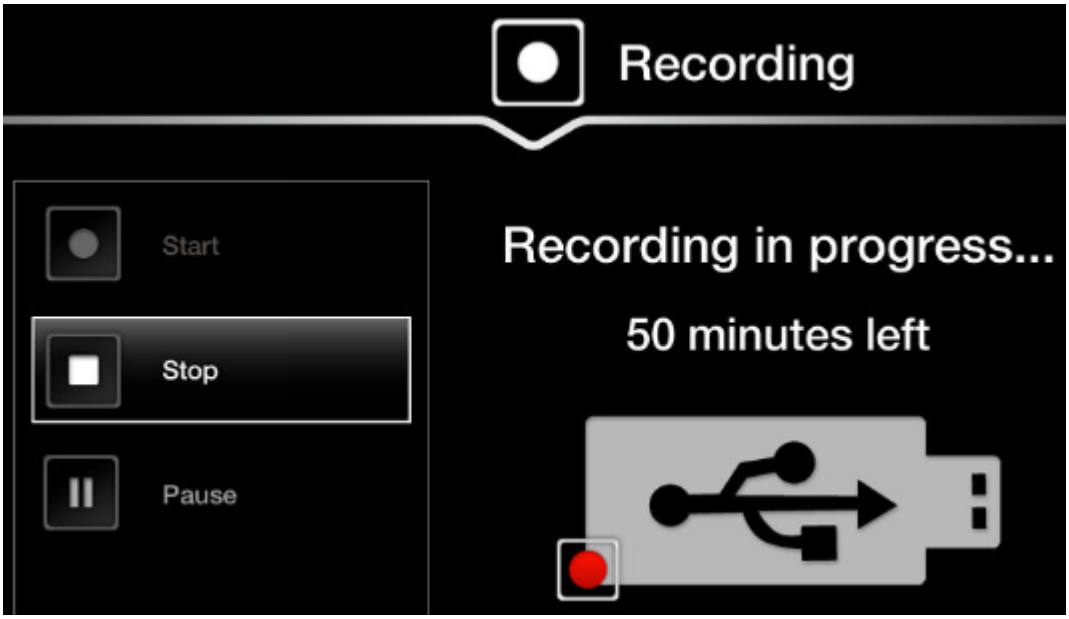


Figure 34: Stopping a recording

5. To view your recorded videoconferences, see Viewing a Recording from the Web Interface on page 50.

Viewing a Recording from the Web Interface

About this task

This procedure describes how to view the recordings from the XT Series web interface. You can record videoconferences and store them to a connected USB storage device. This may require a license, depending on your model. For more information, see *Installation Guide for Scopia XT Series*.

Alternatively, you can also view the recordings from the USB storage device itself. The file is saved as *<endpoint ID><name of endpoint><date><time>.MP4*, for example *0011D_XT_2013_05_01_10_30.MP4*.

For more information on how to record a videoconference, see Starting a Recording on page 47.

You can play the recordings using any standard media player. The system saves the file as an MP4, and records the video in H.264 format and audio in AAC-LC format.

Before you begin

Verify that you have one of the following Internet Browsers installed, required to view the recording:

- Google Chrome version 11 or later
- Apple Safari version 5 or later

Procedure

1. Access the XT Series web interface, as described in Accessing XT Series Web Interface on page 14.
2. Select **More Actions > Recording**.

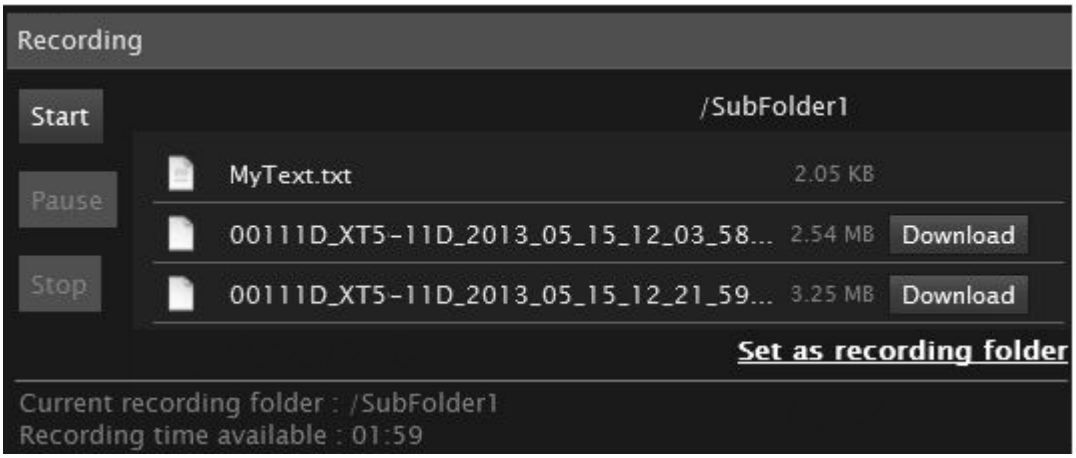


Figure 35: Viewing a Recording from the Web Interface

3. Find the recording from the list and select either **Play** or **Download**.

   The file is saved as *<endpoint ID><name of endpoint><date><time>.MP4*.

Controlling your Video and Audio

This chapter details the configurations you can make on your Scopia XT Series to control the way the video is displayed, to control the audio output and input.

Navigation

- Blocking Video From the Scopia XT Series on page 51
- Moving the Camera's Position on page 52
- Adjusting the Volume on page 54
- Muting the Microphone Pod on page 55

Blocking Video From the Scopia XT Series

About this task

During a call, you can block and unblock your local video and replace it with a system-generated image. If you are hosting a videoconference with your embedded MCU, you have the additional option of hiding your video from the videoconference layout, as described in Hiding your Video and Audio from the Videoconference on page 73.

Alternatively, you can also configure your XT Series to block video input from your local endpoint by default at the start of each call. For more information, see Blocking Video Input by Default on page 86.

Procedure

Block your video during a videoconference as follows:

- Press and hold the **Mute** key on the XT Remote Control Unit.
- Press **ok/menu** to access the In-call menu, and select **Privacy Options > Privacy**:

Figure 36: In-call menu

The system sends a pre-defined image to the remote endpoint, indicated by the icon on your display.

Moving the Camera's Position

About this task

This procedure describes how to position your camera's angle and zoom, to include all people present in the room in the video. You can do this procedure from the endpoint itself or from the XT Series web interface.

You can control and include more than one HDMI camera in your video by connecting them to the Scopia XT Camera Switch (purchased separately). Multiple cameras are typically used for larger meeting rooms or auditoriums. For example, you may want to zoom one camera to focus on the speaker, and use another camera for the audience. Connecting the Scopia XT Camera Switch also allows you use multiple cameras while still keeping the DVI port open to connect a computer and share content. For more information about connecting the Scopia XT Camera Switch, see *Installation Guide for Scopia XT Series*.

By default, the system stores the last camera position and retrieves this position the next time the camera is switched on. You can store multiple camera positions for future use, as described in *Administrator Guide for Scopia XT Series*.

For information about connecting the Scopia XT Camera Switch, see the *Installation Guide for Scopia XT Series*.

Before you begin

Configure your camera settings, as described in *Installation Guide for Scopia XT Series*.

Procedure

1. Access the camera control menu as follows:
   - From the XT Series web interface, select **More Actions > Cameras Control**.
   - From the endpoint's main menu, select **Control Camera** and press **ok/menu**.

     During a videoconference, press **ok/menu** to access the videoconference menu (Figure 37: Controlling your camera on page 53), and then select **Control Camera**.

   You can now move the camera that you configured to be the default. For details on setting your default camera, see *Installation Guide for Scopia XT Series*.

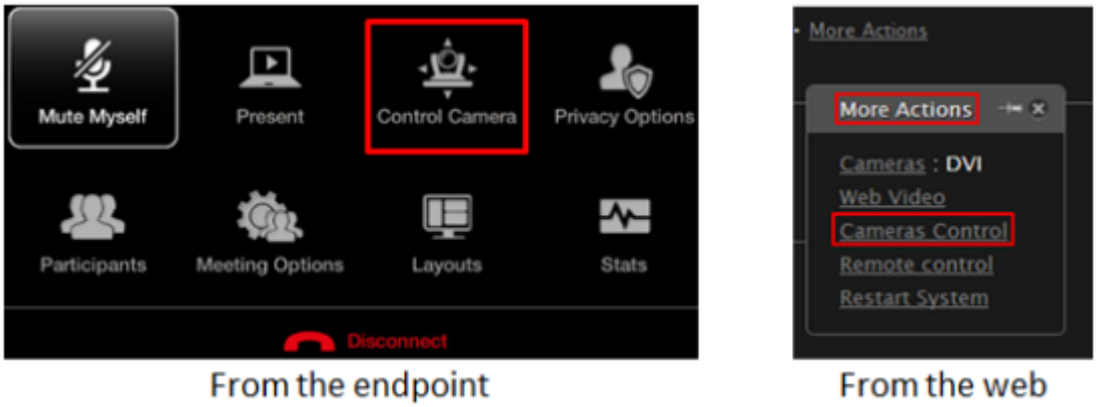


Figure 37: Controlling your camera

2. To move a camera other than the default camera, first select it:
   - From the endpoint's main menu, press **ok/menu** and select **Video Source**. Press **ok/menu** repeatedly to switch between cameras.
   - From the XT Series web interface, select the camera type icon next to **Cameras** to switch between different cameras.

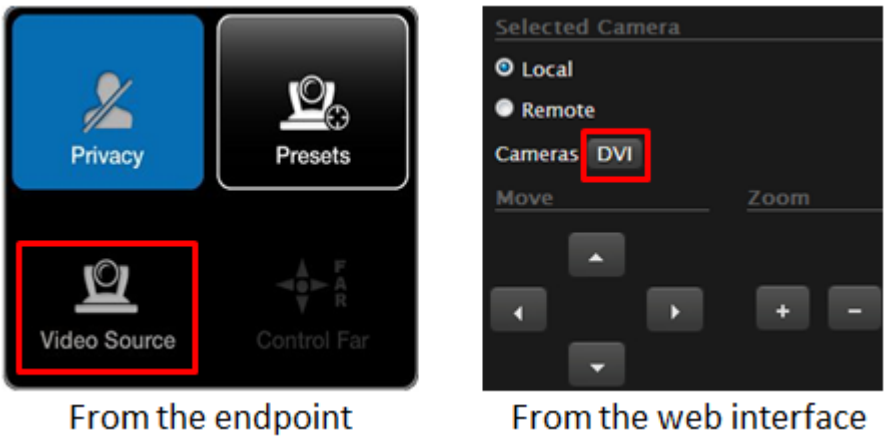


Figure 38: Switching between cameras

3. Move the camera position using the arrow and zoom icons on the XT Remote Control Unit or the web interface to get the desired angle.

Adjusting the Volume

About this task

Press + or - on the XT Remote Control Unit to adjust the sound you hear when receiving a call and during a videoconference.

To change the default speaker volume, perform the procedure in this section. You can do this procedure from the endpoint itself or from the XT Series web interface.

Procedure

1. Access the volume settings, as follows:
   - From the endpoint's main menu, select **Configure** > **Calling** from the Main menu.
   - From the XT Series web interface, select **Basic Settings** > **Call-Answer mode** > **General**.

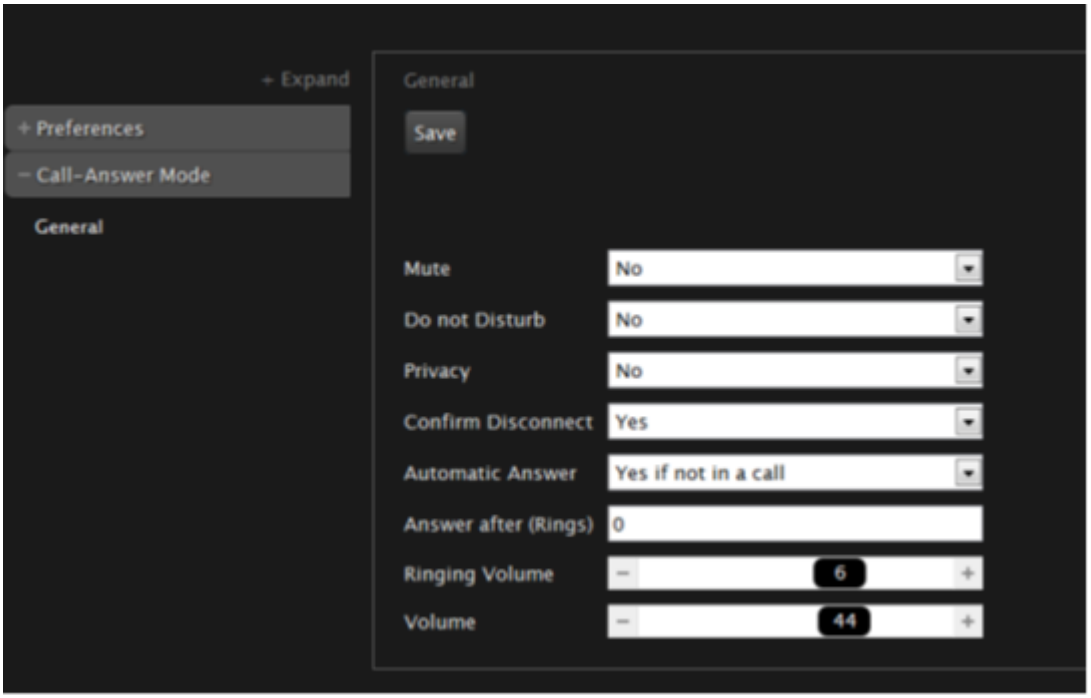


Figure 39: Call-Answer settings

2. Drag the **Volume** slider to set the value.
3. From the web interface only, select **Save**.

Muting the Microphone Pod

You can mute the Microphone Pod in your room if you do not want participants at the remote site to hear you by doing one of the following:

- Press the Mute key on the XT Remote Control Unit or press the Mute button on the Microphone Pod.
- Press **ok/menu** to access the In-call menu and select **Mute Myself**:

Figure 40: In-Call menu

The icon appears on the display.

To unmute, repeat the procedure described above. The icon disappears from the display.

Important:

The icon shows that the remote endpoint's microphone is muted.

About Video Layouts

A video layout is the arrangement of participant images as they appear on the monitor in a videoconference. If the meeting includes a presentation, a layout can also refer to the arrangement of the presentation image together with the meeting participants.

Video layouts of your XT Series depend on whether it uses one or two monitors.

You can change the video layouts on your XT Series during a call to optimize your videoconferencing experience, as described in Changing the Video Layout During the Call on page 61.

Important:

The available layouts are pre-configured by the administrator so that a set of default layouts is available for you.

Navigation

- Selecting your Video Layout with One Monitor on page 56
- Selecting your Video Layout with Two Monitors on page 58
- Changing the Video Layout During the Call on page 61

Selecting your Video Layout with One Monitor

About this task

A video layout is the arrangement of participant images as they appear on the monitor in a videoconference. If the meeting includes a presentation, a layout can also refer to the arrangement of the presentation image together with the meeting participants.

You see the video layout and hear the audio on the monitor, even when a computer is connected.

Important:

If you connect another monitor to the free HD socket and the monitor is configured to **Auto** by the Administrator, the additional monitor is automatically used to show local video or a presentation (local or remote). See the *Installation Guide for Scopia XT Series* for information.

In a call, the monitor can split the screen to show both the participants' video (local and remote) and presentation (local or remote) in different windows, with the system menus displayed transparently:

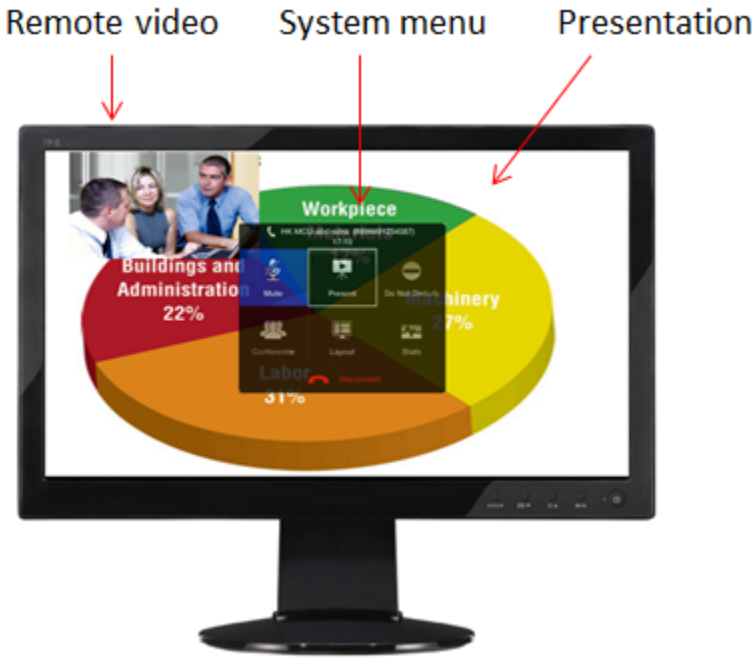


Figure 41: Available video and content (example)

When you are not in a call, the monitor automatically displays the system menus and the video taken by the local camera

You can arrange the monitor layout and content in the following views (see Figure 42: Showing the monitor in Pip, PaP, and PoP views on page 58):

- PiP

  The PiP (Picture In Picture) view shows a video image in the main screen, with an additional smaller image overlapping in the corner. Typically, a remote presentation is displayed in the main part of the screen, and the remote video is in the small image. If the remote endpoint does not show any content, the display shows the remote video in the main part of the screen, and the local presentation in the small image.

- PaP

The PaP (Picture and Picture) view shows two images of the same size, presented side by side.

- PoP

  The PoP (Picture out Picture) view shows up to three images of different size, presented side by side. The image on the left is larger, with two smaller images on the right.

- Fullscreen

  The full screen view shows one video image. Typically, it displays the remote presentation, or, if there is no presentation, it displays the other participant or a composite of the other participants.

Figure 42: Showing the monitor in Pip, PaP, and PoP views

To change the layouts, see Changing the Video Layout During the Call on page 61.

Important:

You can use PIP, PaP or PoP views only if your system administrator has configured them in your XT Codec Unit.

Selecting your Video Layout with Two Monitors

About this task

A video layout is the arrangement of participant images as they appear on the monitor in a videoconference. If the meeting includes a presentation, a layout can also refer to the arrangement of the presentation image together with the meeting participants.

In deployments with two monitors, you have more space available to display video and content (see Figure 43: Available video and content (example) on page 59). One monitor is defined to be the primary one (HD1), and the second monitor is defined as auxiliary (HD2).

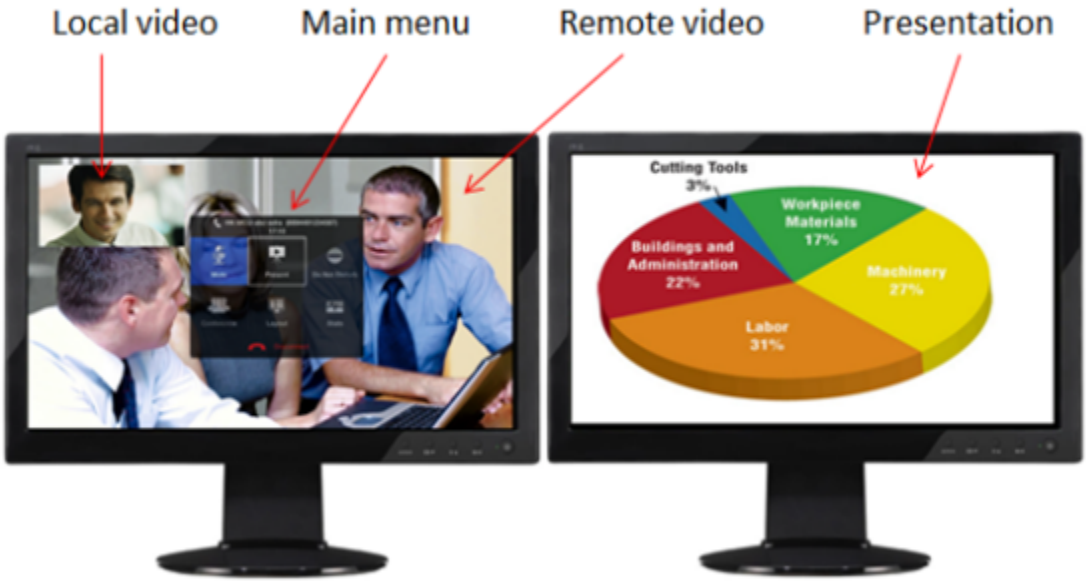


Figure 43: Available video and content (example)

Important:

By default, the video layout appears as follows:

- When you are not in a call, one monitor shows the system menus, and both monitors display the video taken by the local camera.
- During a videoconference, one monitor shows the system menus, and both monitors show the available video and presentation (local and remote), according to the selected monitor configuration described below. You can further arrange the monitor layouts and content by using Layout and PIP keys on the XT Remote Control Unit.

Your system administrator configures the monitors to show one of these layouts when you are in a call (see Table 9: Video configuration options with two monitors on page 60):

Figure 44: Video configuration options with two monitors

Table 9: Video configuration options with two monitors

Layout	Description
HD1 (Menu & Video Rx) + HD2 (Present)	The main monitor (HD1) shows the system menus, the received video, and local video. The local video is in a small overlapping window, also called a PIP (Picture in Picture) view. The auxiliary monitor (HD2) shows the presentation (local or remote), if available. The audio is enabled on HD1. This is the default configuration.
HD1 (Menu & Present) + HD2 (Video Rx)	HD1 shows the system menus, the presentation (local or remote) if available, and the local video in a small overlapping window. HD2 shows the received video. The audio is automatically enabled on HD1.
HD1 (Present) + HD2 (Menu & Video Rx)	HD1 shows the presentation (local or remote), if available. HD2 shows the system menus, the received video, and the local video in a small overlapping window.
HD1 (Video Rx) + HD2 (Menu & Present)	HD1 shows the received video. HD2 shows the system menus, the presentation (local or remote) if available, and the local camera image in a small overlapping window.

For more information about configuring your monitor views, see *Administrator Guide for Scopia XT Series*.

During a call, you can also define the relative size of the windows. For example, two images side by side and at the same size in one monitor is called PaP (Picture and Picture) view. For more information, see Changing the Video Layout During the Call on page 61.

Important:

You can use PIP, PaP or PoP views only if your system administrator has configured them in your XT Codec Unit.

Important:

When there is no call, you can reset the monitors to the default configuration by pressing and then **0** on the XT Remote Control Unit.

Changing the Video Layout During the Call

About this task

A video layout is the arrangement of participant images as they appear on the monitor in a videoconference. If the meeting includes a presentation, a layout can also refer to the arrangement of the presentation image together with the meeting participants.

During the call, you can change your monitor's current layout to the options described in Table 10: Video layout options on page 61. To change the video layout for all participants when you are hosting a videoconference from a Scopia XT Series MCU Edition, see Changing the Video Layout from the Scopia XT Series MCU Edition on page 73.

For more information about video layouts in point-to-point calls, see About Video Layouts on page 56.

Important:

You can use PIP, PaP or PoP views only if your system administrator has configured them in your XT Codec Unit.

You can change the layout in one of the following ways:

- Press the **Layouts** key on the XT Remote Control Unit repeatedly to switch between the full screen, PoP, PaP, and PiP video layouts, described in Table 10: Video layout options on page 61.

Table 10: Video layout options

Layout	Description
Fullscreen	The full screen view shows one video image. Typically, it displays the remote presentation, or, if there is no presentation, it displays the other participant or a composite of the other participants.
PoP	The PoP (Picture out Picture) view shows up to three images of different size, presented side by side. The image on the left is larger, with two smaller images on the right.

Layout	Description
PaP	The PaP (Picture and Picture) view shows two images of the same size, presented side by side.
PiP	The PiP (Picture In Picture) view shows a video image in the main screen, with an additional smaller image overlapping in the corner. Typically, a remote presentation is displayed in the main part of the screen, and the remote video is in the small image. If the remote endpoint does not show any content, the display shows the remote video in the main part of the screen, and the local presentation in the small image.

- Access the In-call menu by pressing **ok/menu** on the XT Remote Control Unit and then select **Layouts**.

  Alternatively, press and hold the **Layouts** key (refer to Table 10: Video layout options on page 61 for layout descriptions).

Figure 45: In-Call menu

Use the arrows to browse through the layouts (Figure 46: Available video layouts in a call on page 63), and select the desired layout.

The In-call menu automatically disappears from the display after a few seconds in a call. To bring back the In-call menu, press **ok/menu** on the XT Remote Control Unit.

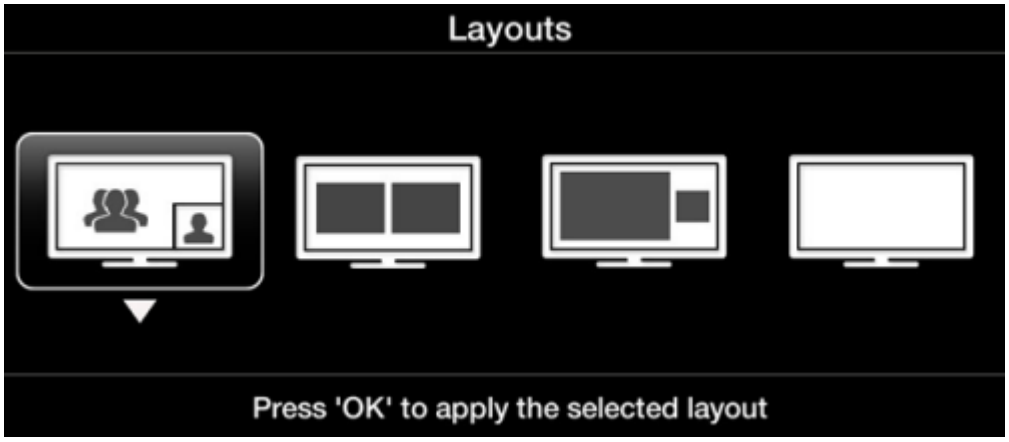


Figure 46: Available video layouts in a call

Sharing Content

This section details how to share a presentation or any other file from a PC.

Typically, a conference room can have one or two monitors. Depending on the conference room configuration, the presentation is shown either on the same monitor as the live remote video or on the monitor of its own. For more information see Selecting your Video Layout with One Monitor on page 56 and Selecting your Video Layout with Two Monitors on page 58.

You can share content in your local conference room only or with all conference rooms and endpoints participating in a call. Local presentation mode is an Scopia XT Series feature that allows to easily connect a PC laptop to the DVI connector of the XT Codec Unit and immediately display a presentation or any other PC content on the monitors (see Start Sharing Content Automatically on page 66 for details).

Navigation

- Connecting a Computer to the Scopia XT Series on page 63
- Selecting the Computer Display Resolution on page 65
- Start Sharing Content Automatically on page 66
- Sharing Content in the Local Conference Room on page 67
- Sharing Content during a Call on page 68

Connecting a Computer to the Scopia XT Series

About this task

Use a computer to share a presentation or other PC content during a call. This procedure describes how to connect computers that are equipped with a DVI-out or VGA-out connector.

Procedure

1. Connect your computer to the XT Codec Unit:

- For computers and laptops with a DVI out connector, connect the DVI cable to the DVI-I socket of the XT Codec Unit and connect the other end of the cable to the computer.

Figure 47: Connecting a computer to Scopia XT Series

- For computers with a VGA output connector, use the included DVI to VGA adapter.

a. Connect the DVI-VGA adapter to the DVI-IN socket of the XT Codec Unit.

b. Connect a VGA cable to the adapter. This cable is not supplied with the system.

c. Connect the VGA cable to the PC/Laptop VGA out socket.

2. Connect the computer audio to the XT Codec Unit.

   When you share content from the PC during a call, remote participants hear the computer's audio output as well as the audio from the Microphone Pod.

Important:

The audio input port supports both analog and digital optical audio.

Figure 48: Connecting the computer's audio to the XT Codec Unit

3. Continue with setting the display resolution, as described in Selecting the Computer Display Resolution on page 65.

Selecting the Computer Display Resolution

About this task

For optimal display quality, and to prevent the screen from flickering during the videoconference, set the computer display to one of the supported picture resolutions and refresh frequencies. This procedure assumes computers running Microsoft Windows.

Procedure

1. From the Windows **Control Panel**, navigate to the screen resolution settings.
2. Select the desired screen resolution. See Table 11: DVI input formats supported by XT Codec Unit on page 65 for the list of resolutions supported by the XT Codec Unit.

Table 11: DVI input formats supported by XT Codec Unit

Name	Resolution
1080p	1920x1080
SXGA	1280x1024
HD+ (900p)	1600x900
WSGA	1440x900
UVGA	1280x960
WXGA	1280x768/ 1280x800
720p	1280x720

Name	Resolution
XGA	1024x768
SVGA	800x600
VGA	640x480

3. Select **Apply**.
4. Select the refresh frequency rate from the **Screen refresh rate** field. See Table 12: Resolution and refresh rates on page 66 for the supported resolution and refresh rates.

Table 12: Resolution and refresh rates

Name	Resolution	Digital Refresh Rate (Hz)	Analog Refresh Rate Frequency (Hz)
1080p	1920x1080	60	60
SXGA	1280x1024	60,75	60, 75
HD+ (900p)	1600x900	60	N/A
WSGA	1440x900	60	60
UVGA	1280x960	60, 85	60, 85
WXGA	1280x768 / 1280x800	60	60
720p	1280x720	60	60
XGA	1024x768	60, 70, 75	60, 70, 75
SVGA	800x600	60, 72, 75	60, 72, 75
VGA	640x480	72, 75	72, 75

5. Select **Apply**.

Start Sharing Content Automatically

About this task

By default, your XT Series automatically starts presenting PC content on the monitors to others in the same room when you connect a PC.

When local presentation mode is enabled, the XT Series:

- Automatically starts presenting when you connect a PC to the DVI connector on the XT Codec Unit, if there is no active call.
- Does not automatically accept incoming calls.
- When you have an incoming call, local presentation mode is suspended and you are asked how to handle the call (accept/reject/do not disturb).
- Video input switches to DVI and the audio settings associated to DVI are automatically used.

Alternatively, you can manually start presenting content (for details, see Sharing Content during a Call on page 68 and Sharing Content in the Local Conference Room on page 67).

Procedure

1. Access the general settings, as follows:
   - From the web interface, select **Basic Settings**.
   - From the endpoint's Main menu, select **Configure** > **General**.

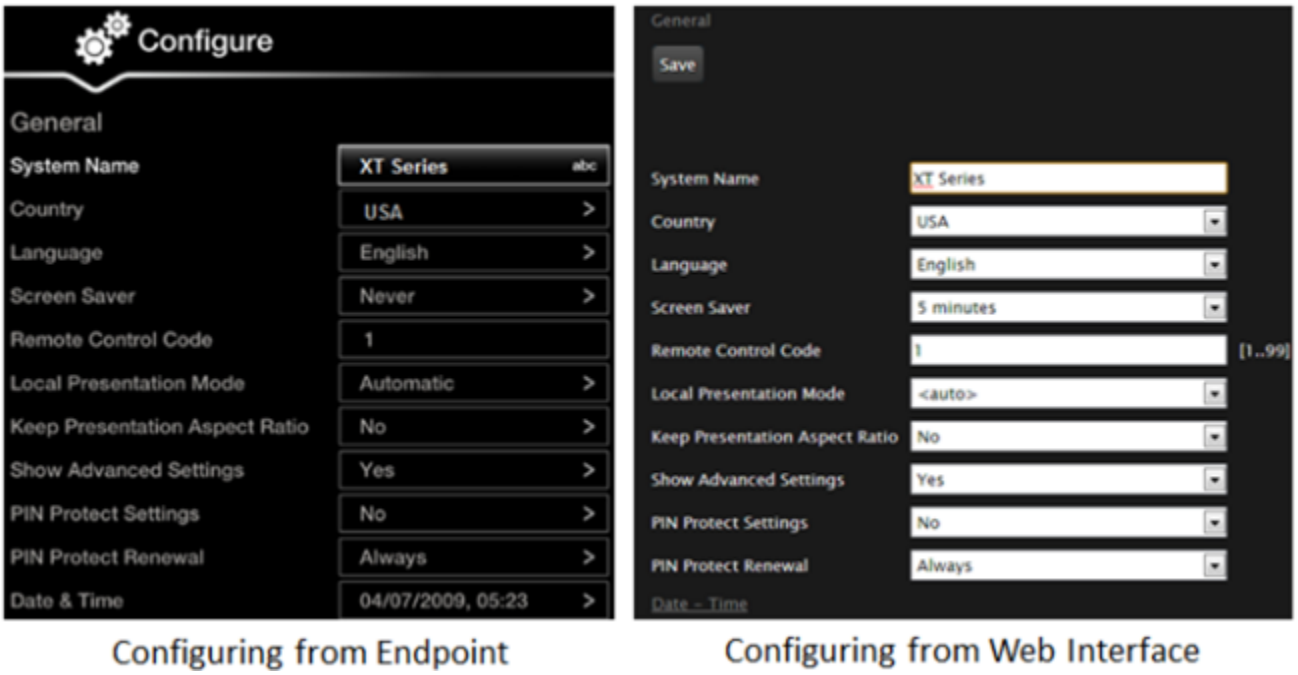


Figure 49: General settings

2. Select **Auto** from the **Local presentation mode** list.
3. From the web interface only, select **Save**.

Sharing Content in the Local Conference Room

About this task

You can share the content of your computer screen with other participants in the local conference room when the Scopia XT Series is not in a call. This mode is called local presentation. When in the local presentation mode, the XT Series:

- Does not automatically accept incoming calls.
- When you have an incoming call, local presentation mode is suspended and you are asked how to handle the call (accept/reject/do not disturb).

Before you begin

You must setup your computer and the XT Codec Unit before starting the presentation:

- Verify that the XT Series is not in a call.
- Configure your computer to the resolution and refresh rates supported by the system. See Selecting the Computer Display Resolution on page 65 for detailed information.
- To hear the PC input locally and remotely, you need to route PC audio through the input audio port:

  Navigate to **Administrator settings > I/O connections > Audio - Inputs > Analog audio > Audio selection** and select one of the following options:

  - **Analog audio associated to DVI**: Select to transmit audio only when the using the DVI camera as the video source.
  - **Analog audio always**: Select to always transmit audio, whether using the DVI or HD1 camera as the video source.
- To enable audio from the PC in the local conference room, navigate to **Administrator settings > I/O connections > Audio - Outputs > Analog audio > Analog Audio to output** and select one of the following options:
  - **All**: Select to enable audio from all sources HD1, HD2, digital, and analog audio.
  - **HD1+Digital audio+Analog audio**: Select to enable only HD1, digital, and analog audio.

Procedure

1. If your XT Series is configured to enter the local presentation mode automatically, connect your computer to the DVI-I connector of the XT Codec Unit. The content appears on the monitors of your local conference room. For more information about automatically entering local presentation mode, see Start Sharing Content Automatically on page 66.

   For information about connecting your computer, see the *Quick Setup Guide* for installation instructions.

2. If your XT Series is not configured to enter the local presentation mode automatically, perform these steps:

   a. Share PC content by pressing the **Presentation** key , or **Present** from the Main menu.

      The XT Codec Unit saves the live camera and switches to DVI mode.

      Menus are hidden.

   b. End local presentation mode in one of the following ways:

      - or the Back key from the XT Remote Control Unit
      - **Present** from the Main menu

      The XT Codec Unit switches back to the previously used live camera.

Sharing Content during a Call

About this task

Once a call has been established, you can share your computer screen with the remote endpoint.

If you are not in a call, you can share your presentation with participants in the local conference room (see Sharing Content in the Local Conference Room on page 67).

If the remote endpoint can receive presentation in addition to live video, the XT Codec Unit sends both live video and presentation without switching to DVI mode. Otherwise, the XT Codec Unit can send only one video stream. The XT Codec Unit sends the presentation in place of live video and switches automatically to DVI mode. When the presentation ends, the XT Codec Unit switches back automatically to the live camera.

By default, the total available bandwidth is evenly divided between live video and presentation. In most cases it ensures the best content sharing experience. If necessary, your system can change the bandwidth dedicated to live video and presentation to suite your network requirements.

Before you begin

Before sharing content, proceed as follows:

- Configure your computer to the resolution and refresh rates supported by the system. See Selecting the Computer Display Resolution on page 65 for detailed information.
- Connect your computer to the DVI-I connector of the XT Codec Unit, as described in Connecting a Computer to the Scopia XT Series on page 63.
- To hear the PC input locally and remotely, you need to route PC audio through the input audio port:

  Navigate to **Administrator settings > I/O connections > Audio - Inputs > Analog audio > Audio selection** and select one of the following options:

  - **Analog audio associated to DVI**: Select to transmit audio only when the using the DVI camera as the video source.
  - **Analog audio always**: Select to always transmit audio, whether using the DVI or HD1 camera as the video source.
- To enable audio from the PC in the local conference room, navigate to **Administrator settings > I/O connections > Audio - Outputs > Analog audio > Analog Audio to output** and select one of the following options:
  - **All**: Select to enable audio from all sources HD1, HD2, digital, and analog audio.
  - **HD1+Digital audio+Analog audio**: Select to enable only HD1, digital, and analog audio.

Procedure

1. During the call, start sharing the presentation in one of the following ways:
   - Press the **Present** key on the XT Remote Control Unit.
   - Select **Present** from the In-call menu. Access the call menu by pressing **OK** on the XT Remote Control Unit:

Figure 50: In-call menu

2. Repeat the previous step to stop sharing the presentation.

Chapter 5 | Hosting Videoconferences with the Built-in MCU

More than a room system, some models of the Scopia XT Series also include an embedded MCU, which enables you to host videoconferences of more than two participants locally, without the use of an external MCU (see Table 13: Hosting videoconferences with your Scopia XT Series on page 71).

This functionality is only enabled when you purchase the optional MCU license, allowing you to locally host a videoconference of up to four or nine participants, depending on your license. See the *Scopia XT Series Administrator Guide* for more information about the embedded MCU and licenses.

The following Scopia XT Series models are capable of locally hosting a videoconference:

Table 13: Hosting videoconferences with your Scopia XT Series

Scopia XT Series Model	Can host videoconferences (license required)
Scopia XT5000 Series	Yes
Scopia XT1200	Yes
Scopia XT Executive	Yes
Scopia XT4000 Series	No

Navigation

- Starting a Locally Hosted Videoconference on page 71
- Hiding your Video and Audio from the Videoconference on page 73
- Changing the Video Layout from the Scopia XT Series MCU Edition on page 73
- Moderating a Hosted Videoconference on page 75
- Moderating a Videoconference Hosted by Another Scopia XT Series on page 77
- Ending a Videoconference on page 79

Starting a Locally Hosted Videoconference

About this task

To locally host a videoconference with more than two participants, using the built-in MCU, you call one person and then add participants one by one.

To enable this option, you must purchase the optional MCU (Multi Conference Unit) license. Depending on your license, you can host a videoconference of up to four or nine participants. For details, see *Installation Guide for Scopia XT Series*.

Alternatively, you can integrate an external MCU, which provides additional capabilities. For more information on alternative network topologies, see the *Administrator Guide for Scopia XT Series* or contact your system administrator.

If your system administrator enabled encryption in your system and your call is secured, an icon showing a padlock appears on your display. For more information, see *Administrator Guide for Scopia XT Series*.

Important:

Using encryption is subject to local regulation. In some countries it is restricted or limited for usage. For more information, consult your local reseller.

Procedure

1. Call the first participant (see Dialing a Number Directly from the Endpoint on page 37 or Dialing a Number from the XT Series Web Interface on page 39).

   Important:

   Your organization may also have implemented a dial plan, which defines various dial prefixes to determine the characteristics of a call. For example, you may be able to dial 8 before the videoconference number for a lower bandwidth call, or 6 for an audio-only call. For more information on the dial plan in your organization, contact your system administrator.

2. You can add participants in one of several ways:
   - Call the next participant by pressing on the XT Remote Control Unit.
   - Answer an incoming call from a participant dialing in to the meeting.
   - Press **ok/menu** on your XT Remote Control Unit to access the videoconference menu, and select **Participants > Invite a new participant**. Enter the participant's number, or select a contact from your phone book, and press **ok/menu**.

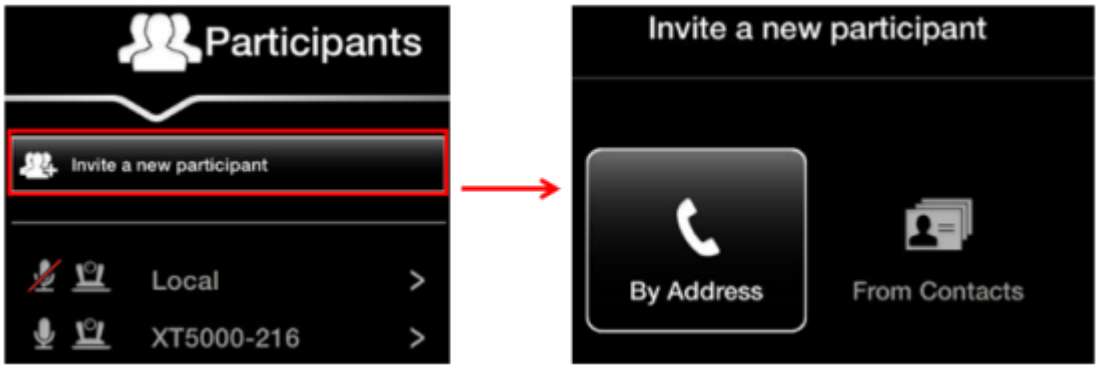


Figure 51: Inviting a participant

   - From the web interface, call the next participant as described in Dialing a Number from the XT Series Web Interface on page 39.

3. Repeat steps according to the number of participants allowed in your system.

4. Continue with:

   a. To choose the video layout, see Changing the Video Layout from the Scopia XT Series MCU Edition on page 73.

b. To manage the videoconference, see Moderating a Hosted Videoconference on page 75.

Hiding your Video and Audio from the Videoconference

About this task

If you are hosting a videoconference with your embedded MCU, you can hide your video and audio from the videoconference. Your video does not appear in the layout, and other participants cannot hear your audio.

Alternatively, you can block your local video and replace it with a system-generated image, if you still want your video to appear in the layout and other participants to hear your audio. For details, see Blocking Video From the Scopia XT Series on page 51.

Procedure

Press **ok/menu** on the XT Remote Control Unit to access the main menu, and select **Meeting Options > Hide Myself.**

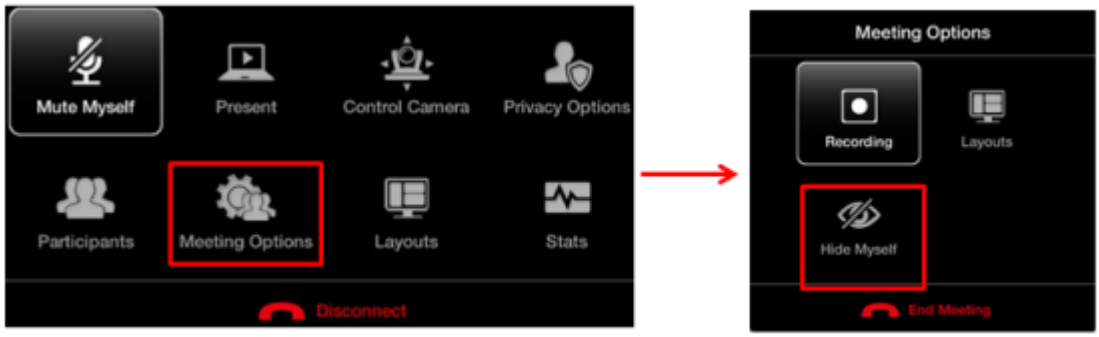


Figure 52: Hiding your Video and Audio from the Videoconference

Other participants cannot see your video in the layout and cannot hear you.

Changing the Video Layout from the Scopia XT Series MCU Edition

About this task

A video layout is the arrangement of participant images as they appear on the monitor in a videoconference. If the meeting includes a presentation, a layout can also refer to the arrangement of the presentation image together with the meeting participants.

By default, the embedded MCU chooses the best video layout dynamically, based on the number of participants in the call.

The moderator of the videoconference can change the layout for the videoconference. The change affects all participants in the call. For more information about moderating videoconferences, seeModerating a Hosted Videoconference on page 75 and Moderating a Videoconference Hosted by Another Scopia XT Series on page 77.

The Scopia XT Series has a number of available video layouts depending on your model, named by the number of participants they show simultaneously: full screen, Continuous Presence (CP) 2, CP3, CP4, CP5, CP6, CP7, CP8, and CP9.

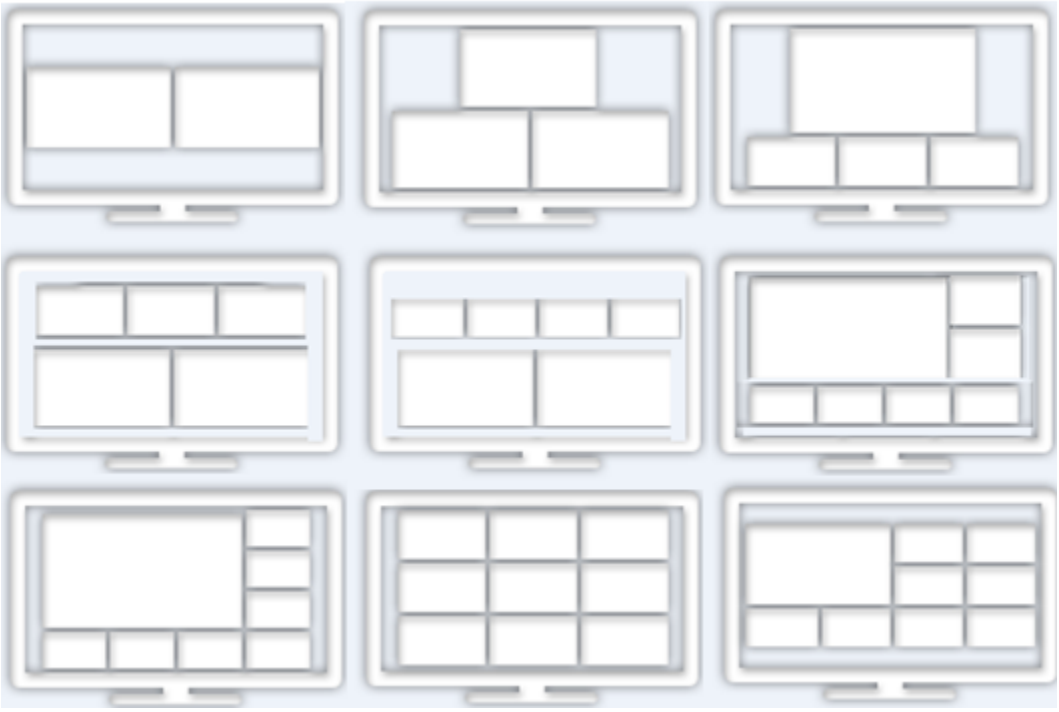


Figure 53: Examples of video layouts for hosted videoconferences with 2-9 participants

Important:

The embedded MCU sends the same video layout to all the participants.

Before you begin

If you are not hosting this videoconference, you must first become a moderator of this videoconference, as described in Moderating a Videoconference Hosted by Another Scopia XT Series on page 77.

Procedure

1. While in a videoconference:
   - From the endpoint interface, press **ok/menu** on the XT Remote Control Unit to access the videoconference menu, and select **Meeting Options > Layouts** (see also Figure 53: Examples of video layouts for hosted videoconferences with 2-9 participants on page 74).

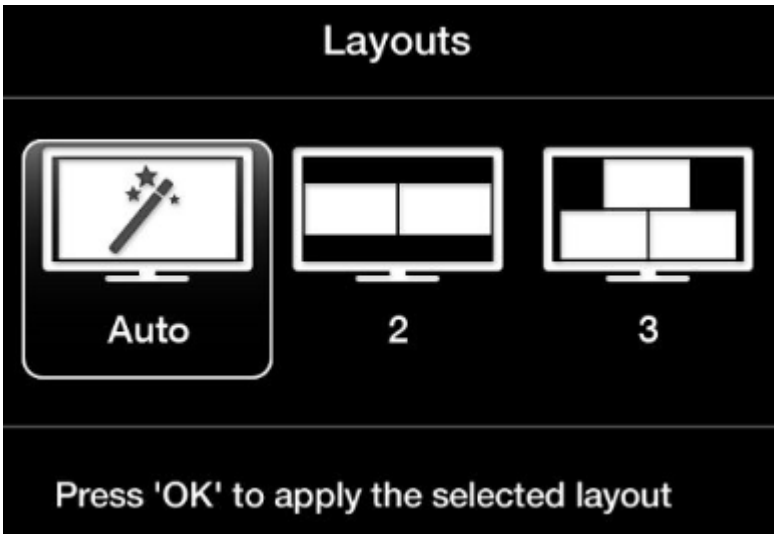


Figure 54: Changing the video layout from the endpoint

   - From the XT Series web interface, select **Meeting Call > Settings > Display**.

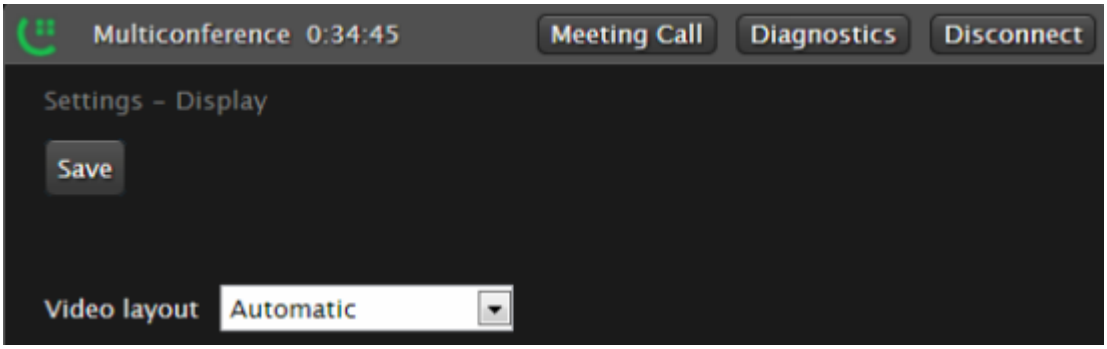


Figure 55: Changing the video layout from the web interface

2. Select the desired layout according to the number of participants.

   Important:

   Select **Auto** to restore the default layout.

Moderating a Hosted Videoconference

About this task

When you host your videoconference using the Scopia XT Series's built-in MCU, you are the moderator of conferences hosted on this XT Series. This procedure describes how to invite and manage the participants in the videoconference. You can do this procedure from the endpoint itself or from the XT Series web interface. You can also change the layout, as described in Changing the Video Layout from the Scopia XT Series MCU Edition on page 73.

Alternatively, to moderate a videoconference hosted by another Scopia XT Series, see Moderating a Videoconference Hosted by Another Scopia XT Series on page 77.

Before you begin

Start the videoconference and invite participants as described in Starting a Locally Hosted Videoconference on page 71.

Procedure

1. Access the active videoconference:
   - From the XT Series web interface, select **Make your call > Meeting Call**.
   - From the endpoint, press **ok/menu** to access the videoconference menu, and select **Participants**.

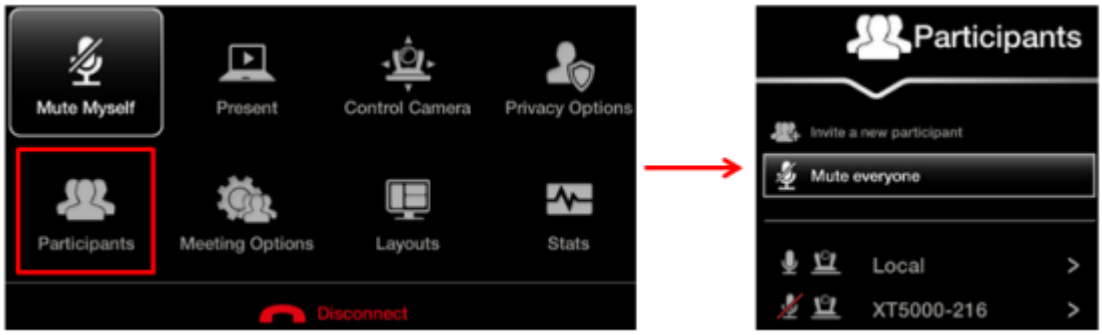


Figure 56: Moderating a hosted videoconference

2. You can moderate the videoconference as follows:
   a. To mute all participants, select **Mute everyone**. This is typically used to eliminate background noise from participants.
   b. To manage a specific endpoint, select it from the list of endpoints and choose from the options described in Table 14: Managing endpoints in the videoconference on page 77. To manage your own endpoint, select **Local**.

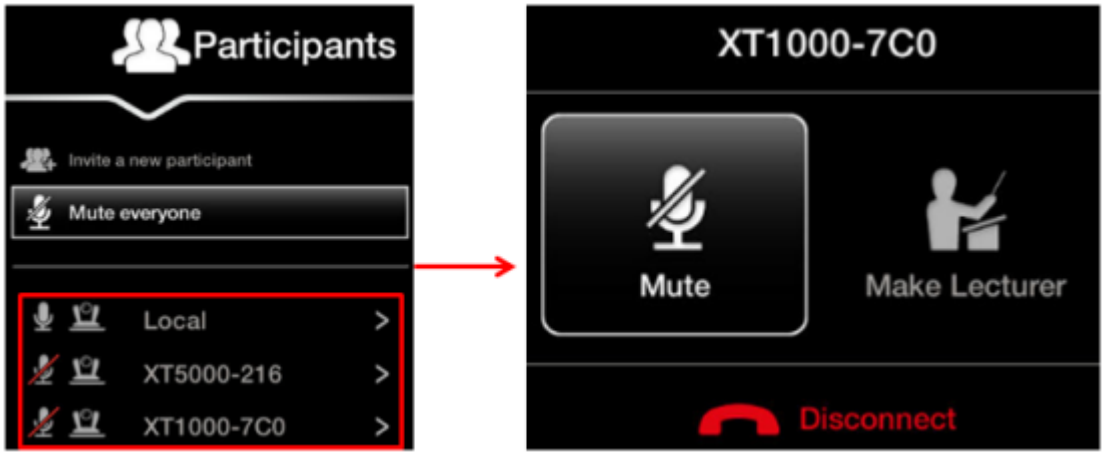


Figure 57: Managing participants

Table 14: Managing endpoints in the videoconference

Field	Description
Mute	Select to mute the selected endpoint.
Make Lecturer	Select to assign the participant as the lecturer. All participants in the videoconference can see the lecturer's video in the main part of the screen, while a smaller image shows the most recent active speaker.
Disconnect	Select to disconnect the selected endpoint.

c. To view detailed information about an endpoint in the videoconference, such as it's name, dialing number and call rate:

- From the XT Series web interface, select **Diagnostics**. Select **Previous** or **Next** to scroll through the endpoints.
- From the endpoint, press **ok/menu** to access the videoconference menu, and select **Stats**. Use the arrow keys on your XT Remote Control Unit to scroll through the endpoints.

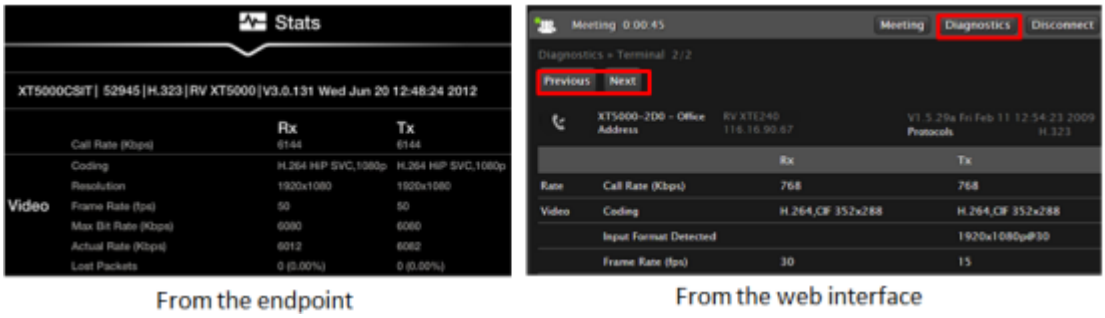


Figure 58: Viewing the remote endpoint's information

Moderating a Videoconference Hosted by Another Scopia XT Series

About this task

When you use the Scopia XT Series as an endpoint, you can moderate videoconferences hosted by an external MCU or another endpoint with a built-in MCU. This functionality is only available if:

- The hosting endpoint or MCU supports H.243, which enables remote videoconference management.
- You are not connecting to the videoconference via SIP.

You can do this procedure from the endpoint itself or from the XT Series web interface.

Alternatively, to host the videoconference on your XT Series, see Moderating a Hosted Videoconference on page 75.

Important:

If the endpoint hosting the meeting does not support H.243, and your Scopia XT Series does not have a built-in MCU, the **Meeting** option in the in-call menu is not available (see Figure 45: In-Call menu on page 62).

Procedure

1. Access the active videoconference:
   - From the endpoint, press **ok/menu** on the XT Remote Control Unit and select **Participants**.
   - From the XT Series web interface, select **Make your call > Meeting Call**.

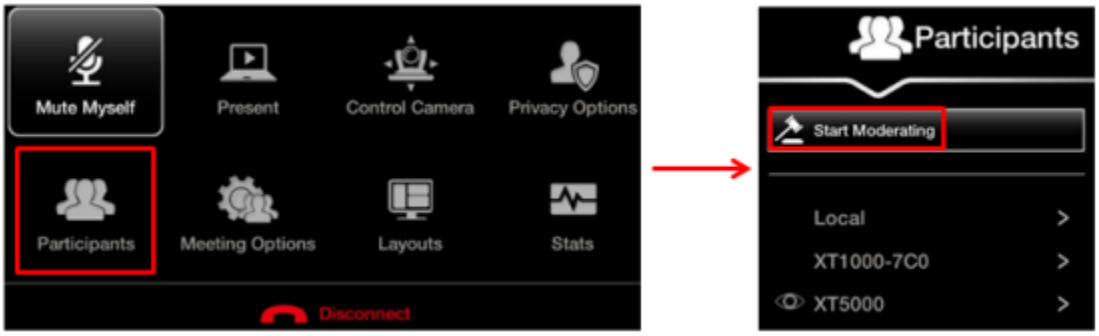


Figure 59: Start moderating the videoconference from the endpoint interface

2. Select **Start Moderating**.

   When approved by the meeting host, you become the meeting moderator and can manage the meeting and its participants.

3. Select an endpoint to manage from the participant list.

4. Moderate this endpoint in the videoconference by choosing one of the following actions:
   - Select **Make Lecturer** to assign the participant as the lecturer.

All participants in the videoconference can see the lecturer's video in the main part of the screen, while a smaller image shows the most recent active speaker.

- Select **Disconnect** to disconnect the endpoint.

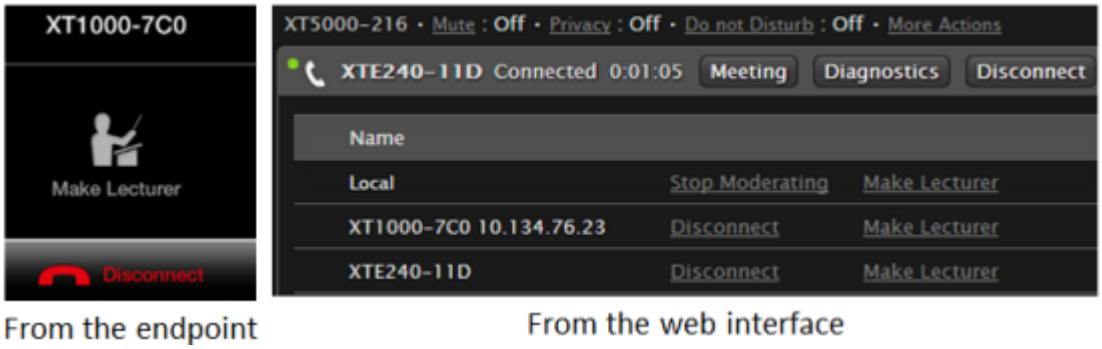


Figure 60: Managing the meeting

5. To stop moderating this meeting:
   - From the endpoint, press **ok/menu** and select **Participants > Stop Moderating**.
   - From the XT Series web interface, select **Stop Moderating** in the participants list, next to **Local**.

   --Or--

   To end the videoconference, access the videoconference menu, and select **Disconnect > End Meeting**.

Ending a Videoconference

About this task

If you are hosting a conference, you can end the meeting and disconnect all endpoints in the videoconference. To disconnect a specific endpoint only, see Moderating a Hosted Videoconference on page 75 or Moderating a Videoconference Hosted by Another Scopia XT Series on page 77.

Disconnect the videoconference in one of the following ways:

- From the XT Series web interface, select **Disconnect**.
- From the endpoint, press on the XT Remote Control Unit, or select **Disconnect > End Meeting** in the videoconference menu.

  If your system is set to **Confirm disconnection**, press **ok/menu** to confirm (for details, see Confirming Call Disconnections on page 83).

Figure 61: Ending a videoconference

If your system administrator defined a time limit for videoconferences, a message appears when the limit is reached, and you can select one of the following:

Figure 62: Meeting Duration Alert

- **End Meeting** to immediately end the call
- **Do Not Limit** to remove the time limit
- **Snooze** to postpone the reminder and extend the meeting for another hour

Chapter 6 | Customizing Your User Experience

This section explains how to configure your Scopia XT Series so that your user experience is optimal. For example, you can automatically block your video so that other participants cannot see you when you accept a call, or define how you answer incoming calls.

All configurations described in this section are optional; you can perform them in any order and at any time.

Navigation

- Setting the User PIN Code for the Scopia XT Series on page 81
- Setting Call Answering Preferences on page 82
- Confirming Call Disconnections on page 83
- Enabling Do Not Disturb to Block All Incoming Calls on page 84
- Blocking Video Input by Default on page 86
- Activating the Screen Saver on page 87

Setting the User PIN Code for the Scopia XT Series

About this task

You can set a PIN code to access basic settings, such as the language displayed on the interface. If set, you are required to enter this code before viewing or modifying any basic settings. You can do this procedure from the endpoint itself or from the XT Series web interface.

By default, you do not need to enter any PIN to access and modify basic settings.

You can also modify the administrator PIN code, required to access and modify advanced settings, such as defining camera settings. To modify the web username and password for the XT Series, see *Administrator Guide for Scopia XT Series*.

Before you begin

If configuring from the endpoint, you must first enable advanced configuration, as described in *Administrator Guide for Scopia XT Series*.

To modify the PIN, you must be connected via HTTPS (see *Administrator Guide for Scopia XT Series*).

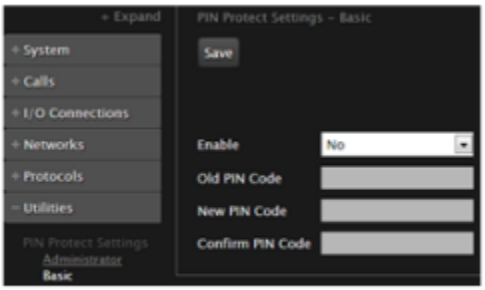
Procedure

1. Access the user PIN settings, as follows:
   - From the endpoint's main menu, select **Configure** > **Advanced > Utilities > PIN Protect Settings > Basic Settings**.

You need to enter the PIN required to access the **Advanced** settings. The default PIN is 1234.

- From the XT Series web interface, select **Administrator Settings > Utilities > PIN Protect Settings > Basic**.

Configuring from Endpoint



Configuring from Web Interface

Figure 63: Modifying the user PIN

2. Set **Enable** to **Yes**.
3. If you previously set a user PIN, enter it in the **Old PIN Code** field.
4. Enter your new 4 digit PIN code.

   From the web interface only, re-enter your new PIN in the **Confirm PIN Code** field.
5. Save your changes as follows:
   - From the endpoint, select **Done**.
   - From the web interface, select **Save**.

   Use this new PIN the next time you are required access basic settings.

Setting Call Answering Preferences

About this task

This procedure describes how to define your preferences when receiving calls. By default, the endpoint never answers calls automatically. You can configure the system to, for example, always automatically answer calls when you are available. If you enable automatic answering, you can define the number of rings until the system automatically answers the call.

You can do this procedure from the endpoint itself or from the XT Series web interface.

Procedure

1. Access the call settings, as follows:
   - From the XT Series web interface, select **Basic Settings** > **Call-Answer Mode** > **General**.

- From the endpoint's main menu, select **Configure** > **Calling**.

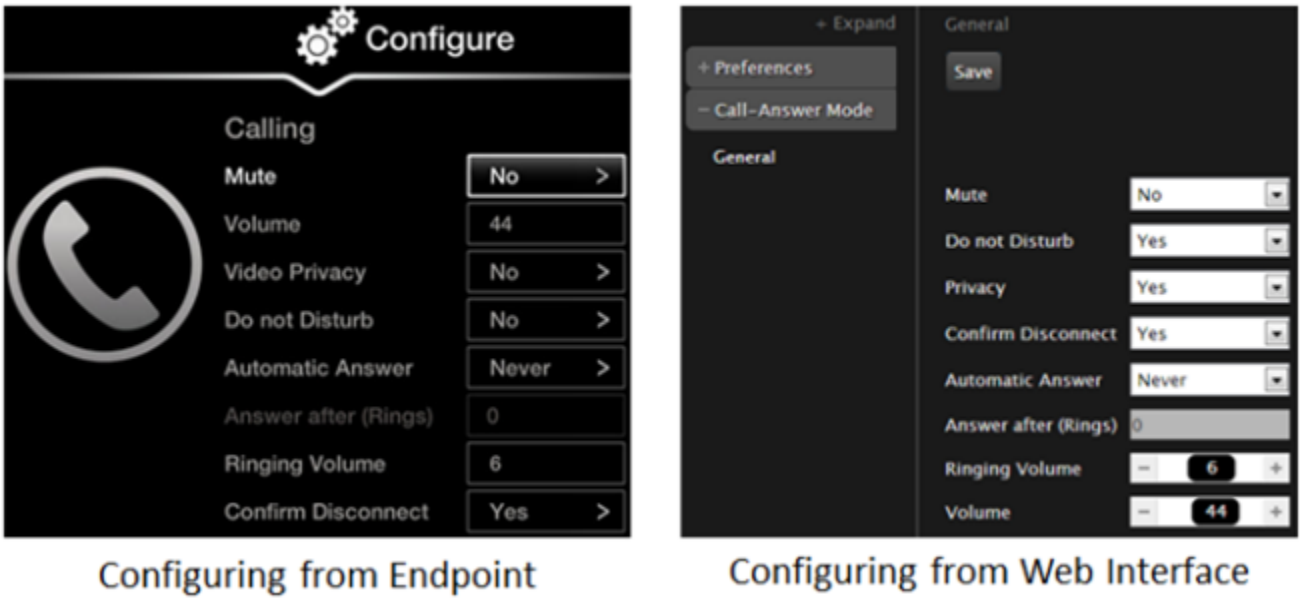


Figure 64: Calling preferences

2. Select the required option from the **Automatic answer** list:
   - **Yes always**: Enables automatic answer to an incoming call. The system will not prompt you to accept a call if the display shows the Home page.
   - **Never**: Disables automatic answer to an incoming call. The system will always prompt you to accept a call.
   - **Yes if not in a call** (available only for XT Series with a built-in MCU): Enables automatic answer only if the system is not in a call. If the system is in a call, it displays a notification about another incoming call, allowing you to accept it. When you are already in a call and accept an incoming call, the built-in MCU is activated, adding the caller to a videoconference.
3. (Optional) Enter the number of rings in the **Answer after (Rings)** list to specify after how many rings the system accepts a call. This option is relevant only if automatic answering is enabled.
4. From the web interface only, select **Save**.

Confirming Call Disconnections

About this task

To prevent accidental disconnection from a call, you can configure the system to confirm before a call is disconnected. By default, calls are disconnected when a participant ends the call, without requiring a confirmation.

Procedure

1. Access the call settings, as follows:
   - From the XT Series web interface, select **Basic Settings** > **Call-Answer Mode** > **General**.
   - From the endpoint's main menu, select **Configure** > **Calling**.

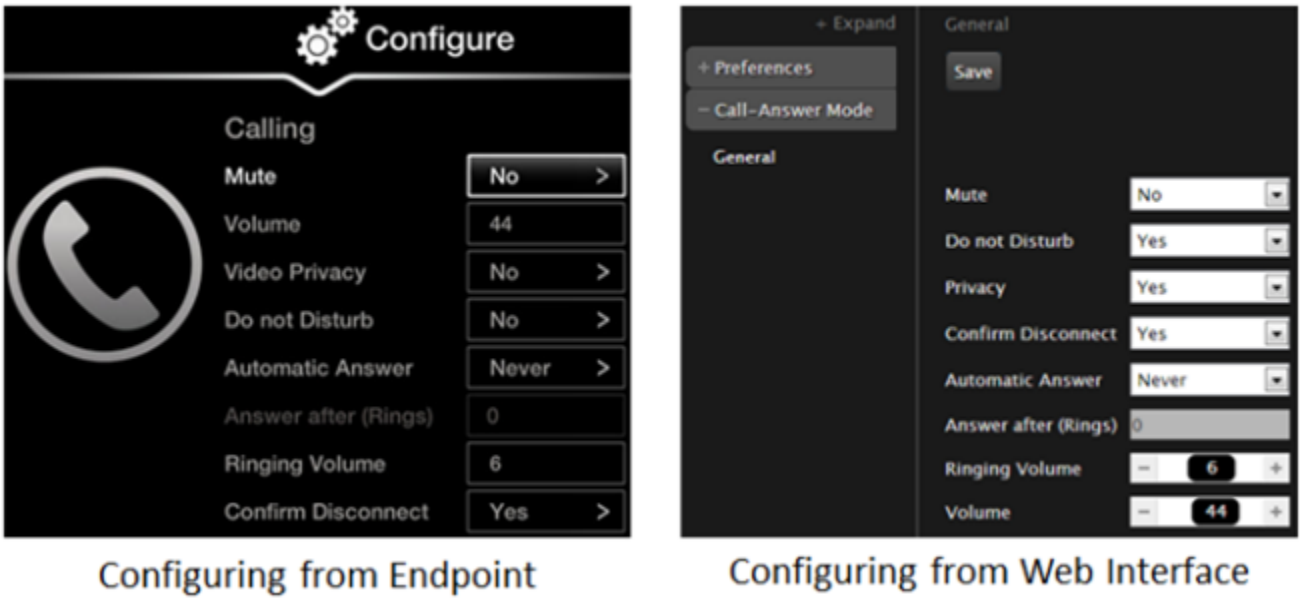


Figure 65: Calling preferences

2. Set **Confirm Disconnect** to **Yes**.
3. From the web interface only, select **Save**.

Enabling Do Not Disturb to Block All Incoming Calls

About this task

If you do not want to answer incoming calls, you can configure the Scopia XT Series to block all incoming calls by enabling Do Not Disturb (DND).

When the Do Not Disturb feature is enabled:

- The system blocks notifications of incoming calls.
- The icon appears in the system information area of the monitor display.
- When a remote endpoint calls, the system informs it that you are unavailable and automatically disconnects the calling endpoint.

Important:

You can also temporarily enable Do Not Disturb when receiving an incoming call. To enable, select **Do not disturb** on the window which appears when your endpoint rings (Figure 66: Enabling Do Not Disturb on page 85). To disable, select **Turn off Do not disturb** from the endpoint's main menu and press **ok/menu**.

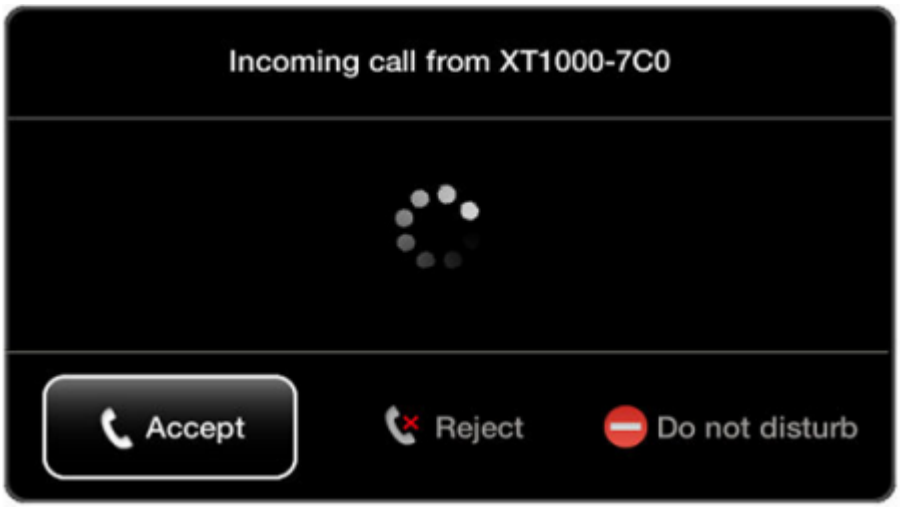


Figure 66: Enabling Do Not Disturb

Procedure

1. Access the call settings, as follows:
   - From the XT Series web interface, select **Basic Settings** > **Call-Answer Mode** > **General**.
   - From the endpoint's main menu, select **Configure** > **Calling**.

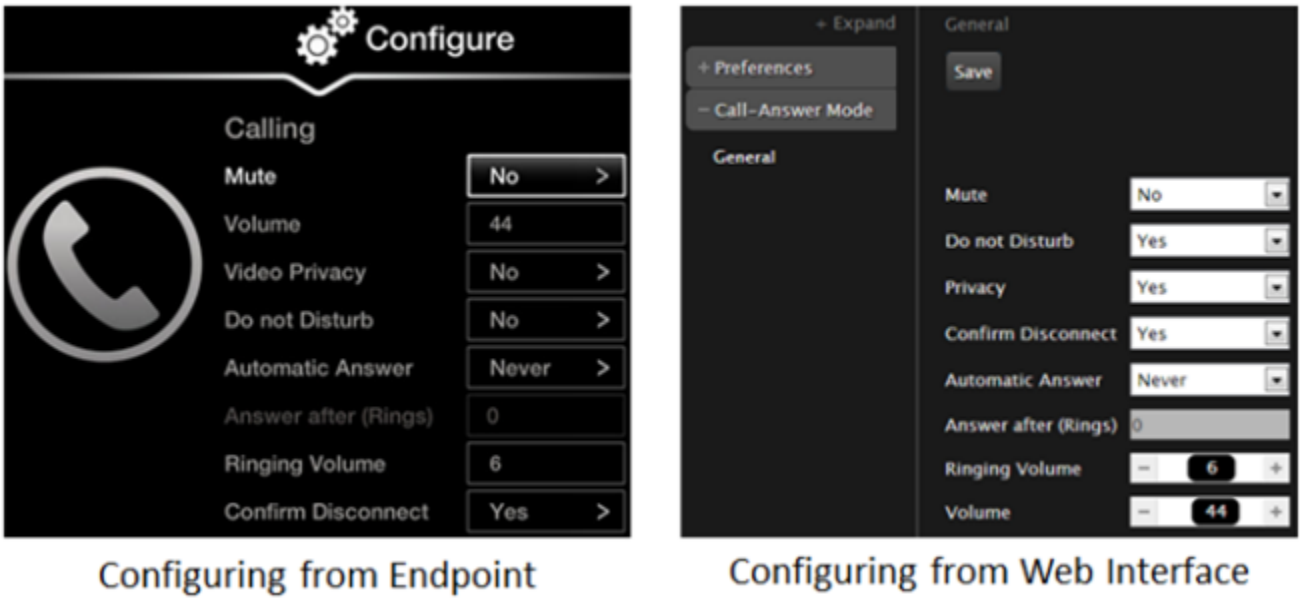


Figure 67: Calling preferences

2. Set **Do Not Disturb** to **Yes**.
3. From the web interface only, select **Save**.

Blocking Video Input by Default

About this task

You can configure the Scopia XT Series to transmit audio only by default at the start of each call. You can do this, for example, to ensure privacy. You can do this procedure from the endpoint itself or from the XT Series web interface.

When configured in this way, the system sends a pre-defined image to the remote endpoint. The icon appears on your display, indicating that the remote endpoint no longer receives video from your local endpoint.

Alternatively, you can block video manually during a call, as described in Blocking Video From the Scopia XT Series on page 51.

Procedure

1. Access the call settings, as follows:
   - From the XT Series web interface, select **Basic Settings** > **Call-Answer Mode** > **General**.
   - From the endpoint's main menu, select **Configure** > **Calling**.

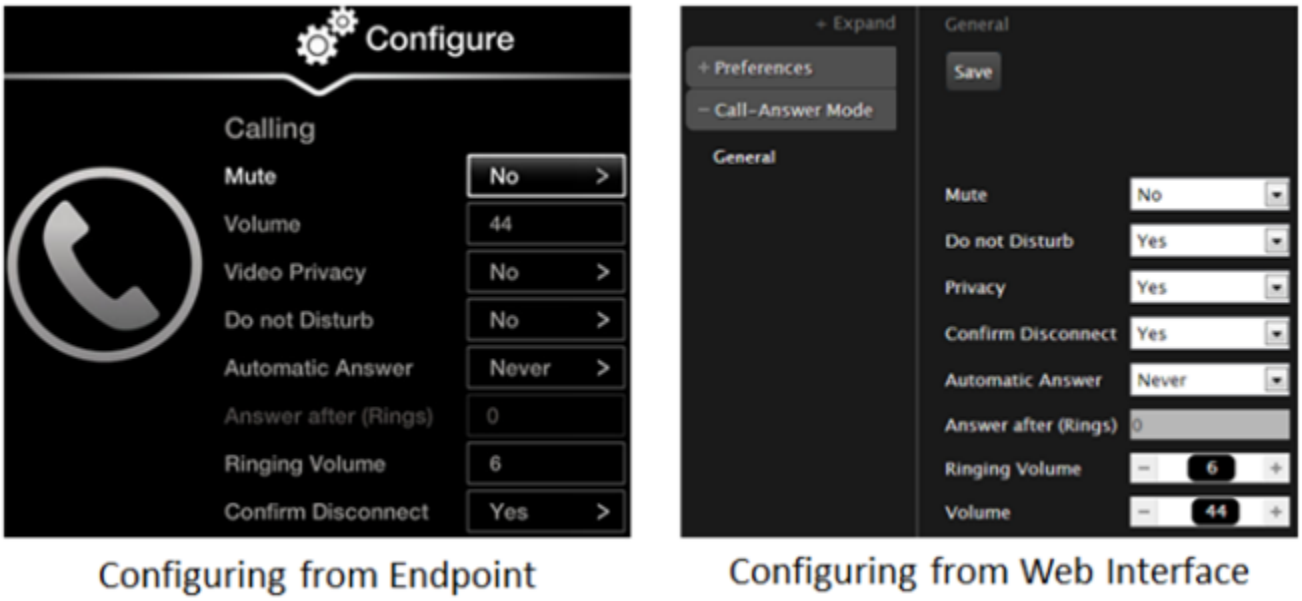


Figure 68: Call settings

2. Block video by default by doing the following:
   - From the web interface, set **Privacy** to **Yes**.
   - From the endpoint's interface, set **Video Privacy** to **Yes**.
3. From the web interface only, select **Save**.

Activating the Screen Saver

About this task

The screen saver helps protect your monitor from burn-in without switching it off.

Your administrator may have configured the screen saver to start automatically when Scopia XT Series is not used for some time.

You can activate the screen saver at any moment by pressing the Power key on the XT Remote Control Unit.

Chapter 7 | Troubleshooting the Scopia XT Series

This section covers troubleshooting problems that may occur when setting up and using the Scopia XT Series.

Navigation

- Viewing System Information for Customer Support on page 88
- Resolving Monitor Display Problems on page 90
- Resolving Problems with PC Presentations on page 92
- Resolving XT Remote Control Unit Problems on page 92
- Restoring Default User Settings on page 92
- Resolving Video or Audio Disruptions on page 94

Viewing System Information for Customer Support

About this task

When contacting customer support or your system administrator, you may need to provide information about the system. This procedure describes how to view the following system information:

- Software version
- User code (MAC address)
- IP addresses
- Serial number
- System name and model
- Licenses
- Network, gatekeeper, and SIP settings

You can do this procedure from the endpoint itself or from the XT Series web interface.

Important:

The system serial number also appears on the label at the back of the XT Codec Unit.

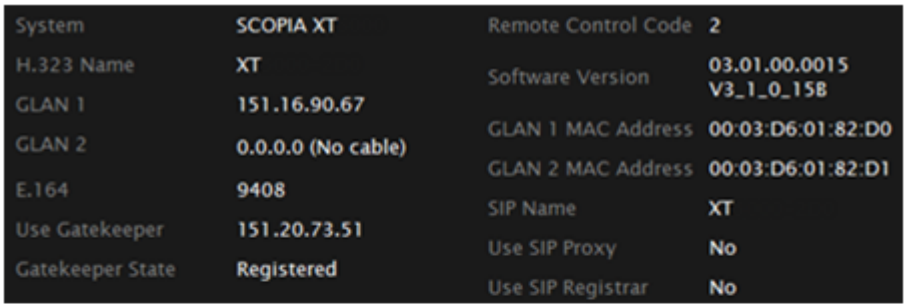
Procedure

1. View system information as follows:
   - From the XT Series web interface, log in. The system information is displayed in the **Home** tab.

- From the endpoint's main menu, select **Configure** > **About** using the XT Remote Control Unit.

Important:

If your system is currently in a call, press **ok/menu** and select **Stats** > **Configure** > **About**.



Viewing information from the web interface

Viewing information from the endpoint

Figure 69: Viewing system information

2. To view additional system information such as IP addresses and the gatekeeper's registration status from the endpoint, press the **Back** key and select **System Status**.

Figure 70: Viewing system network information

Resolving Monitor Display Problems

Problem The system displays a flickering or blank screen.

Solution The rear panel of the XT Codec Unit features 2 HD outputs for connecting a main and auxiliary screen. For cabling, see the cabling diagram in the *Quick Setup Guide*.

Your system administrator must configure the system for correct video resolution.

When you are not in a call, you can set the refresh frequency of the monitor display:

- Set to 50 Hz by pressing then **5.**
- Set to 60 Hz by pressing then **6.**

Problem The system displays a blank screen.

Solution Verify the power cord of the XT Codec Unit is connected properly at both ends.

Solution Verify the monitor's power cord is connected properly at both ends.

Solution Check that the monitor power switch is set to ON.

Solution Verify the XT Codec Unit's LED is on. If the LED is blinking, press the Power key on the XT Remote Control Unit.

Solution Make sure the XT Codec Unit output is properly connected to the monitor input. Make sure the monitor/DVI cable is connected properly at both ends.

Problem The screen layout appears to be cropped.

Solution Configure the monitor layout as described below.

1. From the endpoint's main menu, select **Configure > Quick Setup**.
2. Select **Next** to navigate to the **Configure Monitor** page.
3. Follow the instructions on the screen to adjust the image.

   If necessary, refer to Adjusting the Image Position on page 25 for operational information.

Problem The system menus or the remote presentation appears to be cropped.

Solution Adjust the way the image appears on the monitor. To see your adjustments in real-time, we recommend performing this procedure from the endpoint itself.

If configuring from the endpoint, you must first enable advanced configuration, as described in *Administrator Guide for Scopia XT Series*.

1. Access the monitor settings as follows:
   - From the endpoint's main menu, select **Configure > Advanced > I/O connections > Monitor > Graphic Adjustments**.
   - From the XT Series web interface, select **Administrator settings > I/O connections > Monitor > Graphic Adjustments**.
2. Navigate to the monitor requiring adjustment (**Monitor HD1** or **Monitor HD2**).
3. Select your preferred image view mode:

Table 15: Adjustment options for the monitor

Option	Description
Adjustment Mode	Select to adjust where the windows are displayed on the monitor: • **Menu**: Select to adjust the system menus only. • **Menu, presentation** (default): Select to adjust both the system menu and presentation, local or received.
Top	Drag the sliders to the required sizes until the menu or presentation borders are visible on the monitor. **Important:** You can also adjust the image for the monitor displaying the system menu, in the quick setup wizard as described in Adjusting the Image Position on page 25.
Left	
Bottom	
Right	

4. From the web interface only, select **Save**.

Resolving Problems with PC Presentations

Problem I cannot send a presentation from my PC.

Solution Make sure the VGA/DVI cable is properly connected between the PC and the XT Codec Unit, as described in Connecting a Computer to the Scopia XT Series on page 63.

Solution Make sure the resolution of the PC output is supported by the XT Codec Unit (see Selecting the Computer Display Resolution on page 65).

Resolving XT Remote Control Unit Problems

Problem The XT Remote Control Unit does not function.

Solution Replace the battery, as described in *Scopia XT Series Installation Guide*. When the XT Remote Control Unit's battery power is low, an icon appears in the system menus letting you know that you should replace the battery:

- Half-charged Battery
- Low Battery

Solution If the battery power is not low, configure the XT Remote Control Unit code on the XT Codec Unit to the same number that it is set on the XT Remote Control Unit, as described in Pairing an XT Remote Control Unit with a XT Codec Unit on page 20).

Solution If you still experience problems, reconfigure the XT Remote Control Unit code to be a number between 01-04, inclusive.

Restoring Default User Settings

About this task

This procedure explains how to restore the default settings if necessary. You can do this from the endpoint itself only.

Before you begin

- Turn on the Scopia XT Series unit.
- Verify that you have the four-digit PIN code required to make changes to the system settings. The default PIN code is 1234.

Procedure

1. From the endpoint's main menu, select **Configure** > **General**.

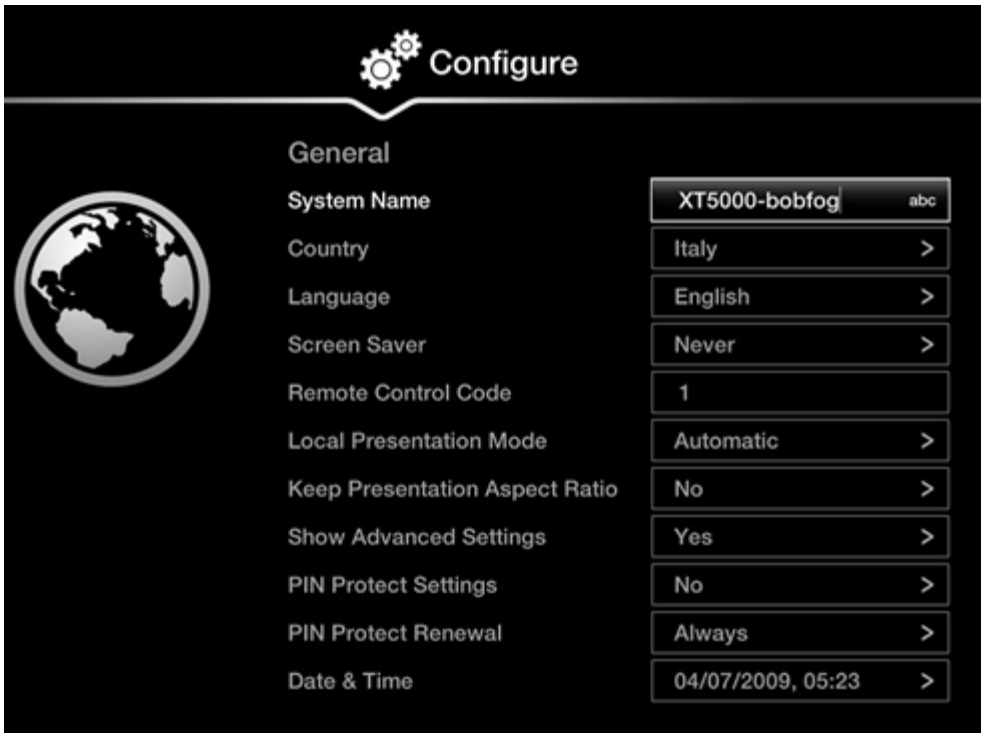


Figure 71: Enabling advanced settings

2. Set **Show Advanced Settings** to **Yes**.
3. Press the Back key on the XT Remote Control Unit.
4. Select **Advanced**.
5. Enter your four-digit PIN code, and press **ok/menu**. The default PIN code is 1234.
6. Select **Utilities** > **Restore System** > **Factory Defaults**.

Figure 72: Restoring factory default settings

7. Press **ok/menu**, and select **Yes**.

   The default settings are restored.

Resolving Video or Audio Disruptions

Problem	You experience disruptions in either video or audio; for example, additional noise or static.
Possible Causes	Video or audio disruptions can occur due to electromagnetic-interference (EMI), caused by other devices such as cellular phones.
Solution	Avoid using your cellular phones during your meeting to avoid electromagnetic interference.
Possible Causes	Loss in audio quality may result from noise produced by a computer's cooling system.
Solution	If you are using a laptop during a meeting, do not place it too close to the microphone.

Glossary of Terms for Scopia Solution

1080p

See Full HD on page 99.

2CIF

2CIF describes a video resolution of 704 x 288 pixels (PAL) or 704 x 240 (NTSC). It is double the width of CIF, and is often found in CCTV products.

2SIF

2SIF describes a video resolution of 704 x 240 pixels (NTSC) or 704 x 288 (PAL). This is often adopted in IP security cameras.

4CIF

4CIF describes a video resolution of 704 x 576 pixels (PAL) or 704 x 480 (NTSC). It is four times the resolution of CIF and is most widespread as the standard analog TV resolution.

4SIF

4SIF describes a video resolution of 704 x 480 pixels (NTSC) or 704 x 576 (PAL). This is often adopted in IP security cameras.

720p

See HD on page 102.

AAC

AAC is an audio codec which compresses sound but with better results than MP3.

Alias

In H.323, an alias represents the unique name of an endpoint. Instead of dialling an IP address to reach an endpoint, you can dial an alias, and the gatekeeper resolves it to an IP address.

Auto-Attendant

Auto-Attendant, also known as video IVR, offers quick access to meetings hosted on MCUs, via a set of visual menus. Participants can select menu options using standard DTMF tones (numeric keypad).

BFCP (Binary Floor Control Protocol)

BFCP is a protocol which coordinates shared videoconference features in SIP calls, often used by one participant at a time. For example, when sharing content to others in the meeting, one participant is designated as the presenter, and is granted the floor for presenting. All endpoints must be aware that the floor was granted to that participant and react appropriately.

Bitrate

Bitrate measures the speed of data flow, measured in kbps. Higher video resolutions require higher bitrates to ensure the video is constantly updated, thereby maintaining smooth motion. If you lower the bitrate, you lower the quality of the video. In some cases, you can select a lower bitrate without noticing a significant drop in video quality; for example during a presentation or when a lecturer is speaking and there is very little motion. In video recordings, the bitrate determines the file size for each minute of recording.

Call Control

See Signaling on page 107.

Cascaded Videoconference

A cascaded videoconference is a meeting distributed over more than one physical MCU, where a master MCU connects to one or more slave MCUs to create a single videoconference. It increases the meeting capacity by combining the resources of several MCUs. This can be especially useful for distributed deployments across several locations, reducing bandwidth usage.

CIF

CIF, or Common Intermediate Format, describes a video resolution of 352 × 288 pixels (PAL) or 352 x 240 (NTSC). This is sometimes referred to as Standard Definition (SD).

Continuous Presence

Continuous Presence enables viewing multiple participants of a videoconference at the same time, including the active speaker. This graphics-intensive work requires scaling and mixing the images together into one of the predefined video layouts. The range of video layouts depends on the type of media processing supported, typically located in the MCU.

Control

Control, or media control, is the set of messages used to setup and manage the media of a call (audio, video and data). Control messages include checking compatibility between endpoints, negotiating video and audio codecs, and other parameters like resolution, bitrate and frame rate. Control is communicated via H.245 in H.323 endpoints, or by SDP in SIP endpoints. Control occurs within the framework of an established call, after signaling.

CP

See Continuous Presence on page 96.

Dedicated Endpoint

A dedicated endpoint is a hardware endpoint for videoconferencing assigned to a single user. It is often referred to as a personal or executive endpoint, and serves as the main means of video communications for this user. For example, Scopia XT Executive. It is listed in the organization's LDAP directory as associated exclusively with this user.

Dial Plan

A dial plan defines various dial prefixes to determine the characteristics of a call. For example, dial 8 before a number for a lower bandwidth call, or 6 for an audio-only call, or 5 to route the call to a different branch.

Dial Prefix

A dial prefix is a number added to the start of a dial string to route it to the correct destination, or to determine the type of call. Dial prefixes are defined in the organization's dial plan. For example, dial 9 for an outside line, or dial 6 for an audio only call.

Distributed Deployment

A distributed deployment describes a deployment where the solution components are geographically distributed in more than one network location.

DNS Server

A DNS server is responsible for resolving domain names in your network by translating them into IP addresses.

DTMF

DTMF, or touch-tone dialling, is the tones you hear when you dial on a touch-tone telephone.

Dual Video

Dual video is the transmitting of two video streams during a videoconference, one with the live video while the other is a shared data stream, like a presentation.

E.164

E.164 is an address format for dialling an endpoint with a standard telephone numeric keypad, which only has numbers 0 - 9 and the symbols: * and #.

Endpoint

An endpoint is a tool through which people can participate in a videoconference. Its display enables you to see and hear others in the meeting, while its microphone and camera enable you to be seen and heard by others. Endpoints include dedicated endpoints, like Scopia XT Executive, software endpoints like Scopia Desktop Client, mobile device endpoints like Scopia Mobile, room systems like XT Series, and telepresence systems like Scopia XT Telepresence.

Endpoint Alias

See Alias on page 95.

FEC

Forward Error Correction (FEC) is a proactive method of sending redundant information in the video stream to preempt quality degradation. FEC identifies the key frames in the video stream that should be protected by FEC. There are several variants of the FEC algorithm. The Reed-Solomon algorithm (FEC-RS) sends redundant packets per block of information, enabling the sender (like the Scopia Elite MCU) to manage up to ten percent packet loss in the video stream with minimal impact on the smoothness and quality of the video.

FECC

Far End Camera Control (FECC) is a feature of endpoints, where the camera can be controlled remotely by another endpoint in the call.

Forward Error Correction

See FEC on page 98.

FPS

See Frames Per Second on page 99.

Frame Rate

See Frames Per Second on page 99.

Frames Per Second

Frames Per Second (fps), also known as the frame rate, is a key measure in video quality, describing the number of image updates per second. The average human eye can register up to 50 frames per second. The higher the frame rate, the smoother the video.

Full HD

Full HD, or Full High Definition, also known as 1080p, describes a video resolution of 1920 x 1080 pixels.

Full screen Video Layout

The full screen view shows one video image. Typically, it displays the remote presentation, or, if there is no presentation, it displays the other participant or a composite of the other participants.

Gatekeeper

A gatekeeper routes audio and video H.323 calls by resolving dial strings (H.323 alias or URI) into the IP address of an endpoint, and handles the initial connection of calls. Gatekeepers also implement the dial plan of an organization by routing H.323 calls depending on their dial prefixes. Scopia Management includes a built-in Scopia Gatekeeper, while ECS is a standalone gatekeeper.

Gateway

A gateway is a component in a video solution which routes information between two subnets or acts as a translator between different protocols. For example, a gateway can route data between the headquarters and a partner site, or between two protocols like the Scopia TIP Gateway, Radvision SIP Gateway, or the Scopia TIP Gateway.

GLAN

GLAN, or gigabit LAN, is the name of the network port on the Scopia XT Series. It is used on the XT Series to identify a 10/100/1000MBit ethernet port.

H.225

H.225 is part of the set of H.323 protocols. It defines the messages and procedures used by gatekeepers to set up calls.

H.235

H.235 is the protocol used to authenticate trusted H.323 endpoints and encrypt the media stream during meetings.

H.239

H.239 is a widespread protocol used with H.323 endpoints, to define the additional media channel for data sharing (like presentations) alongside the videoconference, and ensures only one presenter at a time.

H.243

H.243 is the protocol used with H.323 endpoints enabling them to remotely manage a videoconference.

H.245

H.245 is the protocol used to negotiate call parameters between endpoints, and can control a remote endpoint from your local endpoint. It is part of the H.323 set of protocols.

H.261

H.261 is an older protocol used to compress CIF and QCIF video resolutions.

H.263

H.263 is an older a protocol used to compress video. It is an enhancement to the H.261 protocol.

H.264

H.264 is a widespread protocol used with SIP and H.323 endpoints, which defines video compression. Compression algorithms include 4x4 transforms and a basic motion comparison algorithm called P-slices. There are several profiles within H.264. The default profile is the H.264 Baseline Profile, but H.264 High Profile uses more sophisticated compression techniques.

H.264 Baseline Profile

See H.264 on page 100.

H.264 High Profile

H.264 High Profile is a standard for compressing video by up to 25% over the H.264 Baseline Profile, enabling high definition calls to be held over lower call speeds. It requires both sides of the transmission (sending and receiving endpoints) support this protocol. H.264 High Profile uses compression algorithms like:

- CABAC compression (Context-Based Adaptive Binary Arithmetic Coding)
- 8x8 transforms which more effectively compress images containing areas of high correlation

These compression algorithms demand higher computation requirements, which are offered with the dedicated hardware available in Scopia Solution components. Using H.264 High Profile in videoconferencing requires that both the sender and receiver's endpoints support it. This is different from SVC which is an adaptive technology working to improve quality even when only one side supports the standard.

H.320

H.320 is a protocol for defining videoconferencing over ISDN networks.

H.323

H.323 is a widespread set of protocols governing the communication between endpoints in videoconferences and point-to-point calls. It defines the call signaling, control, media flow, and bandwidth regulation.

H.323 Alias

See Alias on page 95.

H.324M

H.324M is the videoconferencing standard for endpoints connecting via 3G mobile networks. Scopia Mobile, however, uses the same protocols as Scopia Desktop Client.

H.350

H.350 is the protocol used to enhance LDAP user databases to add video endpoint information for users and groups.

HD

A HD ready device describes its high definition resolution capabilities of 720p, a video resolution of 1280 x 720 pixels.

High Availability

Deploying additional servers ensures better service by protecting your organization from server downtime through various strategies including deployment of redundant servers managed by load balancing systems.

High Definition

See HD on page 102.

High Profile

See H.264 High Profile on page 101.

HTTPS

HTTPS is the secured version of the standard web browser protocol HTTP. It secures communication between a web browser and a web server through authentication of the web site and encrypting communication between them. For example, you can use HTTPS to secure web browser access to the web interface of many Scopia Solution products.

Image Resolution

See Resolution on page 106.

kbps

Kilobits per second (kbps) is the standard unit to measure bitrate, measuring the throughput of data communication between two devices. Since this counts the number of individual bits (ones or zeros), you must divide by eight to calculate the number of KB (kilobytes) per second.

LDAP

LDAP is a widespread standard database format which stores network users. The format is hierarchical, where nodes are often represented as *branch location* > *department* > *sub-department*, or *executives* > *managers* > *staff members*. The database standard is employed by most user directories including Microsoft Active Directory, IBM Sametime and others. H.350 is an extension to the LDAP standard for the videoconferencing industry.

Lecture Mode

Scopia Desktop's lecture mode allows the participant defined as the lecturer to see all the participants, while they see only the lecturer. All participants are muted except the lecturer, unless a participant asks permission to speak and is unmuted by the lecturer. This mode is tailored for distance learning, but you can also use it for other purposes like when an executive addresses employees during company-wide gatherings.

Load balancer

A load balancer groups together a set (or cluster) of servers to give them a single IP address, known as a virtual IP address. It distributes client service requests amongst a group of servers. It distributes loads according to different criteria such as bandwidth, CPU usage, or cyclic (round robin). Load balancers are also known as application delivery controllers (ADC).

Location

A location is a physical space (building) or a network (subnet) where video devices can share a single set of addresses. A distributed deployment places these components in different locations, often connected via a VPN.

Management

Management refers to the administration messages sent between components of the Scopia Solution as they manage and synchronize data between them. Management also includes front-end web browsers interfaces sending server settings to the back-end server.

MCU

An MCU, or Multipoint Control Unit, connects multiple endpoints into a single videoconference. It typically manages the audio mixing and video layouts, adjusting the output to suit each endpoint's capabilities.

MCU service

See Meeting Type on page 104.

Media

Media refers to the audio, video and data real time streams sent during a call. Besides the live audio and video streams, you can also send a shared data stream, like a presentation, also known as dual video. Far end camera control (FECC) is another example of information carried on the data stream. Media is transmitted via the RTP and RTCP protocols in both SIP and H.323 calls.

Media Control

See Control on page 97.

Meeting Type

Meeting types (also known as MCU services) are meeting templates which determine the core characteristics of a meeting. For example, they determine if the meeting is audio only or audio and video, they determine the default video layout, the type of encryption, PIN protection and many other features. Meeting types are created in the MCU. You can invoke a meeting type by dialing its prefix in front of the meeting ID.

Moderator

A moderator is a participant with special rights in a videoconference, including muting the sound and video of other participants, inviting new participants, disconnecting participants, defining a meeting PIN to restrict access, determining video layouts, and closing meetings. In Scopia Desktop Client, an owner of a virtual room is the moderator when the room is protected by a PIN. Without this protection, any participant can assume moderator rights.

MTU

The MTU, or Maximum Transmission Unit, is the maximum size of data packets sent around your network. This value must remain consistent for all network components, including servers like the MCU and Scopia Desktop Server, endpoints like XT Series and other network devices like LDAP servers and network routers.

Multi-Point

A multi-point conference has more than two participants.

Multi-tenant

Service provider, or multi-tenant, deployments enable one installation to manage multiple organizations. All the organizations can reside as tenants within a single service provider deployment. For example, Scopia Management can manage a separate set of users for each organization, separate local administrators, separate bandwidth policies etc. all within a single multi-tenant installation.

NAT

A NAT, or Network Address Translation device, translates external IP addresses to internal addresses housed in a private network. This enables a collection of devices like endpoints in a private network, each with their own internal IP address, can be represented publicly by a single, unique IP address. The NAT translates between public and private addresses, enabling users toplace calls between public network users and private network users.

NetSense

NetSense is a proprietary Radvision technology which optimizes the video quality according to the available bandwidth to minimize packet loss. As the available bandwidth of a connection varies depending on data traffic, NetSense's sophisticated algorithm dynamically scans the video stream, and then reduces or improves the video resolution to maximize quality with the available bandwidth.

Packet Loss

Packet loss occurs when some of the data transmitted from one endpoint is not received by the other endpoint. This can be caused by narrow bandwidth connections or unreliable signal reception on wireless networks.

PaP Video Layout

The PaP (Picture and Picture) view shows two images of the same size, presented side by side.

PiP Video Layout

The PiP (Picture In Picture) view shows a video image in the main screen, with an additional smaller image overlapping in the corner. Typically, a remote presentation is displayed in the main part of the screen, and the remote video is in the small image. If the remote endpoint does not show any content, the display shows the remote video in the main part of the screen, and the local presentation in the small image.

Point-to-Point

Point-to-point is a feature where only two endpoints are communicating with each other.

PoP Video Layout

The PoP (Picture out Picture) view shows up to three images of different size, presented side by side. The image on the left is larger, with two smaller images on the right.

Prefix

See Dial Prefix on page 97.

Q.931

Q.931 is a telephony protocol used to start and end the connection in H.323 calls.

QCIF

QCIF, or Quarter CIF, defines a video resolution of 176 × 144 pixels (PAL) or 176 x 120 (NTSC). It is often used in older mobile handsets (3G-324M) limited by screen resolution and processing power.

Redundancy

Redundancy is a way to deploy a network component, in which you deploy extra units as 'spares', to be used as backups in case one of the components fails.

Registrar

A SIP Registrar manages the SIP domain by requiring that all SIP devices register their IP addresses with it. For example, once a SIP endpoint registers its IP address with the Registrar, it can place or receive calls with other registered endpoints.

Resolution

Resolution, or image/video resolution, is the number of pixels which make up an image frame in the video, measured as the number of horizontal pixels x the number of vertical pixels. Increasing resolution improves video quality but typically requires higher bandwidth and more computing power. Techniques like SVC, H.264 High Profile and FEC reduce bandwidth usage by compressing the data to a smaller footprint and compensating for packet loss.

Room System

A room system is a hardware videoconferencing endpoint installed in a physical conference room. Essential features include its camera's ability to PTZ (pan, tilt, zoom) to allow maximum flexibility of camera angles enabling participants to see all those in the meeting room or just one part of the room.

RTP

RTP or Real-time Transport Protocol is a network protocol which supports video and voice transmission over IP. It underpins most videoconferencing protocols today, including H.323, SIP and the streaming control protocol known as RTSP. The secured version of RTP is SRTP.

RTCP

Real-time Control Transport Protocol, used alongside RTP for sending statistical information about the media sent over RTP.

RTSP

RTSP or Real-Time Streaming Protocol controls the delivery of streamed live or playback video over IP, with functions like pause, fast forward and reverse. While the media itself is sent via RTP, these control functions are managed by RTSP

Sampling Rate

The sampling rate is a measure of the accuracy of the audio when it is digitized. During conversions from analog to digital sound, if you increase the frequency that audio data is collected, or "sampled", you increase the audio quality.

SBC

A Session Border Controller (SBC) is a relay device between two different networks. It can be used in firewall/NAT traversal, protocol translations and load balancing.

Scalability

Scalability describes the ability to increase the capacity of a network device by adding another identical device (one or more) to your existing deployment. In contrast, a non-scalable solution would require replacing existing components to increase capacity.

SD

Standard Definition (SD), is a term used to refer to video resolutions which are lower than HD. There is no consensus defining one video resolution for SD.

Service

Also known as MCU service. See Meeting Type on page 104.

SIF

SIF defines a video resolution of 352 x 240 pixels (NTSC) or 352 x 288 (PAL). This is often used in security cameras and countries.

Signaling

Signaling, also known as call control, is the set of messages used to setup, manage and end a call. They include the authorization to make the call, checking bandwidth, resolving endpoint addresses, and routing the call through different servers. Signaling is transmitted via the H.225.0/Q.931 and

H.225.0/RAS protocols in H.323 calls, or by the SIP headers in SIP calls. Signaling occurs before the control aspect of call setup.

SIP

Session Initiation Protocol (SIP) is a signaling protocol for starting, managing and ending voice and video sessions over TCP, TLS or UDP. Videoconferencing endpoints typically are compatible with SIP or H.323, and in some cases (like Scopia XT Series), an endpoint can be compatible with both protocols. As a protocol, it uses fewer resources than H.323.

SIP Server

A SIP server is a network device communicating via the SIP protocol.

SIP URI

See URI on page 110.

SIP Registrar

See Registrar on page 106.

Single Sign On

Single Sign On (SSO) automatically uses your network login and password to access different enterprise systems. Using SSO, you do not need to separately login to each system or service in your organization.

SNMP

Simple Network Management Protocol (SNMP) is a protocol used to monitor network devices by sending messages and alerts to their registered SNMP server.

Software endpoint

A software endpoint turns a computer or portable device into a videoconferencing endpoint via a software application only. It uses the system's camera and microphone to send image and sound to the other participants, and displays their images on the screen. For example, Scopia Desktop Client or Scopia Mobile.

SRTP

Secure Real-time Transport Protocol (SRTP) adds security to the standard RTP protocol, which is used to send video and audio data between devices in SIP calls using TLS. It offers security via encrypting, authenticating and ensuring message integrity.

SSO

See Single Sign On on page 108.

Standard Definition

See SD on page 107.

Streaming

Streaming is a method of delivering multimedia content in one direction. Streaming recipients cannot not use a microphone or camera to communicate back to the videoconference. The content can be a live videoconference, or it can be a stored recording.

STUN

A STUN server enables you to directly dial an endpoint behind a NAT or firewall by giving that computer's public internet address.

SVC

SVC extends the H.264 codec standard to dramatically increases error resiliency and video quality without the need for higher bandwidth. It is especially effective over networks with high packet loss (like wireless networks) which deliver low quality video. It splits the video stream into layers, comprising a small base layer and then additional layers on top which enhance resolution, frame rate and quality. Each additional layer is only transmitted when bandwidth permits. This allows for a steady video transmission when available bandwidth varies, providing better quality when the bandwidth is high, and adequate quality when available bandwidth is poor.

SVGA

SVGA defines a video resolution of 800 x 600 pixels.

SQCIF

SQCIF defines a video resolution of 128 x 96 pixels.

Switched video

Switching is the process of redirecting video as-is without transcoding, so you see only one endpoint's image at a time, usually the active speaker, without any video layouts or continuous presence (CP). Using video switching increases the port capacity of the MCU by four times.

Important:

Use switched video only when all endpoints participating in the videoconference support the same resolution. If a network experiences high packet loss, switched video might not be displayed properly for all endpoints in the videoconference.

SXGA

SXGA defines a video resolution of 1280 x 1024 pixels.

Telepresence

A telepresence system combines of two or more endpoints together to create a wider image, simulating the experience of participants being present in the same room. For example, Scopia XT Telepresence.

TLS

TLS enables network devices to communicate securely by exchanging certificates, to provide authentication of the devices and encryption of the communication between them.

Transcoding

Transcoding is the process of converting video into different sizes, resolutions or formats. This enables multiple video streams to be combined into one view, enabling continuous presence, as in a typical videoconferencing window.

UC (Unified Communications)

UC, or unified communications deployments offer solutions covering a wide range of communication channels. These include audio (voice), video, text (IM or chat), data sharing (presentations), whiteboard sharing (interactive annotations on shared data).

URI

URI is an address format to locate a device on a network. For a SIP call, the URI consists of the endpoint's name or number, followed by the SIP server domain name. For example, *<endpoint name>@<SIP server domain name>* or *user@domain_name.com*.

URI Dialling

Accessing a device via its URI on page 110.

VFU

See Video Fast Update (VFU) on page 111.

VGA

VGA defines a video resolution of 640 x 480 pixels.

Videoconference

A videoconference is a meeting of more than two participants with audio and video using endpoints. Professional videoconferencing systems can handle many participants in single meetings, and multiple simultaneous meetings, with a wide interoperability score to enable a wide variety of endpoints to join the same videoconference. Typically you can also share PC content, like presentations, to other participants.

Video Fast Update (VFU)

Video Fast Update (VFU) is a request for a refreshed video frame, sent when the received video is corrupted by packet loss. In response to a VFU request, the broadcasting endpoint sends a new intra-frame to serve as the baseline for the ongoing video stream.

Video Layout

A video layout is the arrangement of participant images as they appear on the monitor in a videoconference. If the meeting includes a presentation, a layout can also refer to the arrangement of the presentation image together with the meeting participants.

Video Resolution

See Resolution on page 106.

Video Switching

See Switched video on page 110.

Virtual Room

A virtual room in Scopia Desktop and Scopia Mobile offers a virtual meeting place for videoconferences. An administrator can assign a virtual room to the organization's users and conference rooms. Users can

send invitations to others with a link bringing participants directly into their virtual room. External participants can download Scopia Desktop or Scopia Mobile free to access a registered user's virtual room and participate in the videoconference.

Waiting Room

A waiting room is a holding place for participants waiting for the host or moderator to join the meeting. While waiting, participants see a static image with the name of the owner's virtual room, with an optional audio message periodically saying the meeting will start when the host arrives.

Webcast

A webcast is a streamed live broadcast of a videoconference over the internet. A Scopia Desktop webcast becomes available when a participant in the videoconference enables the streaming feature. To invite users to the webcast, one of the participants attending the Scopia Desktop videoconference must send this information in an e-mail or an instant message:

- The link to the webcast

  or

- The link to the Scopia Desktop portal and the meeting ID

WUXGA

WUXGA defines a video resolution of 1920 x 1200 pixels.

XGA

XGA defines a Video resolution of 1024 x 768 pixels.

Zone

Gatekeepers like Scopia ECS Gatekeeper split endpoints into zones, where a group of endpoints in a zone are registered to a gatekeeper. Often a zone is assigned a dial prefix, and usually corresponds to a physical location like an organization's department or branch.

RADVISION®
an Avaya company

About Radvision

Radvision, an Avaya company, is a leading provider of videoconferencing and telepresence technologies over IP and wireless networks. We offer end-to-end visual communications that help businesses collaborate more efficiently. Together, Radvision and Avaya are propelling the unified communications evolution forward with unique technologies that harness the power of video, voice, and data over any network.

www.radvision.com