



# **IP Office 9.1**

## **IP Office Video Collaboration Solution - Installation Notes**

#### Notice

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.

#### Documentation disclaimer

"Documentation" means information published by Avaya in varying mediums which may include product information, operating instructions and performance specifications that Avaya may generally make available to users of its products and Hosted Services. Documentation does not include marketing materials. Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of documentation unless such modifications, additions, or deletions were performed by Avaya. End User agrees to indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

#### Link disclaimer

Avaya is not responsible for the contents or reliability of any linked websites referenced within this site or documentation provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

#### Warranty

Avaya provides a limited warranty on Avaya hardware and software. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language, as well as information regarding support for this product while under warranty is available to Avaya customers and other parties through the Avaya Support website: <http://www.avaya.com/support> or such successor site as designated by Avaya. Please note that if you acquired the product(s) from an authorized Avaya Channel Partner outside of the United States and Canada, the warranty is provided to you by said Avaya Channel Partner and not by Avaya.

#### Licenses

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, <HTTP://SUPPORT.AVAYA.COM/LICENSEINFO>, OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, ARE APPLICABLE TO ANYONE WHO DOWNLOADS, USES AND/OR INSTALLS AVAYA SOFTWARE, PURCHASED FROM AVAYA INC., ANY AVAYA AFFILIATE, OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH AVAYA OR AN AVAYA CHANNEL PARTNER. UNLESS OTHERWISE AGREED TO BY AVAYA IN WRITING, AVAYA DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN AVAYA, AN AVAYA AFFILIATE OR AN AVAYA CHANNEL PARTNER; AVAYA RESERVES THE RIGHT TO TAKE LEGAL ACTION AGAINST YOU AND ANYONE ELSE USING OR SELLING THE SOFTWARE WITHOUT A LICENSE. BY INSTALLING, DOWNLOADING OR USING THE SOFTWARE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING, DOWNLOADING OR USING THE SOFTWARE (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THESE TERMS AND CONDITIONS AND CREATE A BINDING CONTRACT BETWEEN YOU AND AVAYA INC. OR THE APPLICABLE AVAYA AFFILIATE ("AVAYA").

Avaya grants you a license within the scope of the license types described below, with the exception of Heritage Nortel Software, for which the scope of the license is detailed below. Where the order documentation does not expressly identify a license type, the applicable license will be a Designated System License. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the documentation or other materials available to you. "Software" means Avaya's computer programs in object code, provided by Avaya or an Avaya Channel Partner, whether as stand-alone products, pre-installed, or remotely accessed on hardware products, and any upgrades, updates, bug fixes, or modified versions thereto. "Designated Processor" means a single stand-alone computing device. "Server" means a Designated Processor that hosts a software application to be accessed by multiple users. "Instance" means a single copy of the Software executing at a particular time: (i) on one physical machine; or (ii) on one deployed software virtual machine ("VM") or similar deployment.

**Designated System(s) License (DS).** End User may install and use each copy or an Instance of the Software only on a number of Designated Processors up to the number indicated in the order. Avaya may require the Designated Processor(s) to be identified in the order by type, serial number, feature key, Instance, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

**Concurrent User License (CU).** End User may install and use the Software on multiple Designated Processors or one or more Servers, so long as only the licensed number of Units are accessing and using the Software at any given time. A "Unit" means the unit on which Avaya, at its sole discretion, bases the pricing of its licenses and can be, without limitation, an agent, port or user, an e-mail or voice mail account in the name of a person or corporate function (e.g., webmaster or helpdesk), or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software. Units may be linked to a specific, identified Server or an Instance of the Software.

**Database License (DL).** End User may install and use each copy or an Instance of the Software on one Server or on multiple Servers provided that each of the Servers on which the Software is installed communicates with no more than an Instance of the same database.

**CPU License (CP).** End User may install and use each copy or Instance of the Software on a number of Servers up to the number indicated in the order provided that the performance capacity of the Server(s) does not exceed the performance capacity specified for the Software. End User may not re-install or operate the Software on Server(s) with a larger performance capacity without Avaya's prior consent and payment of an upgrade fee.

Named User License (NU). You may: (i) install and use the Software on a single Designated Processor or Server per authorized Named User (defined below); or (ii) install and use the Software on a Server so long as only authorized Named Users access and use the Software. "Named User," means a user or device that has been expressly authorized by Avaya to access and use the Software. At Avaya's sole discretion, a "Named User" may be, without limitation, designated by name, corporate function (e.g., webmaster or helpdesk), an e-mail or voice mail account in the name of a person or corporate function, or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software.

Shrinkwrap License (SR). You may install and use the Software in accordance with the terms and conditions of the applicable license agreements, such as "shrinkwrap" or "clickthrough" license accompanying or applicable to the Software ("Shrinkwrap License").

#### Heritage Nortel Software

"Heritage Nortel Software" means the software that was acquired by Avaya as part of its purchase of the Nortel Enterprise Solutions Business in December 2009. The Heritage Nortel Software currently available for license from Avaya is the software contained within the list of Heritage Nortel Products located at <http://support.avaya.com/LicenseInfo/> under the link "Heritage Nortel Products," or such successor site as designated by Avaya. For Heritage Nortel Software, Avaya grants Customer a license to use Heritage Nortel Software provided hereunder solely to the extent of the authorized activation or authorized usage level, solely for the purpose specified in the Documentation, and solely as embedded in, for execution on, or (in the event the applicable Documentation permits installation on non-Avaya equipment) for communication with Avaya equipment. Charges for Heritage Nortel Software may be based on extent of activation or use authorized as specified in an order or invoice.

#### Copyright

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation, Software, Hosted Service, or hardware provided by Avaya. All content on this site, the documentation, Hosted Service, and the Product provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software unless expressly authorized by Avaya. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil offense under the applicable law.

#### Virtualization

Each product has its own ordering code and license types. Note that each Instance of a product must be separately licensed and ordered. For example, if the end user customer or Avaya Channel Partner would like to install two Instances of the same type of products, then two products of that type must be ordered.

#### Third Party Components

"Third Party Components" mean certain software programs or portions thereof included in the Software or Hosted Service may contain software (including open source software) distributed under third party agreements ("Third Party Components"), which contain terms regarding the rights to use certain portions of the Software ("Third Party Terms"). As required, information regarding distributed Linux OS source code (for those Products that have distributed Linux OS source code) and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply is available in the Documentation or on Avaya's website at: <http://support.avaya.com/Copyright> or such successor site as designated by Avaya. You agree to the Third Party Terms for any such Third Party Components.

#### Preventing Toll Fraud

"Toll Fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of Toll Fraud associated with your system and that, if Toll Fraud occurs, it can result in substantial additional charges for your telecommunications services.

#### Avaya Toll Fraud intervention

If you suspect that you are being victimized by Toll Fraud and you need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Support website: <http://support.avaya.com>, or such successor site as designated by Avaya. Suspected security vulnerabilities with Avaya products should be reported to Avaya by sending mail to: [securityalerts@avaya.com](mailto:securityalerts@avaya.com).

#### Trademarks

The trademarks, logos and service marks ("Marks") displayed in this site, the Documentation, Hosted Service(s), and Product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the Documentation, Hosted Service(s) and Product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party.

Avaya is a registered trademark of Avaya Inc.

All non-Avaya trademarks are the property of their respective owners.

Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

#### Downloading Documentation

For the most current versions of Documentation, see the Avaya Support website: <http://support.avaya.com>, or such successor site as designated by Avaya.

#### Contact Avaya Support

See the Avaya Support website: <http://support.avaya.com> for Product or Hosted Service notices and articles, or to report a problem with your Avaya Product or Hosted Service. For a list of support telephone numbers and contact addresses, go to the Avaya Support website: <http://support.avaya.com> (or such successor site as designated by Avaya), scroll to the bottom of the page, and select Contact Avaya Support.

---

# Contents

## 1. Overview

1.1 IP Office Video Components Overview.....	10
1.2 IP Office Components Overview.....	11
1.3 Known Interoperation Limitations.....	12

## 2. IP Office Video Deployment

2.1 Deployment Process.....	15
2.2 Prerequisites.....	15
2.3 Checking the IP Office Licenses.....	16
2.4 Checking the IP Office SIP Support.....	17
2.5 Creating IP Office Users.....	18
2.6 Creating IP Office SIP Extensions.....	19
2.7 Configuring the Scopia XT Series SIP Connection.....	21

## 3. Document History

Index .....	25
-------------	----



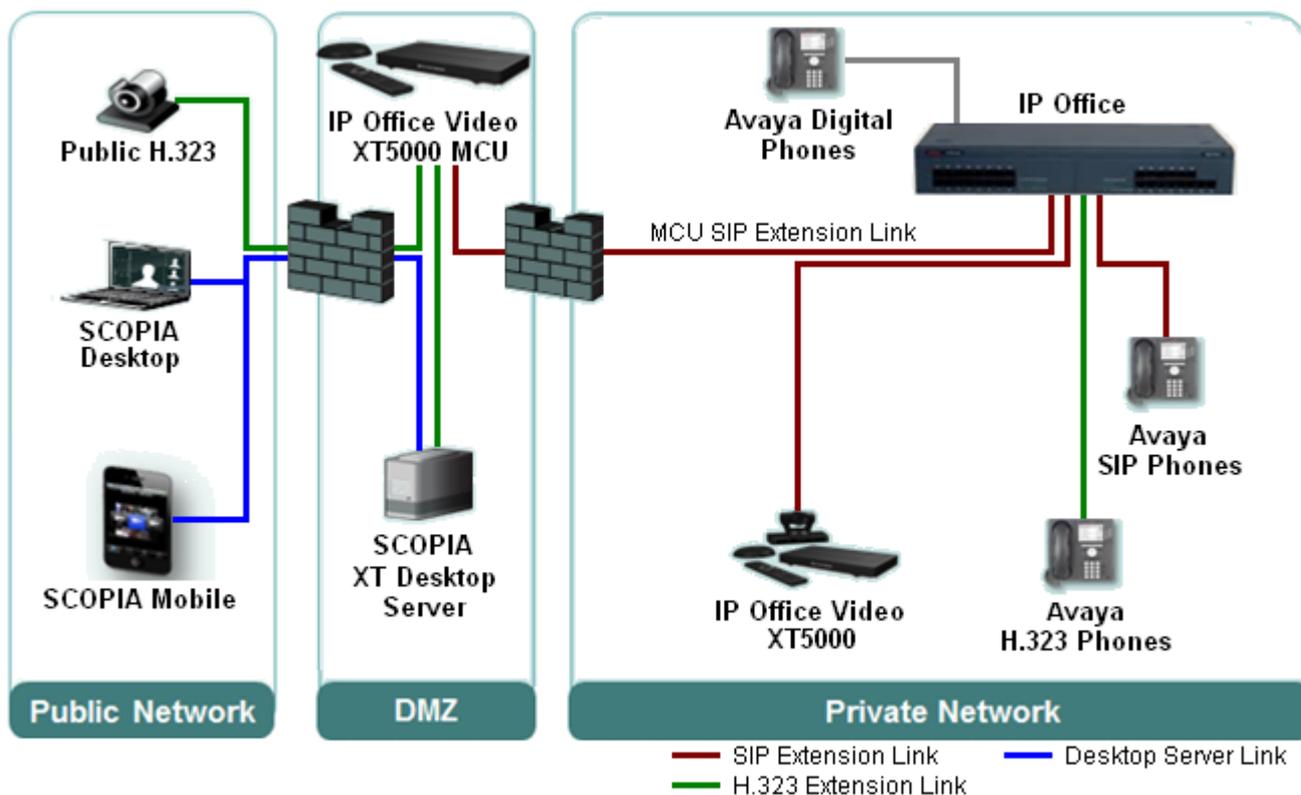
# Chapter 1.

# Overview



# 1. Overview

This document provides notes for deploying a IP Office Video conferencing system with an Avaya IP Office system. These notes should be used in conjunction with the Scopia XT5000 Endpoint for IP Office documentation set.



- IP Office Video is supported with IP Office Essential Edition, IP Office Preferred Edition, IP Office Advanced Edition and Server Edition systems running IP Office Release 8.1 Q3 2012 Service Pack (8.1.52), IP Office Release 8.0 FP1 and higher only.
  - **Conference Server:** IP Office Video XT5000
  - **Conference Capacity:** 1 conference only of up to 9 parties.
  - **Conference Scheduling:** No
  - **Desktop and mobile access:** Yes - via Scopia XT Desktop Server
  - **External access (Firewall traversal):** Yes - via IP Office Video XT5000
  - **Point-to-point calls:** Yes.

The IP Office Video system is based on the same hardware as the Avaya Scopia XT5000. However, it run IP Office specific firmware and so cannot be used with telephone systems other than an IP Office.

---

## 1.1 IP Office Video Components Overview

This page gives a quick overview of the different IP Office Video system components supported by IP Office Release 8.1 Q3 2012 Service Pack (8.1.52). It includes those items from the Avaya Scopia product range that are compatible with IP Office Video.

### Conference Servers

The central part of the video conference system is an Multipoint Conferencing Units (MCU). The MCU hosts the video conference.

- **IP Office Video XT5000**

For IP Office Video, one IP Office Video XT5000 (see Conference Room Video Systems below) is licensed to act as an MCU. There are two licensed MCU modes:

- **Scopia XT Series MCU Edition**

In this mode, the IP Office Video XT5000 acts as a video conferencing MCU hosting video conferences for H.323 and SIP video end points. You can choose a license for up to 4 or 9 participants.

- **Scopia XT Series SMB Edition**

In this mode, the IP Office Video XT5000 acts as a video conferencing MCU hosting video conferences for H.323 and SIP video end points and for Scopia XT Desktop Server clients. The license includes the software for a Scopia XT Desktop Server. You can choose a license for up to 4 or 9 participants.

### Conference Room Video Systems

IP Office supports the following conference room systems. Each consists of a main unit, high-quality remote controllable video camera and room microphone/speaker. Each also provides ports for connection of additional microphones, multiple monitor displays and PC connections for media sharing.

- **Scopia XT4200**

The Scopia XT4200 offers dual 720p/60fps live video and content, HD audio, H.264 High Profile, Scalable Video Coding (SVC) and optional iPad control.

- **IP Office Video XT5000**

The IP Office Video XT5000 offers dual 1080p/60fps live video and content, HD audio, H.264 High Profile, Scalable Video Coding (SVC) and iPad control. For IP Office Video deployments, one IP Office Video XT5000 is required to act as the conference server (see Conference Servers above).

### Video Applications

- **Scopia XT Desktop Server**

Scopia Desktop Server is a server application that lets users use the freely distributable Scopia PC Desktop or Scopia Mobile applications to participate in conferences. While internal users can use these applications, the Scopia Desktop Server supports NAT and firewall traversal, making it ideal for external parties to join a conference when required.

- **Scopia PC Desktop**

Scopia PC Desktop is a web browser plug-in that allows PC users to participate in conferences through their PC. The plug-in connects to the MCU via the Scopia XT Desktop Server or Scopia Desktop Server.

- **Scopia Mobile**

Scopia Mobile is an app that allows users to participate in conferences using their mobile devices. The plug-in connects to the MCU via the Scopia XT Desktop Server or Scopia Desktop Server.

- Scopia Mobile iOS allows iPad, iPhone and iPod Touch users to participate in conferences. Supported on IOS 4 and above.
- Scopia Mobile Android allows Android device users to participate in conferences. Supported on Android 2.3 and above.

## 1.2 IP Office Components Overview

### Supported IP Office Releases

The following IP Office release support IP Office Video:

- 8.1 Q3 2012 Service Pack (8.1.52) or IP Office Release 8.1 Feature Pack 1.

### Supported IP Office Platforms

The following IP Office platforms and operating modes support IP Office Video:

- **IP Office IP500 V2**  
Operating in *Essential Edition*, *Preferred Edition* or *Advanced Edition* mode.
- **IP Office Server Edition**

### Supported IP Office Telephones

The following IP Office extension telephones supported for IP Office Video:

- **Avaya 96x1 Series H.323 telephones**
- **Avaya 9500 Series digital telephones**
- **Avaya 1600 Series H.323 telephones**
- **Avaya 1408 and 1416 digital telephones**
- **Avaya B179 SIP conference telephone**
- **Avaya Communicator** (*audio features only*)

---

## 1.3 Known Interoperation Limitations

The following are the current known limitations for IP Office Video interoperation.

- Connections between IP Office end points and IP Office Video components must use **Direct Media**.
- IP Office does not support:
  - Short code feature dialing for IP Office Video video devices. That includes paging, call queue and call pickup short code features. The only exceptions are dial short code features.
  - Account codes and authorization codes for IP Office Video video devices.
  - Mid-call features, such as hold and transfer, from IP Office Video video devices.
  - IP Office Video video devices as IP Office hunt group members.
- The Scopia XT Series units do not support:
  - When registered to the IP Office, the Content Sharing and Far End Camera Control features are not supported on SIP calls. They are supported on H.323 calls.
  - The G.729 audio codec is not supported with Scopia XT Series end points. Remove the codec from the IP Office configuration of those extensions.
- The IP Office Video Softphone is currently not supported as a video endpoint in IP Office Video video conferences.

For IP Office Release 9.0, the following previous restrictions have now been removed:

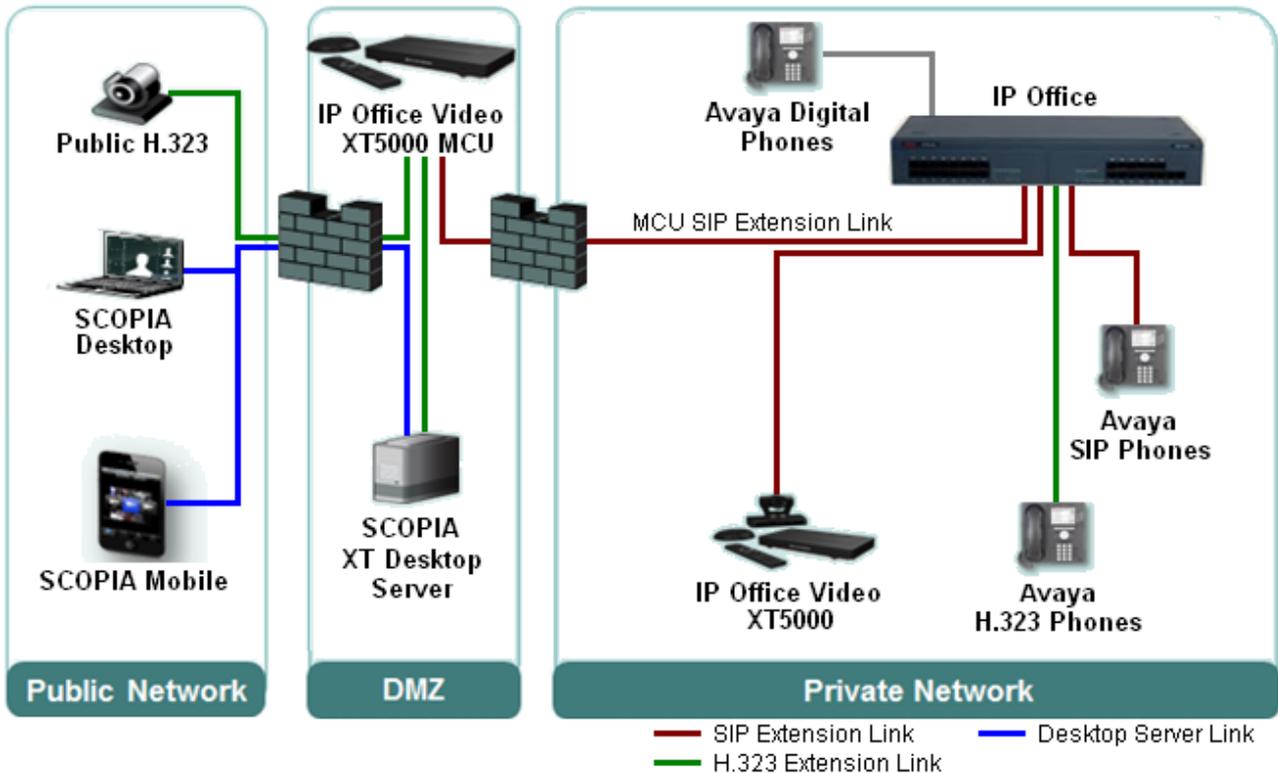
- **BFCP Support**  
XT5000 DVI video port can be used to send a video stream for content sharing controlled by remote (called Binary Floor Control Protocol (BFCP)). In presentation mode, the DVI video stream has priority. That is, if the device can show both it shows both, if it can only show one it shows the content sharing stream.
- **SIP Trunks**  
Incoming video calls on SIP trunks are supported so long as the trunk uses Direct Media.

# Chapter 2.

# IP Office Video Deployment

## 2. IP Office Video Deployment

One IP Office Video XT5000 unit is licensed to act as the conferencing server. It can do this for 4 or 9 conference parties in a single video conference.



- One IP Office Video XT5000 is licensed and configured for MCU operation using a **SCOPIA XT Series MCU Edition** or **SCOPIA XT Series SMB Edition** license. The license used enables either 4 or 9 parties in a video conference.
  - Placing the MCU mode IP Office Video XT5000 in the customer DMZ allows external H.323 video devices to access conferences without having to configure NAT and other firewall traversal for external devices into the customer's internal private network.
  - The MCU mode IP Office Video XT5000 is licensed and registered as a SIP extension on the IP Office system. Other IP Office users, incoming call routes and short code access the video conference by using the extension number assigned to the user created for the MCU mode IP Office Video XT5000.
- Any other Scopia XT Series systems on the customer's network registers with the IP Office as a SIP extension.
- The Scopia XT Desktop Server allows users using the Scopia PC Desktop on PCs and the Scopia Mobile application on mobile devices to join conferences. Placed in the customer's DMZ, the Scopia Desktop Server performs NAT and firewall functions for users if external to the customer's private network. This requires the **SCOPIA XT Series SMB Edition** license.

### Supported IP Office Telephones

The following IP Office extension telephones supported for IP Office Video:

- **Avaya 96x1 Series H.323 telephones**
- **Avaya 9500 Series digital telephones**
- **Avaya 1600 Series H.323 telephones**
- **Avaya 1408 and 1416 digital telephones**
- **Avaya B179 SIP conference telephone**
- **Avaya Communicator** (audio features only)

## 2.1 Deployment Process

The following stages are gone through in the process of integrating the IP Office Video system. To allow calls between the IP Office and the MCU, the MCU registers as a SIP extension on the IP Office system. Calls to the conference then use the MCU's IP Office extension number.

For this example, we assume that the IP Office Video XT5000 MCU added to the IP Office configuration has the extension number 800. In addition, any other Scopia XT Series devices register with the IP Office system as a SIP extension.

1. [Check the prerequisites](#) <sup>[15]</sup>.
2. [Check or add the IP Office licenses](#) <sup>[16]</sup>.
3. [Check IP Office SIP extension support](#) <sup>[17]</sup>.
4. [Create an IP Office user](#) <sup>[18]</sup>.
5. [Create an IP Office SIP extension](#) <sup>[19]</sup>.
6. [Configure the Scopia XT Series SIP settings](#) <sup>[21]</sup>.

## 2.2 Prerequisites

### General Prerequisites

- This document assumes that you are familiar with using the applications in the IP Office Admin Suite (IP Office Manager, System Status Application, IP Office System Monitor) to configure and monitor an IP Office system.

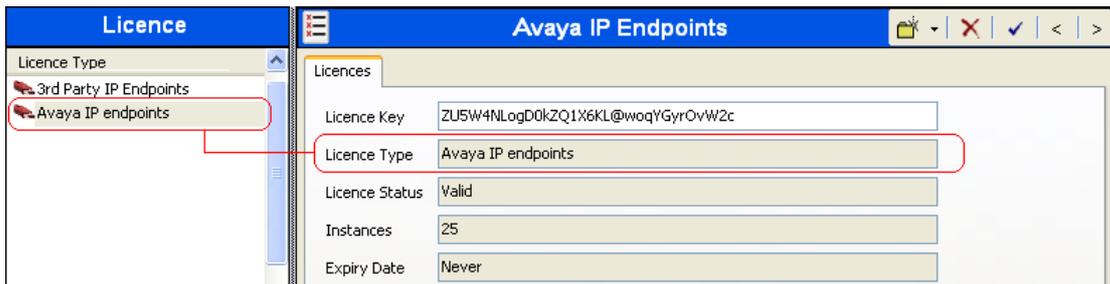
### IP Office Prerequisites

IP Office Video devices are supported on IP Office systems meeting the following prerequisites:

- **IP Office Platform:**  
IP500 V2 control unit or Server Edition.
- **IP Office Software Release:**  
The IP Office system should be running IP Office Release 8.1 Q3 2012 Service Pack (8.1.52) or higher core software.
- **IP Office Operating Mode:**  
The IP Office system must be configured to run in either IP Office Essential Edition, IP Office Preferred Edition, IP Office Advanced Edition or Server Edition operating mode.
- **VCM Resources:**  
Calls to and from IP devices (extension and trunks) require the IP Office system to support VCM channels. For IP Office IP500 V2 system those are provided by the installation of IP500 VCM cards or IP500 Combinations cards. Refer to the IP Office Installation Manual for full details.
- **IP Office Licenses:**  
The following IP Office licenses are used specifically for the deployment:
  - Each Scopia XT4200 and IP Office Video XT5000 device in the deployment is registered with the IP Office system as a SIP extension. To do this, each uses one instance of the **Avaya IP End Point** license.

## 2.3 Checking the IP Office Licenses

IP Office licenses are 32-character strings that are unique to the IP Office system. Each IP Office system has a **Dongle Serial Number** or **System Identification** which is used as the key used to validate whether a license is valid for the system.



The following IP Office licenses are used:

- Each Scopia XT4200 and IP Office Video XT5000 device in the deployment is registered with the IP Office system as a SIP extension. To do this, each uses one instance of the **Avaya IP End Point** license.

### To check the licenses

The System Status Application displays the status and usage of licenses. It can be used to display the status of licenses plus the number of licenses available and the number used.

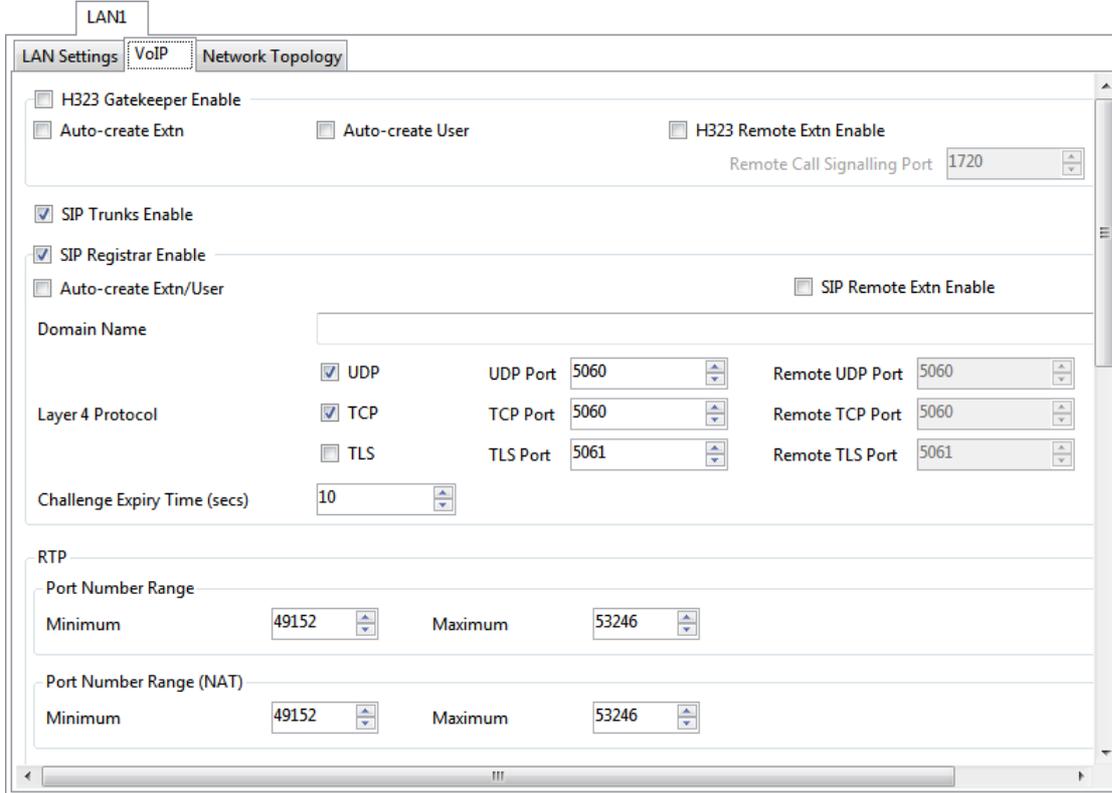
1. Start System Status Application and login to the IP Office system.
2. Click on **Resources** in the left-hand navigation panel and select **Licenses**.
3. The information displayed details the status and usage of the licenses currently in the IP Office system's configuration.

## 2.4 Checking the IP Office SIP Support

IP Office systems are by default configured to support SIP extensions on both their LAN1 and LAN2 interfaces. However, you should check the settings and be familiar with their location in the IP Office configuration.

### To check IP Office SIP registrar operation

- **Note:** Changes to the LAN1 or LAN2 settings of an IP Office system will require the IP Office system to be rebooted.
1. Using IP Office Manager, receive the configuration from the system.
  2. Select  **System**.
  3. Select either the **LAN1** or **LAN2** tab as required.
  4. Select the **VoIP** sub-tab.



The screenshot shows the 'LAN Settings' window with the 'VoIP' sub-tab selected. The 'SIP Registrar Enable' checkbox is checked. Other settings include:

- Domain Name:** Blank
- Layer 4 Protocol:** UDP (checked), TCP (checked), TLS (unchecked)
- Challenge Expiry Time (secs):** 10
- RTP Port Number Range:** Minimum 49152, Maximum 53246
- RTP Port Number Range (NAT):** Minimum 49152, Maximum 53246

- Check that **SIP Registrar Enable** is selected.
- **Domain Name:** *Default = Blank*  
This is the local SIP registrar domain name that will be needed by SIP devices in order to register with the IP Office. If this field is left blank, registration is against the LAN IP address. The examples in this documentation all use registration against the LAN IP address.
- **Layer 4 Protocol:** *Default = Both TCP & UDP*  
The transport protocol for SIP traffic between the IP Office and SIP extension devices. Both TCP and/or UDP can be used.
- **TCP Port:** *Default = 5060*  
The SIP port if using TCP. The default is 5060.
- **UDP Port:** *Default = 5060*  
The SIP port if using UDP. The default is 5060.
- **TLS Port:** *Default = 5061*  
The SIP port if using TLS. The default is 5061.
- **Challenge Expiry Time (sec):** *Default = 10*  
The challenge expiry time is used during SIP extension registration. When a device registers, the IP Office SIP Registrar will send a challenge back to the device and waits for an appropriate response. If the response is not received within this timeout the registration is failed.

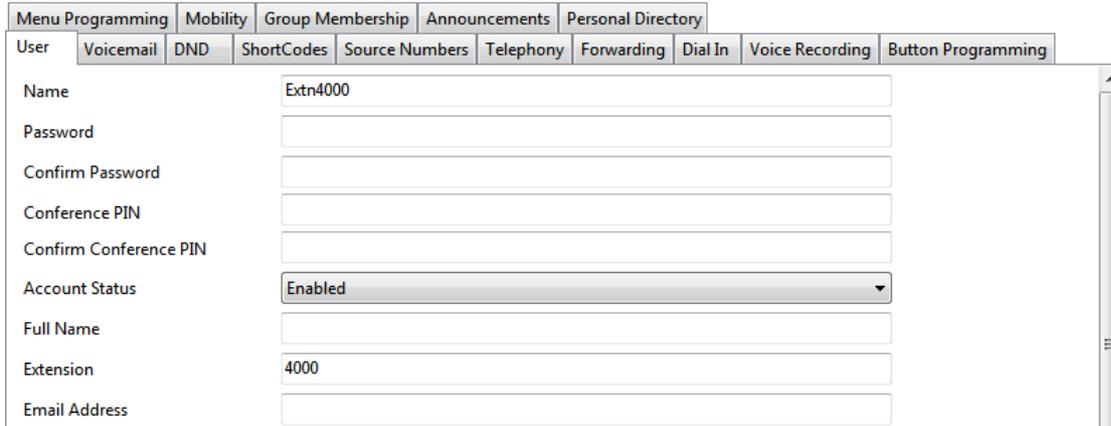
5. If you have made any changes, click the  **Save Config** icon to send the configuration back to the IP Office.

## 2.5 Creating IP Office Users

Create an IP Office user and an IP Office SIP extension entry in the IP Office configuration for each Scopia XT Series device, including the one acting as the MCU.

### To add an extension user

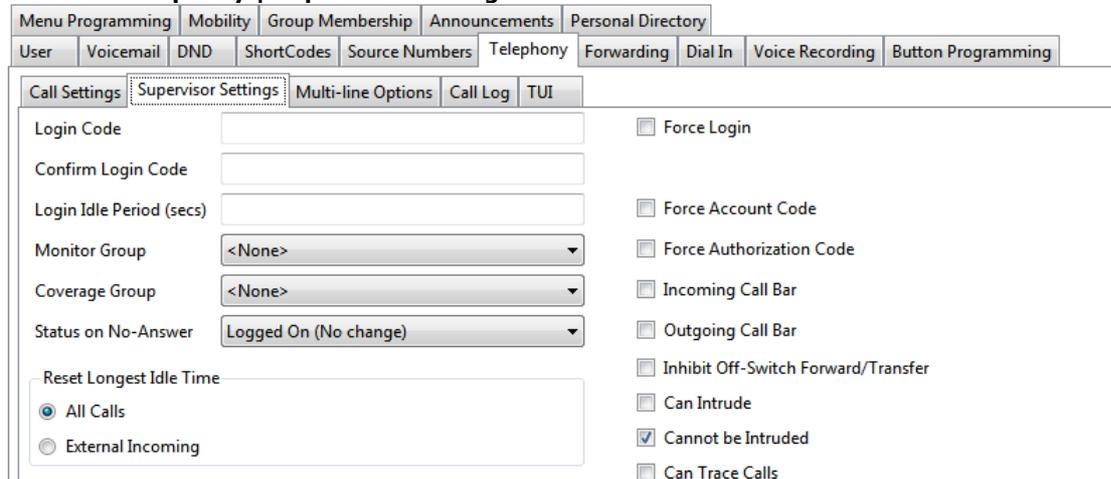
1. Using IP Office Manager, receive the configuration from the system.
2. Select  **User**.
3. Click on the  new entry icon and select **User**.
4. Select the **User** tab.



The screenshot shows the 'User' configuration page in IP Office Manager. The 'User' tab is selected, and the 'Name' field is populated with 'Extn4000'. The 'Extension' field is populated with '4000'. The 'Account Status' dropdown is set to 'Enabled'. Other fields like Password, Confirm Password, Conference PIN, and Full Name are empty.

- **Name**  
Set a name that clearly identifies the role of this user in the IP Office configuration. With the IP Office SIP extension set to **Force Authorization** (the IP Office default and assumed for this example), this field is used as the authorization name that must be set in the SIP device's configuration. This matches the **Authorization Name** set in the Scopia XT Series device's configuration.
- **Extension**  
This is the IP Office extension number for calls to the Scopia XT Series device. This should match the SIP ID of the SIP device, which is set through the **User** field of the device's SIP configuration.

5. Select the **Telephony | Supervisor Settings** tab.



The screenshot shows the 'Supervisor Settings' tab in the IP Office Manager. The 'Login Code' field is empty. The 'Force Login' checkbox is checked. The 'Cannot be Intruded' checkbox is checked. Other checkboxes like 'Force Account Code', 'Force Authorization Code', 'Incoming Call Bar', 'Outgoing Call Bar', 'Inhibit Off-Switch Forward/Transfer', 'Can Intrude', and 'Can Trace Calls' are unchecked.

- **Login Code**  
With the SIP extension set to **Force Authorization** (the default); this field acts as the authorization password that must be set in the SIP device's configuration. This matches the **Authorization Password** set in the Scopia XT Series device's configuration.

6. Click **OK**.
7. IP Office Manager prompts whether you want to create a VoIP extension for the new user. Select **SIP Extension** and click **OK**.
8. Click the  **Save Config** to save the configuration changes.
9. You now need to configure the matching IP Office extension for the MCU user.

## 2.6 Creating IP Office SIP Extensions

Create an IP Office user and an IP Office SIP extension entry in the IP Office configuration for each Scopia XT Series device including the one acting as the MCU.

### To adding a SIP extension

- Using IP Office Manager, receive the configuration from the system.
- Select  **Extension**.
- If you selected to have a SIP extension automatically created after creating the IP Office user, locate and click on that extension entry. Otherwise, to manually create a new extension, click on the  new entry icon and select **SIP Extension** from the list of possible extension types.
- Select the **Extn** tab.



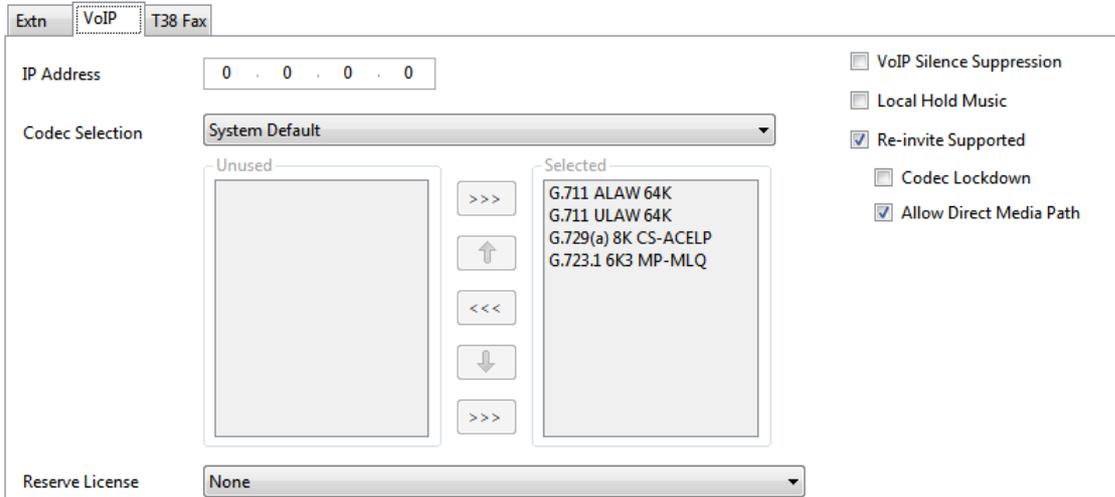
- **Base Extension**

This is used to match the extension to which IP Office user entry that is the default user of the extension. Enter the extension number created for the IP Office user.

- **Force Authorization:** *Default = On*

Leave this setting enabled. When on, SIP devices registering with the IP Office must match the **Name** and **Login Code** configured for the user within the IP Office configuration. These are equivalent to the **Authorization Name** and **Authorization Password** set in the Scopia XT Series device's configuration.

- Select the **VoIP** tab.



- **Codec Selection**

Do not use the G.729 audio codec with Scopia XT Series extensions. If shown in the **Selected** codecs list, change the **Codec Selection** to **Custom** and move the G.729 codec to the **Unused** list.

- **Re-invite Supported/Allow Direct Media Path**

Enable these settings. Enabling them helps ensure that once a video call is established between the extension and the MCU, the video traffic can be routed directly between the two ends rather than having to be routed via the IP Office system.

---

- **Reserve License**

Set this field to **Avaya IP Endpoint**. Each Scopia XT Series needs to use an Avaya IP End Point to register with the IP Office system. Normally, following a system restart, the system issues any available licenses to devices in the order that they register with the system. Selecting this option licenses the extension before the device has registered. IP Office Manager greys out the option if there are insufficient licenses available in the configuration.

6. Click **OK**.

7. Repeat the processes of adding an IP Office user and a SIP extension for any other Click the  **Save Config** icon to save the configuration changes to the IP Office.

## 2.7 Configuring the Scopia XT Series SIP Connection

Make the following changes to the configuration of the Scopia XT Series device to register it with the IP Office as a SIP extension. The settings used match those configured for the SIP user and SIP extension it should use in the IP Office system's configuration.

### To configure the MCU SIP settings

1. Using a web browser, log in to the configuration menus of the Scopia XT Series.
2. Select **Administrator Settings**.
3. Select **Protocols** and click on **SIP**.

SIP	
Save	
User	XT
Authentication Name	Admin
Authentication Password	.....
UDP/TCP Listening Port	5060
Transport Outbound Call	UDP
Use SIP Registrar	Yes
Registrar DNS Name	
Use SIP Proxy	Yes
Proxy DNS Name	
Proxy Model	Auto
Use TLS	Yes
TLS Listening Port	5061
Verify Certificate	Yes

4. Change the SIP settings as follows:

- a. **User:** Set this to match the extension number of the IP Office user configured on the IP Office system.
- b. **Authentication Name:** Set this to match the **Name** set on the matching IP Office user.
- c. **Authentication Password:** Set this to match the **Login Code** set on the matching IP Office user.
- d. **UDP/TCP Listening Port:** Set this to match the IP Office system setting. The default is 5060.
- e. **Transport Outbound Call:** Set this to **UDP**.
- f. **Use SIP Registrar:** Set this to **Yes**.
- g. **Registrar DNS Name:** Set this to the IP Office system's IP address or fully qualified domain name.
- h. **Use SIP Proxy:** Set this to **Yes**.
- i. **Proxy DNS Name:** Set this to the IP Office system's IP address or fully qualified domain name.
- j. **Proxy Model:** Leave this set to **Auto**.
- k. **Use TLS:** Set this to **No**. If you want to use secure SIP connections using TLS certificates refer to the Scopia XT5000 Server for IP Office Administrator Guide.

5. Click **Save**.



# Chapter 3.

## Document History

---

### 3. Document History

<b>24th April 2014</b>	<b>06e</b>	<ul style="list-style-type: none"><li>• Confirmation that with IP Office 9.0, BFCP is support. Also SIP trunk support if using Direct Media. [IPOFFICE-46974]</li></ul>
<b>16th April 2015</b>	<b>06f</b>	<ul style="list-style-type: none"><li>• Correct appearance of old Avaya Communicator product name.</li></ul>
<b>2nd July 2015</b>	<b>07a</b>	<ul style="list-style-type: none"><li>• Updated details for creating IP Office SIP extension.</li><li>• SIP Registrar settings merged into LAN   VoIP settings.</li><li>• Updated Scopia MCU menu for configuring SIP users.</li></ul>

# Index

## A

Authentication Name 21  
 Authentication Password 21  
 Auto-create Extn/User 17  
 Avaya IP End Point License 15, 16

## C

CD Audio 10  
 Challenge Expiry Time 17  
 Conference Room Video Systems 10  
 Conference Servers 10

## D

Domain Name 17

## E

Elite Series Conference Servers 10  
 Enable  
     SIP Registrar 17  
     SIP Trunk 17

Extension 19

## H

HD Audio 10

## I

IP Office  
     Checking Licenses 16  
     SIP Extension Support 17  
     SIP Ports 17  
     System VoIP Settings 17  
 IP Office Manager  
     Load configuration 17, 18, 19

iPad 10

iPhone 10

iPod Touch 10

iView Management 10

## L

Layer 4 Protocol 17  
 License 19  
     Avaya IP End Point 15, 16

Licenses

    Checking 16

Listening Port 21

## P

Port

    Listening Port 21

    SIP TCP Port 17

    SIP UDP Port 17

## R

Reserve Avaya IP Endpoint License 19

## S

Scopia Desktop Server 10  
 Scopia Mobile 10  
 Scopia PathFinder Server 10  
 Scopia PC Desktop 10  
 SCOPIA XT Series 10  
 SCOPIA XT Series MCU Edition 10  
 SCOPIA XT Series SMB Edition 10  
 SIP  
     Extension Support 17  
     IP Office Ports 17  
     SIP Registrar Enable 17  
     TCP Port 17  
     UDP Port 17  
     Use SIP Registrar 21

SIP Trunks Enable 17

System Status Application

    Licenses 16

    Resources 16

## T

TCP Port 17

Transport Outbound Call 21

Trunk Enable 17

## U

UDP Port 17

## V

Video Applications 10

VoIP

    Extension Support 17

    IP Office System Settings 17





Performance figures and data quoted in this document are typical, and must be specifically confirmed in writing by Avaya before they become applicable to any particular order or contract. The company reserves the right to make alterations or amendments to the detailed specifications at its discretion. The publication of information in this document does not imply freedom from patent or other protective rights of Avaya or others.

All trademarks identified by the ® or ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners.

This document contains proprietary information of Avaya and is not to be disclosed or used except in accordance with applicable agreements.

© 2015 Avaya Inc. All rights reserved.