

TechNote

Siemens OpenScape Voice V5

July 1, 2011





Introduction

This document is intended to support you with the integration of the XCAPI (version 3.3.205) into an existing environment of the Siemens OpenScope Voice.

Though being based on the Version 5 of Siemens OpenScope Voice it should be applicable to other versions, given a few adjustments.

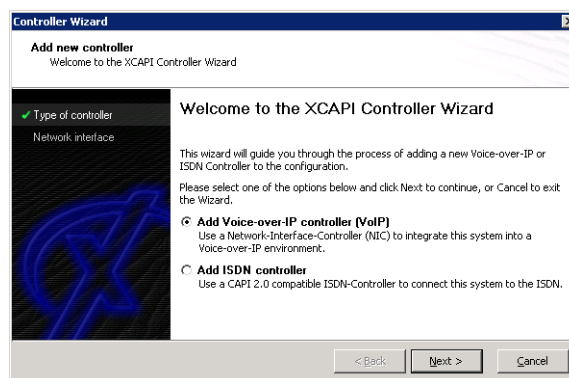
In the following sections we show the essential steps of configuration to allow for optimal cooperation of both the XCAPI and the OpenScope Voice. At this point we suppose that the OpenScope Voice environment, the hardware the XCAPI is running on and both the XCAPI and your CAPI applications are already installed properly. For some extended information on installation procedures please refer to the respective manuals. A short installation manual for the XCAPI is available at the [XCAPI Website](#).

XCAPI Configuration

Please start up the XCAPI configuration to create a new controller assigned to the Siemens OpenScope Voice.

If you've just installed the XCAPI and start the configuration tool for the first time, the XCAPI controller wizard will pop up automatically. This will also happen if there's no controller configured at all. To start up the XCAPI controller wizard on your own, just click the hyperlink labelled **Click here to add a controller** on the main page of the XCAPI configuration tool.

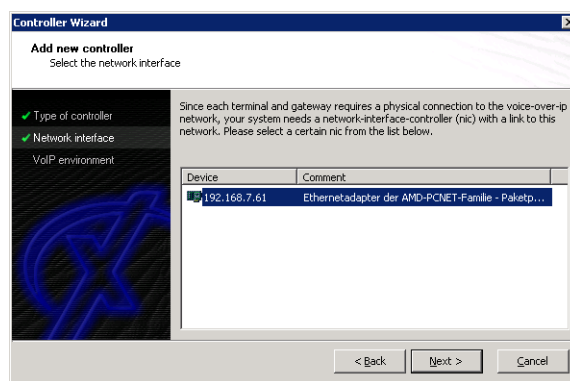
On the first page of the controller wizard please select the **Add Voice-over-IP controller (VoIP)** option and continue by clicking on the **Next** button.





2.1 Network Interface

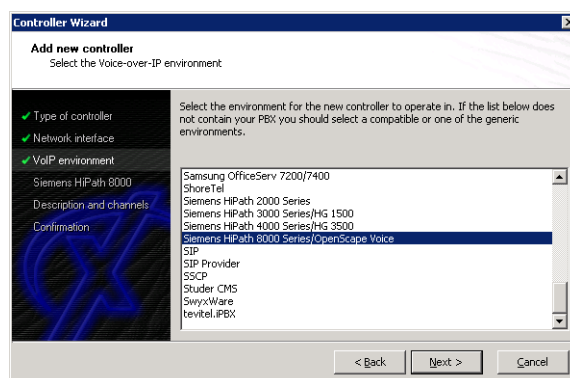
On this page of the XCAPI controller wizard you can select the network adapter you want to bind to the XCAPI controller.



2.2 Voice-over-IP Environment

The next dialog of the configuration tool shows a list of some common Voice-over-IP environments. Selecting one of those will configure the XCAPI with a selection of near-optimal presets for the kind of environment you have, sparing you quite a lot of manual configuration.

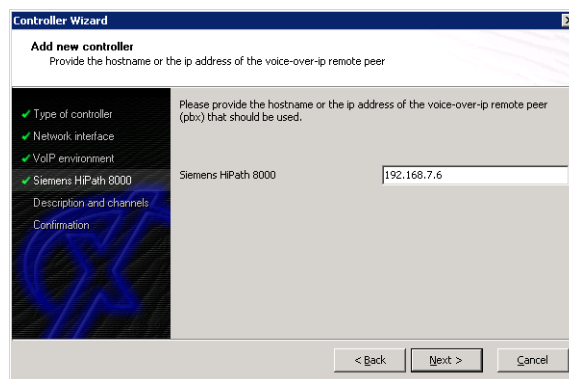
Please select **Siemens HiPath 8000-Series/OpenScope Voice** here.





2.3 IP Address of the Siemens OpenScape Voice

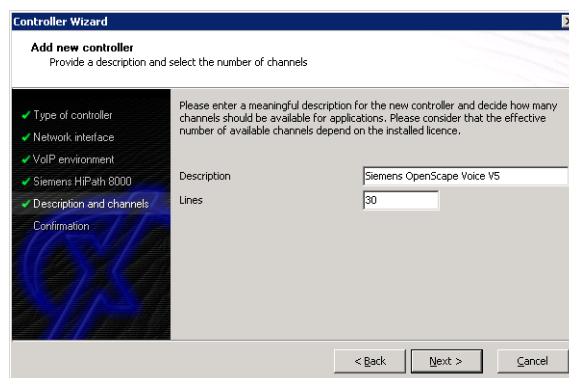
Next, please provide the network address of your Siemens OpenScape Voice.



2.4 Description and Channels

That's about all information that has to be configured with the XCAPI. The next-to-final dialog of the controller wizard allows you to configure a meaningful description for the controller you're going to create. This isn't really used anywhere, so you can enter a text of your choice here.

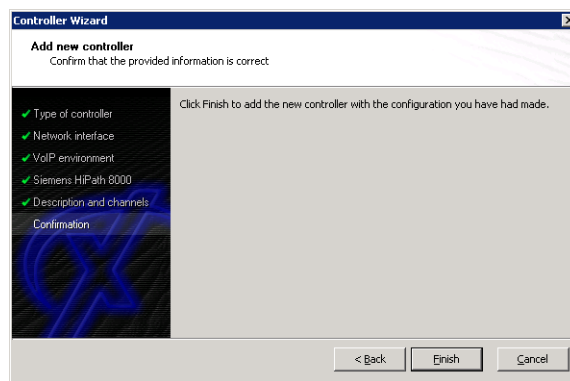
This dialog, however, also allows configuring the number of channels that the new controller will be able to provide. Please enter how many simultaneous connections the XCAPI should handle when communicating with the Siemens OpenScape Voice.



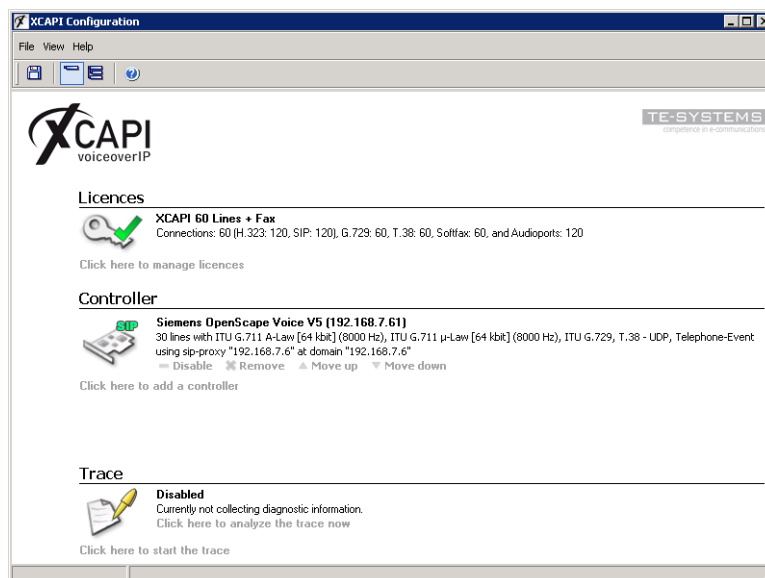


2.5 Confirmation

The final dialog of the controller wizard performs some checks on the configuration parameters you've made. If everything is correct, please use the **Finish** button in order to finally create the new controller.



Finally you can save the new created controller which appears now on main view of the XCAPI configuration.

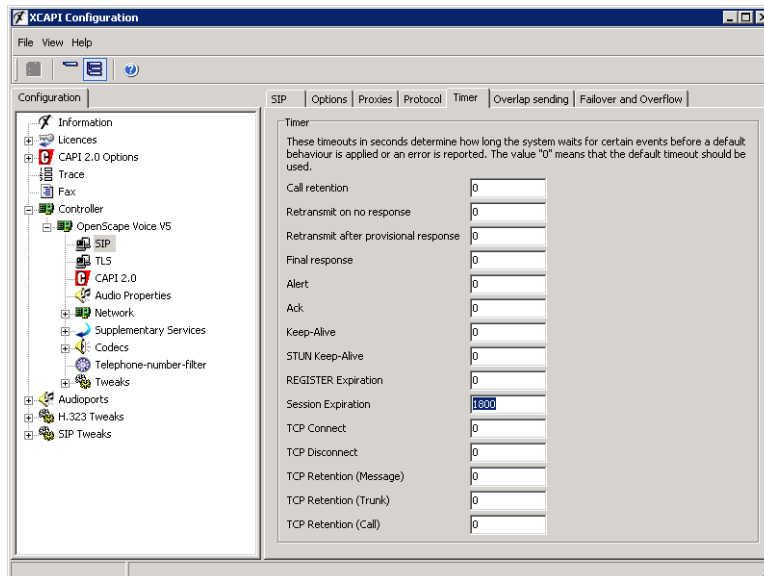


You always need to restart the bound CAPI application, in meaning of its services, for the changes to take effect.

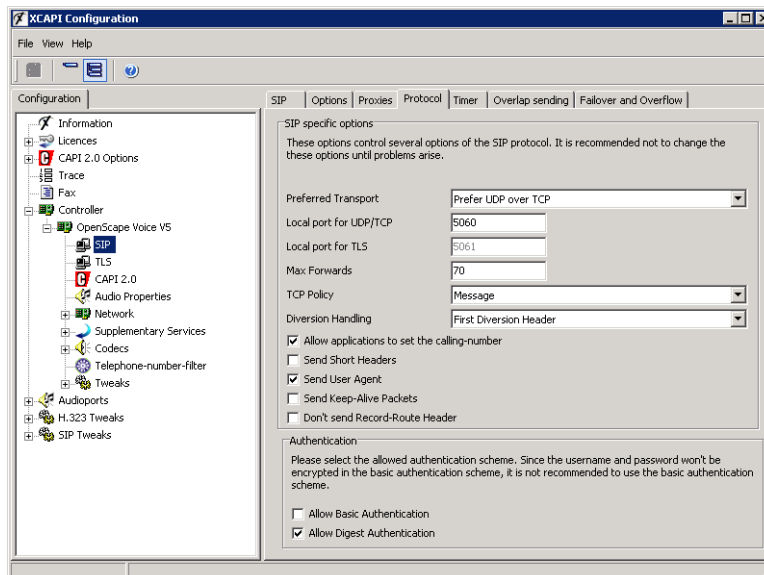


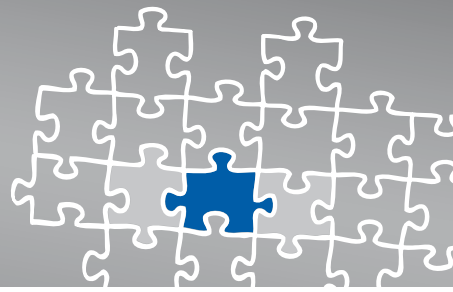
2.6 XCAPI Controller Settings

The session expiration timer should be set to **1800** (valued in seconds).



The protocol settings of the XCAPI controller must be coherent to the OpenScape Voice environment, in meaning of the according endpoint.





Configuring OpenScope Voice

In order to establish a connection between the XCAPI and the Siemens OpenScope Voice you need to setup the XCAPI as endpoint/destination with the appropriate configurations.

3.1 Business Group

This examples business group, called **bg_openscape_voice_lab**, is used as follows. Not shown configuration tabs are used with their default settings.

Business Group	Display Number	Number of Members	Default Office Code	Default Feature Profile	Remark
bg_openscape_voice_lab	4953638195813	2	+49(5363)8195813	fp_hp3k_Labor	No

The display number settings within the General tab are used as shown below.

Business Group: bg_openscape_voice_lab

Default Numbering Plan: +49(5363)8195813

Remark:

Display Number: 4953638195813

Use Reserved Directory Numbers:

Default Office Code: +49 (5363) 8195813

Default DLS Server:

Message Detail Records:

Customer Identification: 1

Activate:



The parameters of the services tab are used as shown next.

[OPENSCLUSTER] - Edit Business Group: bg_openscape_voice_lab

Modifies the selected Business Group.

General Services **Feature Profiles** Options Access Control List

Hot Desking

Allows a subscriber to remotely log on from another phone which has been configured with the Hot Desking feature.

Activate

Auto-Logoff Time: HH mm AM

Disable Auto-Logoff

Distinctive Ringing

This service gives a distinctive ring tone to intra BG calls. In that way, subscribers can more easily distinguish them from extra BG calls.

Activate

Night Bell Call Pickup Group

This is a group of phones that ring simultaneously. Incoming calls can be picked up by any Subscriber in the Business Group the Night Bell CPU Group is associated with.

Activate

Call Pickup Group: ...

LIN Administration for Emergency Calls

LIN Administration provides location capability for Business Group phones.

Activate

Number: ...

Announcement: ...

Large Conference

Large Conference enables more than three parties to share a call at the same time. This tab enables you to configure the ports that are to be used for a Large Conference. Additionally, the proportional number of system conference ports is displayed. This feature is the proposed number of MS circuits that can be used for large conferences, based on the system-wide settings.

Activate

Maximum Number of Conference Ports: 200

Maximum Number of Conferences: 1

Maximum Number of Conference Members per Conference: 3

Conference Recall Disconnect Timer: 30

Play Entry/Exit Tone for Conference Bridge

Silent Monitoring

Define the maximum number of subscribers tagged for monitor

Activate

Maximum Number of Subscribers Tagged for monitor: 20

Actual Number of Tagged Silent Monitored Calls: 0

BG Access Code

The Business Group Access Code

BG Access Code:



Please review the feature profiles, in this example **fp_hp3k_labor** described in the chapter Feature Profiles on [page 12](#), for interworking.

[OPENScapeCLUSTER] - Edit Business Group: bg_openscape_voice_lab

Modifies the selected Business Group.

General Services **Feature Profiles** Options Access Control List

Feature Profiles

Feature Profiles are templates designed to simplify the management of subscribers

Search for: in No Criteria Elements Per Page:

1 Item

<input type="checkbox"/>	Name	Default	Number of Subscribers
<input type="checkbox"/>	fp_hp3k_labor	Yes	2

The detail view of the options tab:

[OPENScapeCLUSTER] - Edit Business Group: bg_openscape_voice_lab

Modifies the selected Business Group.

General Services Feature Profiles **Options** Access Control List

BG related Media Server Options (e.g. Hot Desking)

In case empty values are entered in the fields below, the BG related Media Server options will be saved with the default values.

Media Server Re-try Counter:

Media Server Timeout Interval: seconds

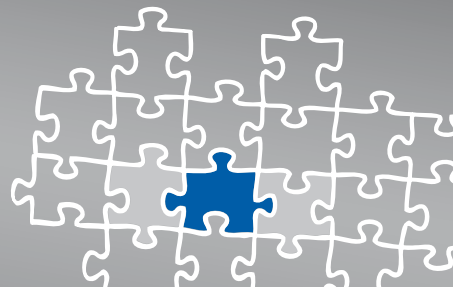
Input Retry Counter:

Keyset Operation

In case empty values are entered in the fields below, the Keyset Operation options will be saved with the default values.

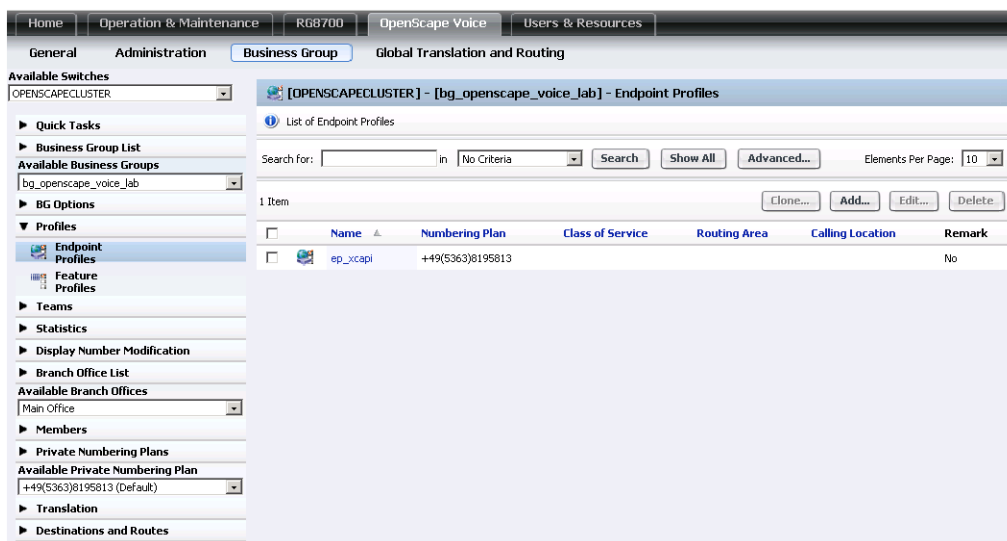
Recall Ring Timer: seconds

Line Reservation Timer: seconds



3.2 Endpoint Profiles

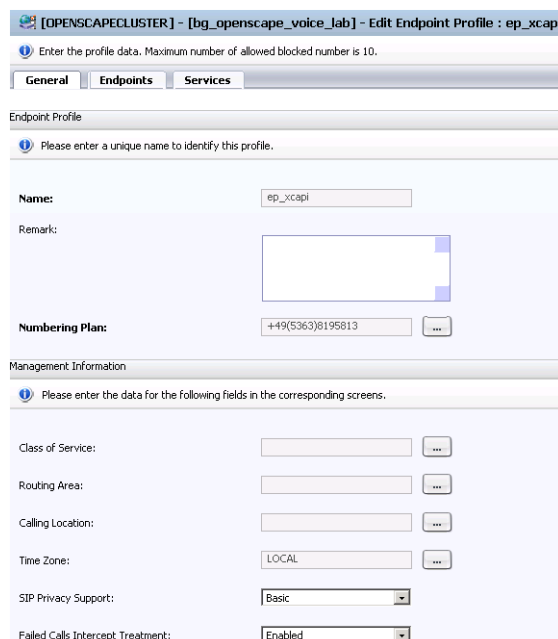
The according endpoint profile named **ep_xcapi** is related to the numbering plan **+49(5363)8195813** and configured as shown next.



The screenshot shows the 'Business Group' configuration page for 'bg_openscape_voice_lab'. The 'Endpoint Profiles' section is active, displaying a table with one entry:

Name	Numbering Plan	Class of Service	Routing Area	Calling Location	Remark
ep_xcapi	+49(5363)8195813				No

The general tab detail view:



The screenshot shows the 'Edit Endpoint Profile' configuration page for 'ep_xcapi'. The 'General' tab is selected, and the following fields are visible:

- Name:** ep_xcapi
- Remark:** (empty text area)
- Numbering Plan:** +49(5363)8195813
- Management Information:**
 - Class of Service:** (empty dropdown)
 - Routing Area:** (empty dropdown)
 - Calling Location:** (empty dropdown)
 - Time Zone:** LOCAL
 - SIP Privacy Support:** Basic
 - Failed Calls Intercept Treatment:** Enabled



The endpoints tab shows the registration of the XCAPI endpoint, as described in the chapter Endpoints ok [page 14](#).

[OPENSCAPECLUSTER] - [bg_openscape_voice_lab] - Edit Endpoint Profile : ep_xcapi

Enter the profile data. Maximum number of allowed blocked number is 10.

General | **Endpoints** | Services

Endpoints currently assigned to this profile

Elements Per Page: 10

1 Item

Name	Type	Registered	Primary
ep_xcapi	Static	Yes	192.168.7.61

The services have to be set by your needs.

[OPENSCAPECLUSTER] - [bg_openscape_voice_lab] - Edit Endpoint Profile : ep_xcapi

Enter the profile data. Maximum number of allowed blocked number is 10.

General | Endpoints | **Services**

Voice mail: Yes

Call Transfer: Yes

Call Forward Invalid Destination: No

Toll and Call Restrictions: No



3.3 Feature Profiles

The feature profile, here named as **fp_hp3k_labor**, is used as shown next.

The screenshot shows the 'Business Group' configuration page for 'Global Translation and Routing'. The left sidebar contains a navigation menu with options like 'Quick Tasks', 'Business Group List', 'Available Business Groups', 'BG Options', 'Profiles', 'Endpoint Profiles', 'Teams', 'Statistics', 'Display Number Modification', 'Branch Office List', 'Available Branch Offices', 'Members', 'Private Numbering Plans', 'Available Private Numbering Plan', 'Translation', and 'Destinations and Routes'. The main content area displays the 'Feature Profiles' for the selected business group. A table lists the profiles:

Name	Default	Number of Subscribers	Remark
fp_hp3k_labor	Yes	2	No

The general view in detail:

The screenshot shows the 'Edit Feature Profile' page for 'fp_hp3k_labor'. The page has tabs for 'General', 'Features', and 'Members'. Under the 'General' tab, there is an 'Identification' section with the following fields:

- Name:** fp_hp3k_labor
- Remark:** (empty text area)
- Default:**



The detail view of the features tab:

[OPENScapeCLUSTER] - [bg_openscape_voice_lab] - Edit Feature Profile : fp_hp3k_labor

Here you can modify the current configuration of the services contained in this feature profile

General | **Features** | Members

Subscriber Features

Feature Name:

Elements Per Page:

11 Items

<input type="checkbox"/>	Name	Active	Assignment
<input type="checkbox"/>	Name Permanent Presentation Status	✓	Assigned
<input type="checkbox"/>	Number Permanent Presentation Status	✓	Assigned
<input type="checkbox"/>	Call Forwarding on Busy	●	Assigned
<input type="checkbox"/>	Call Forwarding Unconditional	●	Assigned
<input type="checkbox"/>	Call Forwarding Internal/External	●	Assigned
<input type="checkbox"/>	Call Forwarding to Voice Mail	●	Assigned
<input type="checkbox"/>	Enhanced Call Forwarding	●	Assigned
<input type="checkbox"/>	CSTA Access	✓	Assigned
<input type="checkbox"/>	One Number Service	✓	Assigned
<input type="checkbox"/>	Music On Hold	✓	Assigned
<input type="checkbox"/>	Call Transfer	✓	Assigned

The members view in detail:

[OPENScapeCLUSTER] - [bg_openscape_voice_lab] - Edit Feature Profile : fp_hp3k_labor

Here you can modify the current configuration of the services contained in this feature profile

General | **Members** | Features

Elements Per Page:

2 Items

	Directory Number	Internal Name	Unicode Display Name	External Name	Unicode External Name
	495363819581398	+49 (5363) 819581398		+49 (5363) 819581398	
	495363819581399	+49 (5363) 819581399		+49 (5363) 819581399	



3.4 Endpoints

The XCAPI endpoint named **ep_xcapi** is related to the host address 192.168.7.61.

The screenshot shows the 'Endpoints' configuration page in the OpenScope Voice V5 interface. The page title is '[OPENScapeCLUSTER] - [bg_openscape_voice_lab] - [Main Office] - Endpoints'. The left sidebar contains navigation options like 'Quick Tasks', 'Business Group List', 'Available Business Groups', 'BG Options', 'Profiles', 'Teams', 'Statistics', 'Display Number Modification', 'Branch Office List', 'Available Branch Offices', 'Members', 'Subscribers', 'Endpoints', 'Media Servers', 'Private Numbering Plans', 'Available Private Numbering Plan', 'Translation', and 'Destinations and Routes'. The main content area shows a search bar with 'Search for:' and 'in No Criteria'. Below the search bar, there is a table with one item:

Name	Numbering Plan Name	Registration Type	Registration State	Primary	Remark
ep_xcapi	+49(5363)8195813	Static	Registered	192.168.7.61	No

The general view in detail:

The screenshot shows the 'Edit Endpoint : ep_xcapi' page in the OpenScope Voice V5 interface. The page title is '[OPENScapeCLUSTER] - [bg_openscape_voice_lab] - [Main Office] - Edit Endpoint : ep_xcapi'. The page has tabs for 'General', 'SIP', 'Attributes', 'Aliases', 'Routes', and 'Accounting'. The 'General' tab is selected. The page contains a form with the following fields:

- Name:** ep_xcapi
- Remark:** (empty)
- Registered:**
- Profile:** ep_xcapi
- Branch Office:** (empty)
- Associated Endpoint:** (empty)
- Default Home DN:** (empty)



The SIP interface is configured as follows:

- The endpoint is used as **Static SIP Trunking** type.
- The signaling address type is set to **IP Address or FQDN**.
- The endpoint address is set to the host address (192.168.7.61) of the application server with the according XCAPI installation.
- The port is used with the default value **5060** and the transport protocol is set to **UDP**.

The screenshot shows the configuration page for endpoint 'ep_xcapi' in the OpenScope Voice V5 interface. The 'SIP' tab is selected, and the 'SIP Trunking' radio button is chosen. The configuration is as follows:

SIP Private Networking:	<input type="radio"/>
SIP-Q Signaling:	<input type="radio"/>
SIP Trunking:	<input checked="" type="radio"/>
Type:	Static
Signaling Address Type:	IP Address or FQDN
Endpoint Address:	192.168.7.61
Port:	5060
Transport protocol:	UDP

Security section:

Set the Realm, Username and Password for digest authentication or configure the signaling address as a trusted one.

0 Items

<input type="checkbox"/>	Trusted
--------------------------	---------



The detail view of the attributes tab:

[OPENSCLUSTER] - [bg_openscape_voice_lab] - [Main Office] - Edit Endpoint : ep_xcapi

General SIP **Attributes** Aliases Routes Accounting

Attributes available for this SIP endpoint:

Supports SIP UPDATE Method for Display Updates	<input type="checkbox"/>
UPDATE for Confirmed Dialogs Supported	<input type="checkbox"/>
Send Provisional response during session updates	<input type="checkbox"/>
Survivable Endpoint	<input type="checkbox"/>
SIP Proxy	<input type="checkbox"/>
Route via Proxy	<input type="checkbox"/>
Allow Proxy Bypass	<input type="checkbox"/>
Public/Offnet Traffic	<input checked="" type="checkbox"/>
Inaccessible	<input type="checkbox"/>
Accept Billing Number	<input type="checkbox"/>
Allow Sending of Insecure Referred-By Header	<input checked="" type="checkbox"/>
Override IRM Codec Restriction	<input type="checkbox"/>
Transfer HandOff	<input type="checkbox"/>
Send P-Preferred-Identity rather than P-Asserted-Identity	<input type="checkbox"/>
Send domain name in From and P-Preferred-Identity headers	<input type="checkbox"/>
Send Redirect Number instead of calling number for redirected calls	<input type="checkbox"/>
Do not send Diversion header	<input type="checkbox"/>
Do not Send Invite without SDP	<input checked="" type="checkbox"/>
Send URI In Telephone Subscriber Format	<input type="checkbox"/>
Rerouting Direct Incoming Calls	<input checked="" type="checkbox"/>
Rerouting Forwarded Calls	<input checked="" type="checkbox"/>
Enhanced Subscriber Rerouting	<input checked="" type="checkbox"/>
Support of Best Effort SRTP	Disabled
Automatic Collect Call Blocking supported	<input type="checkbox"/>
Send Authentication Number as P-Asserted-Identity header	<input checked="" type="checkbox"/>
Set NP1/TON to Unknown	<input type="checkbox"/>
Include Restricted Numbers in From Header	<input type="checkbox"/>
Send Authentication Number in Diversion Header	<input type="checkbox"/>
Send Authentication Number in From Header	<input type="checkbox"/>
SIPQ Truncated MIME	<input checked="" type="checkbox"/>
Enable Session Timer	<input checked="" type="checkbox"/>
Ignore Answer for Announcement	<input type="checkbox"/>
Reserve 1	<input type="checkbox"/>
Reserve 2	<input type="checkbox"/>
Reserve 3	<input type="checkbox"/>



The aliases view:

<input type="checkbox"/>	Name	Type
<input type="checkbox"/>	192.168.7.61	SIP URL

The routes tab shows the relation of the destination point (**dp_xcapi**), as shown in the chapter Destinations and Routes on [page 20](#).

<input type="checkbox"/>	Route ID	Destination	Delete	Insert	Nature of Address
<input type="checkbox"/>	8	dp_xcapi	0		NoalUnknown

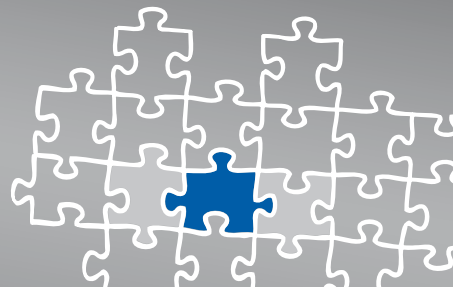
The accounting tab in detail:

Accounting Type:

Endpoint Location Name:

Endpoint Location Code:

Endpoint Service Provider:



3.5 Translation

The prefix access code (PAC) is used as shown next.

The screenshot shows the 'Prefix Access Codes' configuration page. The left sidebar contains a navigation menu with options like 'Quick Tasks', 'Business Group List', 'Available Business Groups', 'BG Options', 'Profiles', 'Teams', 'Statistics', 'Display Number Modification', 'Branch Office List', 'Available Branch Offices', 'Members', 'Private Numbering Plans', 'Available Private Numbering Plan', and 'Translation'. The 'Translation' section is expanded to show 'Prefix Access Codes', 'Destination Codes', 'Code Indexes', 'Location Codes', 'Extensions', and 'Destinations and Routes'. The main content area shows a search bar with '8' entered and a table with one item:

<input type="checkbox"/>	Code	Min/Max Length	Prefix Type	Nature Of Address	Destination Type	Destination	Remark
<input type="checkbox"/>	8	1 / 30	Off-net Access	Unknown	None	No	No

The detail view of the prefix access code:

The screenshot shows the 'Edit Prefix Access Code' detail view. The 'Identification' section contains a note: "If the dialed digits match this code, the specified modification to these dialed digits is executed." The 'Prefix Access Code' field contains '8'. The 'Remark' field is empty. The 'Minimum Length' field contains '1' and the 'Maximum Length' field contains '30'. The 'Digit Position' field contains '0' and the 'Digits to insert' field is empty. The 'Settings' section contains a note: "Specify additional parameters to determine how the call will be routed." The 'Prefix Type' dropdown is set to 'Off-net Access', the 'Nature of Address' dropdown is set to 'Unknown', and the 'Destination Type' dropdown is set to 'None'. The 'Destination Name' field is empty.



The destination code for XCAPI destination (**dp_xcapi**) is here used with the prefix **8**.

Available Switches: OPENScapeCLUSTER

Business Group: bg_openscape_voice_lab

Available Business Groups: bg_openscape_voice_lab

Available Private Numbering Plan: +49(5363)8195813 (Default)

Destination Codes are used for routing decisions.

Search for: [] in [No Criteria] [Search] [Show All] [Advanced...] Elements Per Page: [10]

1 Item

<input type="checkbox"/>	Code	Class Of Service	Routing Area	Nature Of Address	Destination Type	Destination Name	Remark
<input type="checkbox"/>	8			Unknown	Destination	dp_xcapi	No

The general view in detail:

[OPENScapeCLUSTER] - [bg_openscape_voice_lab] - [+49(5363)8195813] - Edit Destination Code: 8

General | Extensions

Identification

This destination code will be used for a call if the dialed or modified (in PAC) digits and the Nature of Address are matching.

Destination Code: 8

Remark: []

Country Code: []

Nature Of Address: Unknown

Traffic Type: []

Originator Attributes

Optionally, an additional match is required if the originator of the call belongs to the specified Class of Service and Routing Area.

Class Of Service: []

Routing Area: []

NPA: []

Destination

Specify additional parameters to determine how the call will be routed.

Destination Type: Destination

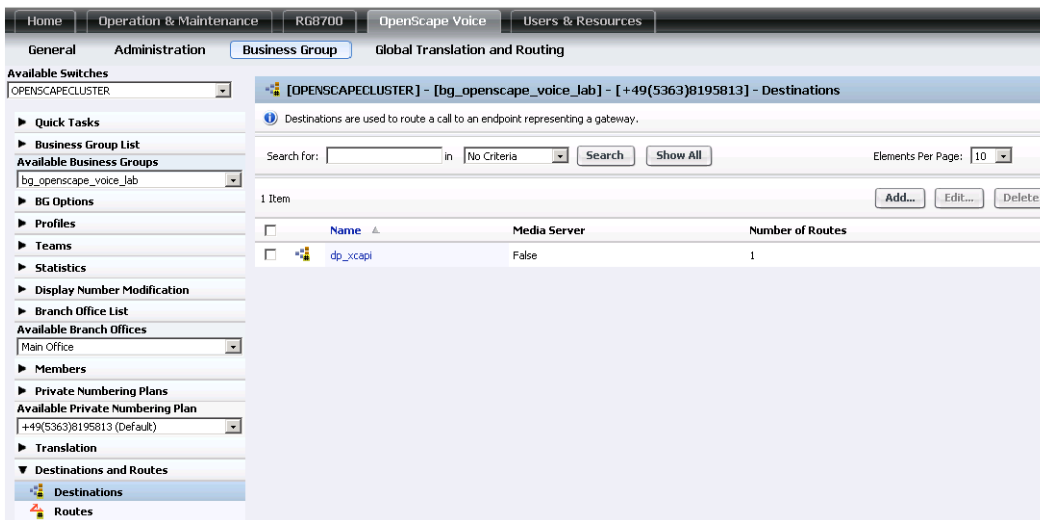
Destination Name: dp_xcapi

DN Office Code: []



3.6 Destinations and Routes

The `dp_xcapi` destination is used as shown next.



The screenshot shows the 'Destinations' configuration page in the OpenScope Voice V5 web interface. The breadcrumb trail is: Home > Operation & Maintenance > RG8700 > OpenScope Voice > Users & Resources > Business Group > Global Translation and Routing. The left sidebar contains various navigation options like 'Quick Tasks', 'Business Group List', 'Available Business Groups', 'BG Options', 'Profiles', 'Teams', 'Statistics', 'Display Number Modification', 'Branch Office List', 'Available Branch Offices', 'Members', 'Private Numbering Plans', 'Available Private Numbering Plan', 'Translation', and 'Destinations and Routes'. The main content area is titled '[OPENScapeCLUSTER] - [bg_openscape_voice_Jab] - [+49(5363)8195813] - Destinations'. It includes a search bar, a table with 1 item, and buttons for 'Add...', 'Edit...', and 'Delete...'. The table has columns for 'Name', 'Media Server', and 'Number of Routes'.

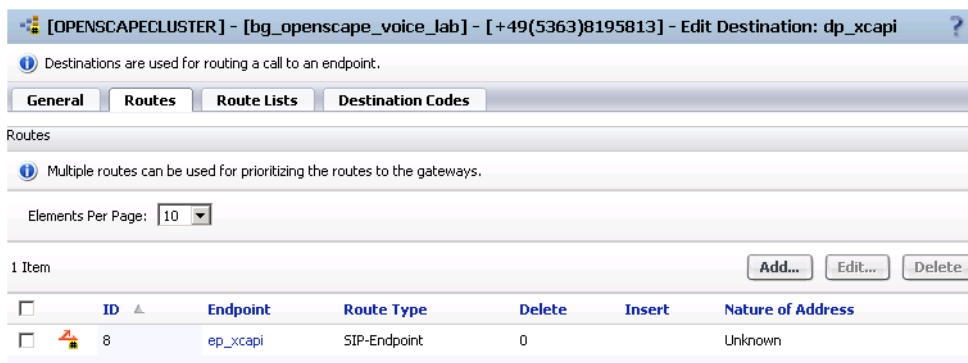
Name	Media Server	Number of Routes
dp_xcapi	False	1

The general view in detail:



The screenshot shows the 'Edit Destination: dp_xcapi' page. It has tabs for 'General', 'Routes', 'Route Lists', and 'Destination Codes'. The 'General' tab is active, showing the 'Name' field with the value 'dp_xcapi' and a checkbox for 'is a media server:' which is unchecked.

The detail view of the routes tab:



The screenshot shows the 'Routes' tab in the 'Edit Destination: dp_xcapi' page. It includes a description: 'Multiple routes can be used for prioritizing the routes to the gateways.' Below this is a table with 1 item. The table has columns for 'ID', 'Endpoint', 'Route Type', 'Delete', 'Insert', and 'Nature of Address'. There are also buttons for 'Add...', 'Edit...', and 'Delete...'.

ID	Endpoint	Route Type	Delete	Insert	Nature of Address
8	ep_xcapi	SIP-Endpoint	0		Unknown



The route lists tab in detail:

[OPENScapeCLUSTER] - [bg_openscape_voice_lab] - [+49(5363)8195813] - Edit Destination: dp_xcapi

Destinations are used for routing a call to an endpoint.

General Routes **Route Lists** Destination Codes

Route Lists

This list provides an overview of all routes with the same originating signaling type and bearer capability. Prioritization is possible.

1 Item

Originating Signaling Type	Originating Bearer Capability	Prioritized	Fallback to Local Numbering Plan	Prefix Area Code	Preface Country Code
SIP	Unassigned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The detail view of the destination codes:

[OPENScapeCLUSTER] - [bg_openscape_voice_lab] - [+49(5363)8195813] - Edit Destination: dp_xcapi

Destinations are used for routing a call to an endpoint.

General Routes **Route Lists** **Destination Codes**

Destination Codes

Destination Codes are used for routing decisions.

Elements Per Page: 10

1 Item

Code	Nature Of Address	Destination Type	Destination Name
8	Unknown	Destination	dp_xcapi



The `dp_xcapi` destination is related as follows:

The screenshot shows the 'Routes' tab for the Business Group '[OPENSCAPECLUSTER] - [bg_openscape_voice_lab] - [+49(5363)8195813]'. The table below lists the routes used by the selected BG:

Route ID	Route Name	Destination	Route Endpoint	Endpoint Type
8	R_E16_123	dp_xcapi	ep_xcapi	SIP-Endpoint

The routes tab in detail view:

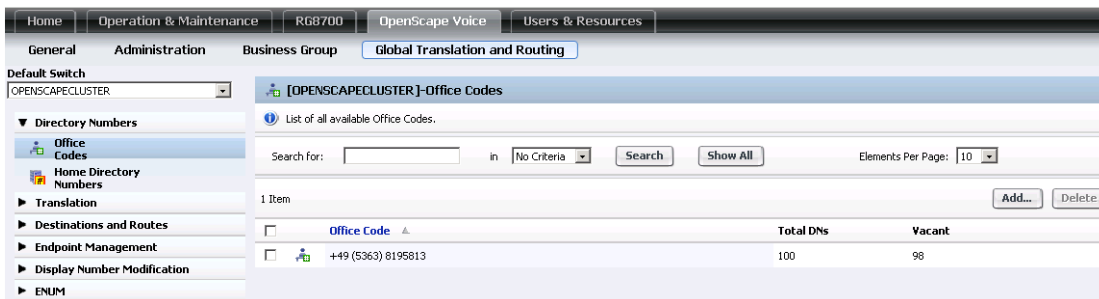
The detail view for route 'R_E16_123' includes the following configuration details:

- ID:** 8
- Type:** SIP Endpoint
- ENUM:** ep_xcapi
- Originator Attributes:**
 - Signaling Type:** SIP
 - Bearer Capability:** Unassigned
- Destination Directory Number:**
 - Number of digits to delete:** 0
 - Digits to insert:** (empty field)
 - Nature of Address:** Unknown



3.7 Global Translation and Routing

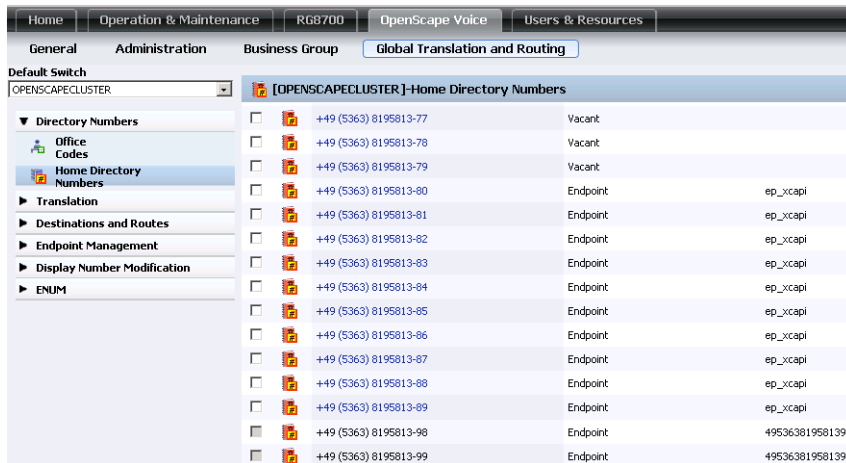
The global translation and routing is here used as shown next.



The screenshot shows the 'Global Translation and Routing' configuration page for Office Codes. The left sidebar contains a navigation menu with 'Office Codes' selected. The main content area shows a search bar and a table with one item.

Office Code	Total DN's	Vacant
+49 (5363) 8195813	100	98

The according range of numbers has to be related as home directory numbers for the XC-API endpoint (ep_xcapi).



The screenshot shows the 'Home Directory Numbers' configuration page. The left sidebar has 'Home Directory Numbers' selected. The main content area displays a list of numbers from +49 (5363) 8195813-77 to +49 (5363) 8195813-99, each with a checkbox and a status.

Number	Status	Endpoint
+49 (5363) 8195813-77	Vacant	
+49 (5363) 8195813-78	Vacant	
+49 (5363) 8195813-79	Vacant	
+49 (5363) 8195813-80	Endpoint	ep_xcapi
+49 (5363) 8195813-81	Endpoint	ep_xcapi
+49 (5363) 8195813-82	Endpoint	ep_xcapi
+49 (5363) 8195813-83	Endpoint	ep_xcapi
+49 (5363) 8195813-84	Endpoint	ep_xcapi
+49 (5363) 8195813-85	Endpoint	ep_xcapi
+49 (5363) 8195813-86	Endpoint	ep_xcapi
+49 (5363) 8195813-87	Endpoint	ep_xcapi
+49 (5363) 8195813-88	Endpoint	ep_xcapi
+49 (5363) 8195813-89	Endpoint	ep_xcapi
+49 (5363) 8195813-98	Endpoint	495363819581398
+49 (5363) 8195813-99	Endpoint	495363819581399



The display number modification in detail:

The screenshot shows the 'Global Translation and Routing' configuration page for the 'OPENScapeCLUSTER'. The 'Display Number Modification' section is active, showing a table with one entry:

<input type="checkbox"/>	Business Group	Numbering Plan	NPI	Country/L2 Code	Area/L1 Code	Local Office/L0 Code	Skip	Min./Max.
<input type="checkbox"/>	bg_openscape_voice_lab	ANY	Public	49	5363	8195813	5	16/16

The display number definition in detail:

The detailed view shows the configuration for the 'bg_openscape_voice_lab' business group. The 'Numbering Plan' is set to 'ANY'. The 'Number Definition' section includes the following values:

- Numbering plan indicator: Public
- Country/L2 Code: 49
- Area/L1 Code: 5363
- Local Office/L0 Code: 8195813
- Number of digits to skip: 5
- Min. Digits: 16
- Max. Digits: 16

The 'Local Toll' section is currently empty.



Fax Services

In this chapter, we are going to describe the necessary configuration for using Fax services in meaning of T.38 and Softfax.

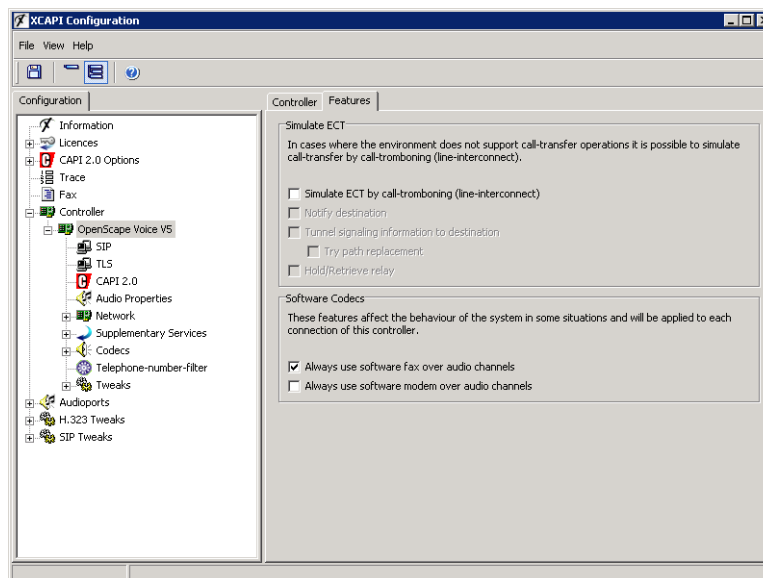
You may need configuring the Call Admission Control Management which features enable the Siemens OpenScope Voice to control bandwidth that is allowed to be used for both Audio (RTP) and Fax (T.38 over UDPTL) traffic over bandwidth limited links in the network.

4.1 Software Fax

With the software fax mode, the XCAPI simulates an analogue Fax device by transmitting modulated Fax-signals modem-like over the established audio channels. To configure the software fax mode, please open the XCAPI configuration utility and select in the advanced configuration mode the SIP controller assigned to the gateway.

Open the configuration tab labeled **Features** and activate the Softfax mode by enabling the option **Always use software fax over audio channels**.

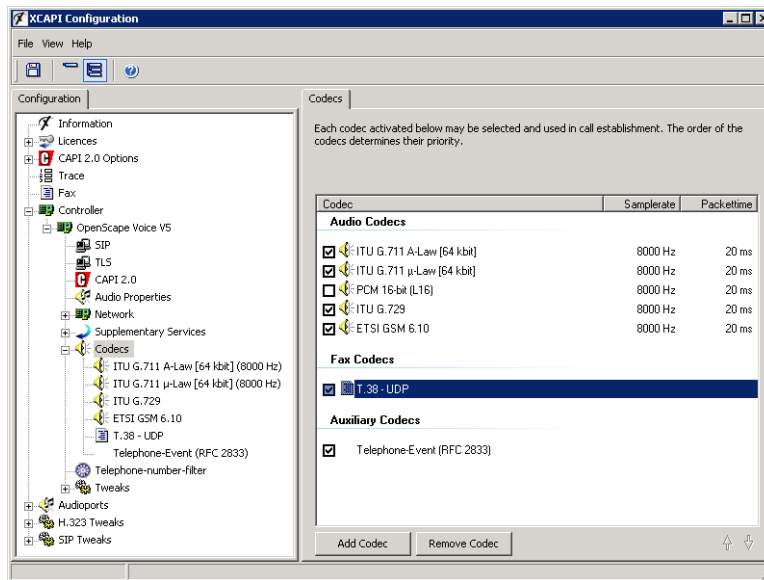
You may have to do some additional configurations for the media gateway, such as disabling the T.38 codec.



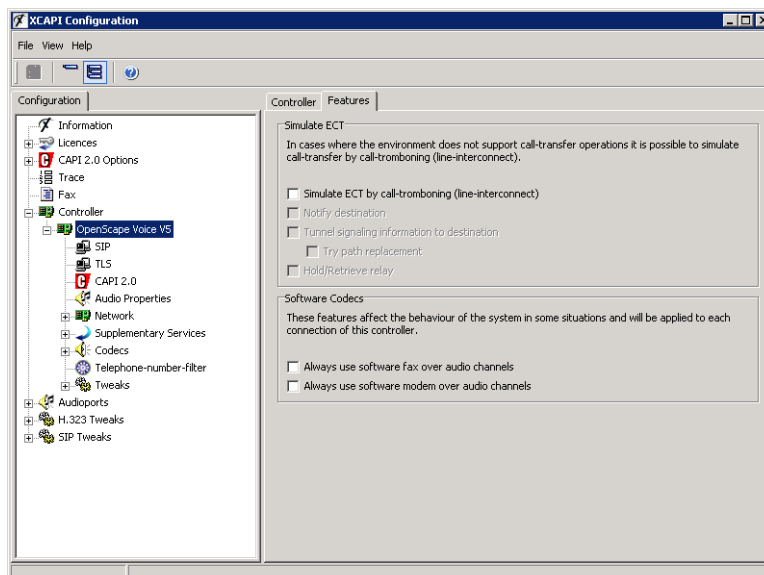


4.2 T.38

The Siemens OpenScope Voice supports the T.38 Fax-over-IP protocol when using capable media gateways. Ensure that the T.38 codec is enabled within the media gateway. When using T.38 it is mandatory that the **T.38 - UDP Codec** is enabled within the XCAPI controller configuration.



The option **Always use software fax over audio channels** has to be disabled within the XCAPI controller's Features tab configuration.





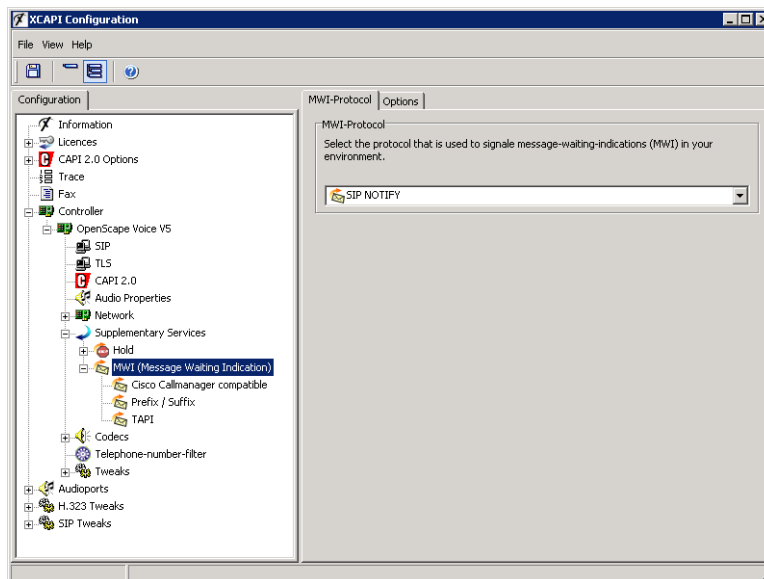
Supplementary Services

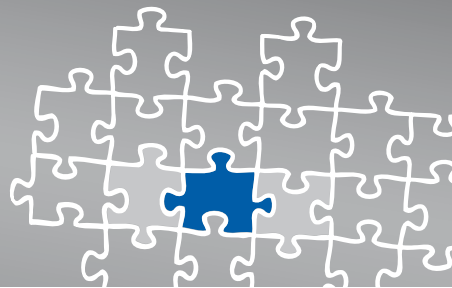
The SIP protocol defines support for the so called supplementary services, such as Call Transfer or MWI (Message Waiting Indications). The XCAPI provides means for best approximating the effects of some supplementary services with the Siemens OpenScape Voice gateway. This might not be enabled by default; in this case it needs to be configured explicitly for both, Subscribers services and Feature Profiles. Depending on your installed CAPI-Application you might need to activate additional services for Call Forwarding, Caller ID or Manage Calls.

We are now going to describe the configuration for a near optimal interoperability in the next chapters.

5.1 Message Waiting Indications (MWI)

Please ensure that the SIP Notify method is enabled within the XCAPI controller configuration.





OpenScope Ready Certificate

Certificate

OpenScope Ready

The connectivity of

XCAPI 3.3
made by the company
TE-Systems GmbH
at the open interface **SIP** of
OpenScope Voice V5

has been certified in accordance with the test report dated 2011-01-24. The tests have been conducted conforming to DIN EN ISO 9001.

This certificate is only valid in conjunction with the full test report and the notes contained therein.

Siemens Enterprise Communications GmbH & Co. KG
Munich, 2011-01-24

Gerhard Späth
Gerhard Späth
SEN OP ET SD

Peter Bergmann
Peter Bergmann
SEN SDS GCS GER SSC1

OpenScope Ready

SIEMENS

Siemens Enterprise Communications GmbH & Co. KG is a Trademark Licensee of Siemens AG



Exclusion of Liability

Copyright © 2011 TE-SYSTEMS GmbH

All rights reserved

This document, in part or in its entirety, may not be reproduced in any form without the prior consent of TE-SYSTEMS GmbH.

The information contained in this document was correct at the time of writing. TE-SYSTEMS GmbH reserves the right to make any alterations without prior notice.

The utmost care was applied during the compilation of texts and images, as well as during the creation of the software. Nevertheless, no responsibility can be taken for the content being accurate, up to date or complete, nor for the efficient or error-free operation of the software for a particular purpose. Therefore, TE-SYSTEMS GmbH cannot be held liable for any damages resulting directly or indirectly from the use of this document.

Trademarks

All names of products or services used are trademarks or registered trademarks (also without specified indication) of the respective private or legal persons and are therefore subject to legal regulations.

Third Party Disclaimer and Limitations

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)

This product includes cryptographic software written by Eric Young (ey@cryptsoft.com).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

This product includes source code derived from the RSA Data Security, Inc. MD2, MD4 and MD5 Message Digest Algorithms.

This product includes source code derived from the RFC 4634 Secure Hash Algorithm software.

TE-SYSTEMS GmbH

Managing Directors Andreas Geiger
Oliver Körber

Address Max-von-Laue-Weg 19
38448 Wolfsburg
Germany

Tel. +49 5363 8195-0
Fax +49 5363 8195-999

E-Mail info@te-systems.de
Internet www.te-systems.de
www.xcapi.de