

Optimum Business Trunking and the Siemens OpenScape Office MX IP PBX vOMX_V2_R1.4.0_001 Configuration Guide





Table of Contents

1.	Overview	3
2.	SIP Trunk Adaptor Set-up Instructions	3
3.	Additional Set-up Information	7
4.	International Calling	8
5.	PBX Configuration	9



1 Overview

The purpose of this configuration guide is to describe the steps needed to configure the Siemens PBX for proper operation Optimum Business Sip Trunking.

2 SIP Trunk Adaptor Set-up Instructions

These instructions describe the steps needed to configure the LAN side of the Optimum Business SIP Trunk Adaptor.

Step 1:

Log on to the Optimum Business SIP Trunk Adaptor

1. Connect a PC to port 4 of the Optimum Business SIP Trunk Adaptor, the silver device labeled Edgewater Networks, 4550 series.



- 2. Open a Web browser and go to IP Address http://10.10.200.1. A login box will appear.
- Enter login and password and click 'OK'. Login: pbxinstall Password: s1ptrunk



Step 2:

Click on the LAN Settings Link

1. Assign an IP Address to the LAN interface of the SIP Trunk Adaptor. The IP address must be on the same subnet as the IP PBX. This changes the address on port 1 of the Optimum Business SIP Trunk Adaptor.

Note: This will become your local SIP proxy IP address. No other IP addresses will be provided by Cablevision.

2. Optional: Specify a VLAN for your voice traffic. Click the 'Enable Voice VLAN Tagging' check box. The default VLAN ID is 100.

Note: VLAN 200 should not be used. It is dedicated to port 4 for management.







- 3. Optional: Enable the DHCP server. This will allow the SIP Trunk Adaptor to act as a DHCP server, which will provide IP addresses to the voice network, and create a dedicated voice LAN, as per diagram 2.
- 4. Click 'Submit'.



Diagram 1 SIP Trunk Adaptor for IP-PBXs

Using a connection from the customer's LAN, the SIP Trunk Adaptor's address can be a statically assigned private IP address. It may not be assigned a Public IP address.

Diagram 2 SIP Trunk Adaptor for IP-PBXs Example: Separate Voice and Data Networks Configuration





Step 3:

Click on the SIP Trunk Configuration Link

- 1. Select your IP PBX make and model from the drop-down menu.
- 2. Specify how the IP PBX will register to the Optimum Business SIP Trunk Adaptor.
- 3. The Cablevision network only supports Inband DTMF. Click on the check box next to "Convert Inband DTMF" if you cannot configure your IP PBX to

optimum.	SIP Trunk Configu	ration	Help
	Select your PBX:	Asterisk	-
Configuration Menu Customer <u>LAN Settings</u> <u>SIP Trunk</u> <u>Configuration</u>	 Passive connection u This address must be on t interface PBX Address: 	ising the local, privat he same subnet as the IP	e IP address of the PBX Address that is specified for the LAN
Diagnostics System	Active connection us	ng registration	
	User Id:	secret	
	Password:	•••••	
	Convert Inband DTMF:		
	Status:		
	Trunk Status:	Not Registered	
	DID's		
	5164933699 (Pilot number) 5164939768 5164939769 5164939765 5164939795 5164939841	() () ()	

send out Inband DTMF. The DTMF tone duration generated by the phones and/or PBX may need to be increased from their default setting. Some phones and/or PBX have a default setting between 180ms to 200ms. This setting is too low. The recommended setting is 600ms.

4. Click 'Submit'.

Step 4:

Diagnostics Link

You can make a test call directly from your phone or use the test call application under the Diagnostics link.

optimum	Network Test Tools
optimom.	A network administrator may use the test tools on this page to verify connectivity of the System and trace the path of data throughout the
Configuration Menu	network. Outbound Call Test:
LAN Settings	This test will place a call to the provided telephone number and play a series of tones for 30 seconds.
SIP Trunk Configuration	Pilot Number: 5164933839
Diagnostics	Telephone Number:
- Dyacana	Call Reset
	when this test is easilied call an ecoved for the plict number are downed to the internal Test UA for 13 minutes, after this elapsed time the test is automatically disabled. © Enabled Seem.
	Ping Test:
	IP Address to Ping:
	Ping Reset
	Traceroute Test:



Step 4 continued

Field	Description
Outbound Call Test TelephoneNumber	Specifies an outside phone number to which an outbound call will be initiated. The pilot telephone number of the SIP Trunk will be prepopulated.
Pilot Number	Displays the provisioned pilot number, which is used for outbound and inbound call tests.
Call	Initiates a call outbound to a telephone number entered or inbound to the pilot number displayed.
Inbound Call Test (radio button)	Indicates whether inbound test call will be enabled or disabled. If inbound test calls are enabled, calls made to the pilot number will be redirected to the test UA for fifteen minutes. When the pilot number is dialed, you will hear a test message play.
Submit	Enables or disables the inbound call test.
IP Address to Ping	Verifies basic connectivity to a networking device. Successful ping test results indicate that both physical and virtual path connections exist between the system and the test IP address.
Ping Button	Sends a ping to the IP address specified in the field "IP Address to Ping".
IP Address to Trace	Tracks the progress of a packet through the network. The packet can be tracked through the WAN or LAN interfaces of the adaptor.
Interface (radio button)	Indicates whether a packet will be tracked through the LAN or the WAN.
Traceroute Button	Initiates a traceroute to the specified IP address on either the LAN or the WAN.
Reset	Clears all fields and selections and allows you to enter new information. Reset applies to outbound call test, ping and traceroute.



3 Additional Set-up Information

Systems

optimum.	System Help
Configuration Menu	Software Version: Version 11.6.14.1 Fri Jan 4 17:49:28 PST 2013
Customer <u>LAN Settings</u> SIP Trunk	Hostname: 5164939899
Configuration Diagnostics System	Model: EdgeMarc 4552
	Vendor: Cablevision
	LAN Interface MAC Address: A8:70:A5:00:D8:18
	Registration Status: The ALG feature is registered. View license key.
	System Date: 02/29/2016 15:03:40 UTC
	Change Password: • pbxinstall

FieldDescriptionPbxinstall LinkSelect to change the default password for the pbxinstall login ID.
Only the password can be changed. The login ID cannot be changed.

Password

optimum.	Set Password		<u>Help</u>
-	Change the GUI password b must be between 6 and 8 ch	y filling in the fields below. The password paracters in length.	l .
Configuration Menu • Customer • LAN Settings SIP Truck Configuration • Diagnostics • System	Username: Current Password: New Password: Confirm Password: Submit Reset	pbxinstall	



Field	Description
Username	Specifies the username for which the password can be changed.
Current Password	Specifies the current password.
New Password	Specifies the new password.
Confirm Password	Confirms the new password.
Submit	Applies the settings configured on this page.
Reset	Clears all fields and selections and allows you to enter new information.

4 International Calling

Optimum Voice Business Trunking offers an optional International Calling Service for direct-dialed calls made from the Customer's business or from any phone via the Optimum Voice International Calling remote access number to destinations outside of the United States, Puerto Rico, Canada and the U.S. Virgin Islands at per minute rates. The Customer must login to the Optimum Business Account Center and activate the service on the Optimum Business Trunk Pilot telephone number to activate the service and manage the monthly International spending limit for the account.

Activating International calling on the Pilot TN will enable International calling for all Direct Inward Dial (DIDs) telephone numbers as well. Blocking International calling for one or more DIDs is managed by the customer directly from the PBX phone system configuration. To minimum the exposure to fraudulent calling, It is recommended to limit International calling capability to those DID's that require it and set up an account spending limit that reflects what is necessary to run the business.

It is the Customer (and/or the Customer Agent's) responsibility to properly secure the customer's PBX to prevent the PBX from being compromised and fraudulent calls from being made by unauthorized (internal or external) users. If fraudulent calls are detected, Cablevision reserves the right to disable International Calling until the PBX is properly secured by the customer.

optimum.

5 PBX Configuration

The steps on the next pages describe the minimum configuration required to enable the PBX to use Optimum Business SIP Trunking for inbound and outbound calling. Please refer to the OpenScape Office MX product documentation for more information on advanced PBX features.

The configuration described here assumes that the PBX is already configured and operational with station side phones using assigned extensions or DIDs. This configuration is based on the Siemens OpenScape Office MX IP PBX vOMX_V2_R1.4.0_001.

The PBX is shipped with a default IP address of 192.168.1.2/24 for the LAN ports. Port 2 and port 3 are disabled. Port 1 (or port 4) should be connected to the phones in the same LAN segment. The PBX's WAN port should be connected to the Optimum Business SIP Trunk Adaptor's LAN port 1 in the same LAN segment. In the lab, the Optimum Business SIP Trunk Adaptor's LAN port 1 and the PBX's WAN port have been assigned with IP addresses of 10.10.100.1/24 and 10.10.100.11/24 respectively.

To configure the PBX, start the browser from a PC and HTTPS to the PBX's LAN or WAN IP address to access the OpenScape Office Assistant.

Click the "Continue to this website (not recommended)" link.



From the login screen, select your choice of language in the "Language" field, enter the default username of "administrator@system" (or enter "administrator" and then press the tab key) in the "User name" field, enter the password in the "Password" field and then click the "Login" button. Note: The initial default password is "administrator", and it must be changed when you log in for the first time.

	OpenSca	pe Office Assistant
SIEMENS The Siemens braid is used under Trademic Lectere of Siemeine AG by Siemens Enterprise Communications Griff & Co KG	Language.	English •
		adminstrator@system
		Login

Click the **"Administrators"** tab to create an administrator to have a user role of **"Expert"**. When logging in as an administrator with Expert user role, the PBX will allow you to make quick configuration changes without going through the lengthy Setup wizards.

				c	penScape Office Assistant	Logoff
Home	Administrators	Setup	Data Backup	License Management	Service Center	
lome						
OpenSca	ge Office Assistant		The documental For full functional is required on the	on for your system can be found it ity, an installed Java 2 ^m version PPC. <u>Coversional tions SUB.</u>	n the Service Center. 15/5x	
			SW Version: OM	X_V2_R1.4.0_001	System Date: 12/11/10 10:25 System Up Date: 08/11/10 17:12	

Click the "**Add**" button to create an administrator with Expert user role:

					OpenScape On	administrate	rØsystem Loo
lome	Administrators	Setup	Data Backup	License Managem	ent Service Center		
ministrat	ors						
Administ	trators List	Admi	nistrators List				
		Admin	istrators List				
			Login Na	ime	First Name	Last Name	User role
			administrator@syste	m system o	efault administrator		Advanced

Enter **"service@system"** (or enter **"service"** and hit the tab key) in the **"Login Name"** field.

Enter the same password in both the "**Password**" field and the "**Confirm Password**" field.

Select "Expert" in the "User role" field.

Click the "OK & Next" button.

						administrator@sestem	Logo
Home	Administrators	Setup	Data Backup	License Management	Service Center		
ministrat	tors						
Administ	trators List	Edit	Administrators				
		Edit Ar	Iministrators				
		LUR A	ministrators				
		Login M	lame	anica Baustam			
		Cogin	- and the	atticeBalaten			
		First N	ame				
		Last N	ame				
		Passw	ord				
		Confirm	Password				
		User ro	le	Expert •			
				Basic			
				Expert			
				**			

Now click the "Logoff" link to log out.

							rØsystem Log
Home	Administrators	Setup	Data Backup	License Managem	ent Service Center		
ministrat	ors.						
Administ	trators List	Admi	nistrators List				
		Admin	listrators List				E 1
			Login Na	sme	First Name	Last Name	User role
			administrator@syste	m system d	lefault administrator		Advanced
		E	service@system				Expert

Login again as **"service@system**" and the OpenScape Office Assistant should show an **"Expert mode**" tab. Unlike the Wizards under the Setup tab, Expert mode allows making quick changes to the configurations.



Navigate to **"Setup">"Wizards">"Basic Installation"** to perform Initial Installation setup for the PBX.

Click the "Edit" button next to "Initial Installation".



A new window will pop up when the Wizard starts running. Under System Settings, enter "**OpenScape**" in the "**Display Logo**" field, select "**OpenScape Office MX**" in the "**Brand**" field, enter PBX's LAN IP address (we are using "192.168.1.14" in this example, not the default IP address of "192.168.1.2") in the "**OpenScape Office – IP Address**" field, enter the subnet mask in the "**OpenScape Office – Subnet Mask**" field and click the "**OK & Next**" button. **Note**: The OptiPoint 420 Standard telephones (default password is "123456") should be configured to use the PBX's LAN IP address to access the PBX.

Setup - Wizards - Basic Installation - Initial Installation	9
Step 1 of 5	
System	Settings
Display Logo:	OpenScape
Brand:	OpenScape Office MX +
OpenScape Office - IP Address :	192.168.1.14
OpenScape Office - Subnet Mask:	255 255 255 0
Help Abort Bock OK & Next	

Under DHCP Global Settings, uncheck the **"Enable DHCP Server**" checkbox and click the **"OK & Next**" button. **Note**: In this example, all the IP phones have a pre-assigned IP address and have been configured to communicate with the PBX using H.323 protocol.

Setup - Wizards - Basic Installation - Initial Installation	9)
Step 2 of 5	ĥ
DHCP Global Settings	
Enable DHCP Server:	
Help Abort Back OK & Next	

Under Language settings, select country from the drop-down list of the "System Country Code" field and select language from the drop-down list of the "Language for Customer Trace Log" field. Under Time settings, enter date and time in the "Date and Time" fields and select time zone in the "Timezone" field and then click the "OK & Next" button.

Setup - Wizards - Basic Installation - Initial Installation					9)
Step 4 of 5					
Basic Cor	nfiguratio	n			
Language settings					
System Country Code:	USA		•		
Language for Customer Trace Log:	English				
Time settings					
Date and Time:	Day	Month	Year	hh.mm.ss	
	12 •	11 •	2010	12:46:17	
Timezone:	(GMT -08	00) Pacific	Time (US & Ca	inada); Tijuana 👻	
					1
Hele Abort Back OK & Next					
They cours out the meas					

Click the **"Finish"** button and you are done with Initial Installation setup.

Setup - Wizards - Basic Installation - Initial Installation	9)
Step 5 of 5	Ì
You have successfully completed the 'First Installation' wizard.	
Due to data modifications, the system performs a restart after finishing the wizard. Please close the browser after you click Finish and log in again after the system restarts if you want to perform further configurations.	
You have changed the IP address, so the system will perform a restart when you exit the wizard. On exiting the wizard, please close the Browser and log in again with the new IP address.	
For your own seculty, you should save the configuration data. To do this, upon completion of the wizard, choose Backup' in the main menu, and follow this by choosing Backup immediately.	
Help Abort Back Finish	

Navigate to **"Expert mode">"Telephony Server">"Voice Gateway**" to configure the PBX to use UDP for SIP protocol.



A new window showing the Voice Gateway screen will pop up.

Select "**SIP Parameters**". Make sure the "**SIP via UDP**" checkbox is checked. **Note**: The "Maximum possible Provider Calls" field shows "0" because the Optimum Business SIP Trunk Adaptor has not been set up as a SIP trunk service provider yet.

Click the "Apply" button.

Voice Gateway	
Voice Gateway	SIP Parameters
8.323 Parameters SIP Parameters Codec Parameters	t dt SIP Parameters
Internet Telephony Service Provider	SIP Transport Protocol
Gatekeeper	SIP via TCP: Yes
▶ P6X	SIP via UDP: [V]
	Provider Calls
	Maximum possible Provider Calls: 0
	Apply Undo Help

From the Voice Gateway screen, click **"Internet Telephony Service Provider**" to disable any Stun operation.

Click the **"Edit STUN Configuration"** tab, select **"Off"** from the drop-down list of the **"STUN Mode"** field.

Click the **"Apply**" button.

Click the Windows **"x"** (close) button (above the Voice Gateway screen) to close the window.

oice Gateway 📫 Tot	ernet Telephony Service Provider		
H.323 Parameters SIP Parameters Codec Parameters	Add Internet Telephony Service Provider	Edit STUN Configuration	Detect NAT Type
Code Programmers Enderer Teisphops Service President Fanise Ansir Ansir Ansir Ansir Ansir Ansir Code Transhurt Code	STUN Mode Detected Nat Type	Of Avays Automatic Use static IP Port Preserving router	server or server does not exiat
Priority Telecom			
 Siggate Skype for SIP SoTel with register 			

Navigate to **"Setup">"Wizards">"Basic Installation"** to perform Basic Installation setup for the PBX.

Click the "Edit" button next to "Basic Installation".

					OpenScape Of	ffice Assistan	it
						50	rvice@system Log
Home	Administrators	Setup	Expert mode	Data Backup	License Management	Service Center	
Wizards Basic Ins	tallation	Basic	c Installation				2
Network Telephon	/ Internet nes / Subscribers	E	dit Hultibox Sy Single usage a system. An ex	stem it initial setup if the curren isting multibox system car	tly configured box is to be used as part be resolved by using this waard.	of a multibox	
User Tek	ephony		dit Initial Instal Single Usage a	llation at Initial Setup. Country In	itialization, System IP address and DHC	9 Server	
Security			dit Basic Install Basic Setup of	lation System with Station Data	, Trunks, Network Parameters, Internet	t	
		E	dit Licensing Activate Licen	ses Online via the License	Server		

In the **"PABX number"** section, enter **"1"** in the **"Country code"** field, leave other fields as default and then click the **"OK & Next"** button. **Note**: The PBX may be equipped with other hardware like T1 and/or cards for analog trunks (that are not needed for SIP trunk service), as shown under the Overview section.

Setup - Wizards	- Basic Installation - Basic Installation			9
	Over	view		
	And the Terms			
Slot3				Slot4
Box1 Slot2		ADMIN OUT IN UPLINK		Slot 1
		1 2 3 4		
Note: At least the	configuration of the 'Country code' is needed for features such as 'I	nternet telephony' and 'Me	etMe conference'.	
PADA number	Country code:	1	(mandatory)	
	Local area code:		(optional)	
	PABX number:		(optional)	
Help	Abort Back OK & Next			

In the **"Function selection**" section, select the **"Display stations configuration**" radio button and then click the **"Next**" button.

Setup - Wizards - Basic Installation - Basic Installation	8)
Central Functions for Stations	
Before configuing individual stations, it is possible to execute certain functions, which affect all stations, Choose one of the functions below and upon selecting the function, configure the parameter shown. The button "Execute function" will carry out the function, You may proceed to the configuration of individual stations by selecting the "Next" button.	
Function selection	
Display stations configuration	
Delete all station call numbers	
Change preconfigured call and functional numbers	
Import CSV file with station data	
Ν	
4	
Help Abort Back Next Execute function	

Click the "OK & Next" button (we are not using the analog trunks).

				Analog tr	unk CLIP			
Slot3							Slot4	
Bax1 Slot2					ACMIN OUT IN UPLINK	DMZ WAN	Slot1	
s protocol is a	system-wide c	onfiguration. (Changes will affect	all analog trunk	is of the system.			
atocol	ECH							
	ran	•						
	r sk							
	rak	•						
	rak	•						
	rak							
	rak							
	rak							
	Fak							
	Fak							
	Fak							
	Fak	-						
	ran							

Click the "OK & Next" button (we are not using the analog trunks).

			MSI Flags		
Slot3			*		Slot4
Box1 Slot2		1 2 3			Slot1
	Tru	nk	Code	Box-SI-F	1.Li
Edit	24	##723		TLANI4 1-3-1-1	
Edit	25	##724		TLANI4 1-3-2-1	
Edit	26	##725		TLANI4 1-3-3-1	
Edit	27	##726		TLANI4 1-3-4-1	
Help At	ort Back	OK & Next			

Uncheck the **"No Internet Access"** checkbox, select the **"TCP/IP at WAN Port via an external Router"** radio button and then click the **"OK & Next"** button.

Setup - Wizards - Basic II	nstallation - Basic Installation		9
	Configure Inte	met Access	
Slot3			Slot4
Box1 Slot2			Slot1
No Internet Access			
Internet Access	DSL at WAN Port directly	0	
	TCP/IP at WAN Port via an external Router	•	
	TCP/IP at LAN Port via an external Router	0	
Halo Abort	Back OK & Nove		
neip woon	Dack On a rest		

Make sure the "Automatic Address Configuration (via DHCP)" checkbox is unchecked, enter PBX's WAN port IP address in the "IP Address" field", enter the subnet mask in the "Subnet Mask" field, leave other fields as default and then click the "OK & Next" button.

	Interne	t Access	
	and the	(Access	
Slot3	1		Slot4
		AGAIN OUT IN UPLINK DWC WAN USB HI	uer
Box1 Slot2			Slot1
		1 2 3 4	
	Automatic Address Configuration (via DHCP):	8	
	IP Address:	10.10.100.11	
	Subnet Mask:	255 255 255 0	
	MAC Address :	00:1a:e8:10:02:8f	
	Ethernet Link Mode:	Auto -	
	Max. Data Packet Size (bytes):	1500	
	Network Address Translation:	8	
	Bandwidth Control for Voice Connections:	None •	
	Bandwidth for Downloads:	10000	

Enter an IP address for the DNS server in the "**IP Address of DNS Server**" field, enter the Optimum Business SIP Trunk Adaptor's IP address in the "**IP Address of Default Router**" field and then click the "**OK & Next**" button.

Setup - Wizard	is - Basic Installation	- Basic Installation		9)
		Routing Co	nfiguration	
DNS Server				
		IP Address of DNS Server:	4222	
Default Router	r).			
		IP Address of Default Router:	10.10.100.1	
Help	Abort Bac	k OK & Next		

Uncheck the "**No call via Internet**" checkbox and then click the "**Add**" button to add the Optimum Business SIP Trunk Adaptor as an Internet Telephony Service Provider.

ietup - Wizari	ds - Basic Installation - Ba	sic Installation		
	Pr	ovider configuration	and activation for Internet Telephony	
No call via	Internet Activate Provider		Internet Telephone Camire Devider	
Add	Activate Provider	Other Provider	internet relepitony service Frontier	1
Edit	-	Amis		
Edit	-	Belgacom		
Edit		Cablecom		
Edit	F	COLT Frankfurt		
Edit		COLT London		
Edit	E	COLT Paris		
Edit		COLT UK & Europe		
Edit	F	COLT VPN		
Edit		COLT Zürich		
Edit	F	Detel		
Edit		Engin		
Help	Abort Back	OK & Next	Display Status	
Help	Abort Back	OK & Next	Display Status	

Enter a name in the **"Provider Name**" field. **Note**: that "EWN" is used in this example and the PBX will identify it as one of the service providers.

Check the **"Enable Provider**" checkbox.

Enter the Optimum Business SIP Trunk Adaptor's IP address in the **"Domain Name**" field.

For registration mode: Check the "Use Registrar" checkbox.

Enter the Optimum Business SIP Trunk Adaptor's IP address in the **"IP Address/Host name"** field. Enter **"5060"** in the **"Port"** field.

Enter "120" or other preferred numbers in the "**Reregistration Interval at Provider (sec)**" field.

In the Provider Proxy section, enter the Optimum Business SIP Trunk Adaptor's IP address in the "**IP Address/Host name**" field and enter "**5060**" in the "**Port**" field.

Setup - Wizards - Basic Installation - Basic Installation		9)
Internet Telepho	ny Service Provider	
Provider Name:	EWN	
Enable Provider.		
Domain Name:	10.10.100.1	
Provider Registrar		
Use Registrar:		
IP Address / Host name:	10.10.100.1	
Port	5060	
Reregistration Interval at Provider (sec)	120	
Provider Proxy		
IP Address / Host name:	10.10.100.1	
Port	6060	
Provider Outbound Proxy		
Use Outbound Proxy:		
IP Address / Host name:	0.0.0.0	
Port	0	
Provider STUN		v
neip Abort Back Or & next Del		

If the Optimum Business SIP Trunk Adaptor has been configured for static IP mode, instead of registration mode, uncheck the **"Use Registrar**" checkbox.

Setup - Wizards - Basic Installation - Basic Installation	۵)
Internet Telepho	ny Service Provider
Provider Name:	EWN
Enable Provider:	2
Domain Name:	10.10.100.1
Provider Registrar	
Use Registrar:	8
IP Address / Host name:	10.10.100.1
Port:	5050
Reregistration Interval at Provider (sec)	120
Provider Proxy	
IP Address / Host name:	10.10.100.1
Port:	5060
Provider Outbound Proxy	
Use Outbound Proxy:	8
IP Address / Host name:	0.0.0.0
Port	Ø
Provider STUN	
Help Abort Back OK & Next De	lete Data
	D ₂
one	😜 Internet Protected Mode: Off 🦷 🗸 🔩 100% 👻

Leave other fields as default and then click the "OK & Next" button.

Click the "Add" button to add the pilot DID for the Internet Telephony Station.

Name of Internet Telephony Station Add New Internet Telephony Station	Setup - Wizards	- Basic Installation - Basic Installation	9)
Name of Internet Telephony Station Add New Internet Telephony Station		Internet Telephony Stations for EWN	
New Internet Telephony Station Add New Internet Telephony Station			
Help Abort Back OK & Next		Name of Internet Lelephony Station	
Help Abort Back OK & Next	Add	ivew internet Leiephony Station	
Help Abort Back OK & Next			
Help Abort Back OK & Next			
Help Abort Back OK & Next			
Help Abort Back OK & Next			
Help Abort Back OK & Next			
Help Abort Back OK & Next			
Help Abort Back OK & Next			
Help Abort Back OK & Next			
Help Abort Back OK & Next			
Help Abort Back OK & Next			
Help Abort Back OK & Next			
Help Abort Back OK & Next			
	Help	Abort Back OK & Next	

Add one Internet Telephony Station and a phone number for the EWN provider for now. We will add all the stations and phone numbers we need for the voice gateway later in Export mode.

In the **"Internet Telephony Station for EWN**" section, enter the username (the pilot DID of 6316769659 in this example to match the Optimum Business SIP Trunk Adaptor configuration) in the **"Internet telephony station**" field. Enter an authorization name (if needed) in the **"Authorization name**" field. Enter the same password in both the **"Password**" field and the **"Confirm Password**" field. **Note**: The authentication info is not needed for static IP mode.

In the "Call number type" section, select the "Internet Telephony Phone Number" radio button.

In the **"Internet Telephony Phone Numbers"** section, enter the pilot DID and click the **"Add**" button.

Click the "OK & Next" button.

Setup - Wiza	rds - Basic Installation - Basic Installation	
	Internet Telephon	y Station for EWN
	Internet telephony station:	6316769659
	Authorization name:	6316769659
	Password.	
	Confirm Password:	
Call number	туре	
	Internet Telephony Phone Number	•
	Internet telephony system phone number	0
	Internet 1	elephony Phone Numbers
Add	6316769659	
Enter here all During configu	Internet Telephony Phone Numbers' provided by your network pro ration of the stations, you can assign the individual numbers to th	udar.
Help	Abort Back OK & Next	Delete Data

Click the "OK & Next" button.

Setup - Wizard	is - Basic Installation - Basic Installation	8)
	Internet Telephony Stations for EWN	
	Name of Internet Telephone Station	
Add	New Internet Telephony Station	
Edit	6316769659	
Help	Abort Back OK & Next	

Make sure the "**Activate Provider**" checkbox next to the newly created Internet Telephony Service Provider of "EWN" is checked and then click the "**OK & Next**" button.

	Pr	rovider configuration and activation for Internet Telephony	
No call via Inte	met		
	Activate Provider	Internet Telephony Service Provider	
Edit	E	COLT Frankfurt	
Edit		COLT London	
Edit	F	COLT Paris	
Edit		COLT UK & Europe	
Edit		COLT VPN	
Edit	8	COLT Zürich	
Edit	F	Detel	
Edit	8	Engin	
Edit	R	EWN	
Edit	–	Gamma StaticIP	
Edit	8	Gamma with Register	
Edit	E	Infopact	

Enter the maximum number of simultaneous calls for the SIP trunk service in the "**Number of Simultaneous Internet Calls**" field, "4" in the example. **Note**: The PBX does not require SIP trunk license and the default for this field is 32.

Setup - Wizards - Basic Installation - Basic Installation	ω,
Settings for Internet Telephony	
Simultaneous Internet Calls	
annunanyoup uno not cana	
Under 'Setup - Wizards - Network / Internet - Internet Access', you have entered the value Upstream up to (Kbps) = 10000	
In the 'Change Feature -> Internet Telephony' Assistant. This upstream allows you to conduct up to 32 Internet phone calls simultaneously for each active Int Telephony Service Provider. If the call quality deteriorates due to network load, you need to reduce this number of simultaneous calls.	ternet
Number of Simultaneous Internet Calls: 4	
Help Abort Back OK & Next	
Done 🔮 Internet Protected Mode: On 🖓	- @ 100% -

Click the "OK & Next" button (we are not using the ISDN/analog trunks).

	Special phone numbers	
ste:		
mergency calls should always be built u	p with ISDN or Analog Trunk for safety reasons.	
ease make sure that all special call nun	abers are supported by the selected provider without fail.	
Special phone number	Dialed digits	Dial over Provider
FAX/Modem	orace alles	Analog Trunk •
1	0C112	Analog Trunk •
2	0C110	Analog Trunk •
3	0C0137Z	Analog Trunk •
4	0C0138Z	Analog Trunk •
5	0C0900Z	Analog Trunk 👻
6	0C118Z	Analog Trunk 👻
7	0C116116	Analog Trunk 💌
8		Analog Trunk 👻
9		Analog Trunk 👻
10		Analog Truck *

If the PBX has been set up for static IP mode, you will see a green light for the EWN provider entry. The DID would also be considered "registered" (trusted) although there has been no SIP registration packet sent to the Optimum Business SIP Trunk Adaptor. Click the "**Next**" button to continue.

Setup - Wizards - Basic Installation - B	lasic Installation			9)
St	atus for the internet T	elephony Service Provide	r (ITSP)	
Provider		User		
Amis	Disabled			
Belgacom	Disabled			
Cablecom	Disabled			
COLT Frankfurt	Disabled			
COLT London	Disabled			
COLT Paris	Disabled			
COLT UK & Europe	Disabled			
COLT VPN	Disabled			
COLT Zurich	Disabled			
Detel	Disabled			
Engin	Disabled			
EWN	Enabled	6316769659	registered	
Gamma StaticIP	Disabled			
Common mitte Provintere	N			
Help Abort Back	Next			
		🕥 Internet I	Protected Mode: On	₹100% ·

If the PBX has been set up for SIP registration mode, you will see an orange light for the EWN provider entry. The DID would also be marked as "not registered". Click the "**Next**" button to continue.

Provider		User		
Amis	Disabled			
Belgacom	Disabled			
Cablecom	Disabled			
COLT Frankfurt	Disabled			
COLT London	Disabled			
COLT Paris	Disabled			
COLT UK & Europe	Disabled			
COLT VPN	Disabled			
COLT Zurich	Disabled			
Detel	Disabled			
Engin	Disabled			
EWN	Enabled	6316769659	not registered	
Gamma StaticIP	Disabled			
A	Pirested.			

Click the "OK & Next" button.

	'Network' and ISD	N configuration wizard complete	
lease proceed to connect the netwo IX .	rk components (DSL modern, PCs, LAN	phones) and the ISDN components (ISDN ports and devices) to your \ensuremath{O}	penScape Office
he installation wizard will continue w	th the configuration of the voice subscrift	bers.	
Help Abort	Jock OK & Next		

Click the "OK & Next" button (we are not using analog phones).

Slot3		Ī		i					Slat4	
Box1 Slot2		Ē	1 2			ADMIN CUT IN UPU			Slot1	
Take DID) from chan	ged call	numbe							
	Box	Slot	a/b- Port	Callno	Name	Direct inward dialing	Class of service		Call pickup	
Edit	1	3	1	250	STATION 250	250	International	• •		
Edit	1	3	2	251	STATION 251	251	International	•		

For each DID assigned for SIP trunk service, map it to an internal extension (under the **"Callno"** column) by clicking the **"Edit"** button next to the extension.

				S	elect a station	-LAN	Phones				
Slot3											Slot4
lox1 Slot2					ß	ACMIN 1		DME		D D D	Slot1
	Box	Slot	Callno	Name	Туре		Licence Typ	e	Licensed	Fax Call no.	Class of servic
Edit	1	1	100	•	System Cli	ient 🔻	Comfort User	•			International
Edit	1	1	101		System Cli	ient +	No License	•			International
Edit	1	1	102		System Cli	ient •	No License	•			International
Edit	1	1	103		System Cli	ient 🔻	No License	•			International
Edit	1	1	104		System Cli	ient +	No License	•			International
Edit	1	1	105		System Cli	ient •	No License	•		+	International
	1	1	106		System Cli	ient 🔻	No License	٠			International
Edit											

Enter a name in the "**Name**" field.

Enter the DID assigned for this extension in the "**Direct inward dialing**" field.

Select "**Comfort Plus User**" from the drop-down list of the "**License Type**" field. Leave other fields as default and click the "**OK & Next**" button.

Setup - Wizards - Basic Installation - Basic In	stallation		0
	Change Sta	ation	
	Station	Fax	i i
Name: (for Subscriber):	STATION 100		
Call number:	100		
Direct inward dialing (Number for Direct Inward Dialing)	6316769659	*	
direct inward dialing for Internet Telephony			
EWN	•	•	
Parameter			
Туре	System Client ·		
Device Type:	optiPoint 420 Standard		
Clip/Lin:	•		
Licence Type:	Comfort Plus User .		
Licensed:	Yes		
Language.	English U.S. +		
Call signaling internal: (Ringer pitch for internal calls):	Ring type 1 ·		
Call signaling external: (Ringer pitch for external calls):	Ring type 1 💌		
Help Abort Back 0	K & Next		

Click the **"OK & Next**" button after you are done with assigning DIDs to the internal extensions.

				Se	ect a station -LA	N Phones				
Slot3								7	Slot4	
lax1 Slat2					HEM.	IN OUT IN UPLINE		1	Slot1	
Take DID	from c	hange	ed call number	1.0						
					Direct inward					
	Box	Slot	Callno	Name	dialing	Туре	Licence Type	Licensed	Fax Call no.	Ir
Edit	Box 1	Slot 1	Calino 100	STATION 100	dialing 6316769659	Type System Client •	Licence Type Comfort Plus User •	Licensed	Fax Call no.	-
Edit Edit	Box 1	1 1	Callno 100 101	STATION 100 STATION 101	dialing 6316769659 6316769660	Type System Client • System Client •	Licence Type Comfort Plus User • Comfort Plus User •	Licensed	Fax Call no.	
Edit Edit Edit	Box 1 1	1 1 1	Callno 100 101 102	Name STATION 100 STATION 101 STATION 102	dialing 6316769659 6316769660 6316769661	Type System Client • System Client • System Client •	Licence Type Comfort Plus User • Comfort Plus User • Comfort Plus User •	Licensed	Fax Call no.	1
Edit Edit Edit Edit	Box 1 1	1 1 1	Callno 100 101 102 103	Name STATION 100 STATION 101 STATION 102	dialing 6316769659 6316769660 6316769661	Type System Client • System Client • System Client • System Client •	Licence Type Comfort Plus User • Comfort Plus User • Comfort Plus User • No License •	Licensed	Fax Call no.	
Edit Edit Edit Edit Edit	Box 1 1 1 1	1 1 1 1	Callno 100 101 102 103 104	Name STATION 100 STATION 101 STATION 102	6316769660 6316769660 6316769661 -	Type System Client • System Client • System Client • System Client •	Licence Type Comfort Plus User • Comfort Plus User • Comfort Plus User • No License • No License •	Licensed	Fax Call no.	
Edit Edit Edit Edit Edit Edit	Box 1 1 1 1 1	1 1 1 1 1	Callno 100 101 102 103 104 105	Name STATION 100 STATION 101 STATION 102	6316769660 6316769660 6316769661 - -	Type System Client • System Client • System Client • System Client • System Client •	Licence Type Comfort Plus User • Comfort Plus User • No License • No License • No License •	Licensed	Fax Call no.	
Edit Edit Edit Edit Edit Edit	Box 1 1 1 1 1	1 1 1 1 1	Callno 100 101 102 103 104 105	Name STATION 100 STATION 101 STATION 102	6316769660 6316769660 6316769661 - -	Type System Client • System Client • System Client • System Client • System Client •	Licence Type Comfort Plus User • Comfort Plus User • Comfort Plus User • No License • No License •	Licensed	Fax Call no.	

Click the "OK & Next" button.

Please	print out this list as a	a reference for setting	g up phone numbers	later.					
Licenses			Canto	e Cont	of Dive				
Augilabled	ad Frances		15/0	t Come	Priva				
Available/Or	red licenses.		1510	5/5					
Compured	promes.		0	3					
Callno	Name	Direct Inward dialing	Туре	Licence Type	Licensed	Fax Call no.	Fax Direct Inward Dialing	Access	Status
100	STATION 100	6316769659	System Client	Comfort Plus User					Enabled
101	STATION 101	6316769660	System Client	Comfort Plus User					Enabled
102	STATION 102	6316769661	System Client	Comfort Plus User	~	•	*		Enabled
103		5	System Client	No License		•			Disabled
104	-	-	System Client	No License			-		Disabled
105			System Client	No License					Disabled
106		-	System Client	No License			-		Disabled
107			System Client	No License			81 C		Disabled
108			System Client	No License			0		Disabled
109			System Client	No License		-	-		Disabled
110	-	-	System Client	No License		-	-		Disabled
Helo	Abort	Back OK	& Next	Print					

Leave all fields as default and click the "OK & Next" button.

Setup - Wizards - Basic Installation - Basic Installation	9
Configure MeetMe Conference	
Call number (7430 Direct inward dasing - (Number for Direct Inward Dialog)	
Help Abort Back OK & Next	

Make sure the **"This server requires an encrypted connection (TLS/SSL)"** checkbox is checked, leave other fields as default and then click the **"OK & Next"** button.

Setup - Wizards - Basic Installation - Basic Installation	
Configure E-M	all Forwarding
Server Information	
Outgoing Mail Server (SMTP)	
This server requires an encrypted connection (TLS/SSL)	z
Logon Information	
User Name	toot
Password	
Confirm Password	
User Information (Sender)	
E-Mail Address	root@hostname
Help Abort Back OK & Next Chec	k e-mail forwarding

Click the "Finish" button.



Navigate to "Expert mode">"Telephony Server">"Voice Gateway" to add Internet Telephony Stations and phone numbers for service provider EWN. A new window showing the Voice Gateway screen will pop up. Click "Internet Telephony Service Provider" and then click "EWN". Important: The configuration in this section may look redundant, but it is required for getting the SIP trunk service to work.

To configure the provider EWN for SIP registration mode, follow these steps:

oice Gateway	-	Internet Telephony Service Provider		
8.323 Parameters		Edit Internet Telephony Service Provider Delete Intern	unt Talanihanu Sanuina Desuidar	Add Internet Telephony Station
SIP Parameters				
Codec Parameters	_			
Internet Telephony Service Provide		Provider Name:	EWN	
Amis	_			
Arcor	_	Enable Provider:	1	
Belgacom	- 1	Provider Identifier in System:	Provider 1 +	
Cablecom	- 1			
COLT Frankram		Domain Name:	10.10.100.1	
COLT Conton		Provider Registrar		
COLT Parts		Use Registrar		
COLT VEN				
COLT THE		IP Address / Host name:	10.10.100.1	
Protei		Port	5060	
P Fromin			lagan	
- IWN		Reregistration Interval at Provider (sec)	120	
B 6316769659		Provider Proxy		
• freenetBusiness		IR Address / Host earer	10 10 100 1	
Gamma Static#	- 11	IP Address / Host name.	10.10.100.1	
Camma with Register		Port	5060	
Infopect		Provider Outbound Provo		
Internode	- U	Her Orthogonal Price	-	
OneCentral		Use Outbound Proxy.		
DOPAL.		IP Address / Host name:	0.0.0.0	
OpenIP				
Priority Telecom		Port	6	
Sipgate		Provider STUN		
Skype for SIP		IP Address / Host name:		
Soller with register				
▶ SoTel		Port	3478	
Tele2 NL-ASD				

Click the **Internet Telephony Station** under EWN (pilot DID of "6316769659" in this example) and then click "**MSNs**" to add another DID and map the DID to an extension.

Enter a DID ("6316769660" in this example) in the "**Internet Telephony Phone Number**" field. **Note**: The phone number "6316769659" has already been added by the Wizard.

Select next available internal extension from the drop-down list of the "**Internal Call Number**" field.

Leave other fields as default and then click the "Apply" button.

ce Gateway	* MON Colors		
1323 Parameters	PISH CIUY		
IP Parameters	Add HSN Entry		
odec Parameters			
Iternet Telephony Service Provider	Internet Telephony Phone Number		
Amis	Internet Telephony Phone Number	6316769660	
Arcor			
Belgacom	Internal Call Number:	101 STATION 101	-
Cablecom	Default Entry	171	
COLT Frankfurt	Deads Endy.	-	
COLT London			
COLT Paris			
COLT UK & Europe			
COLT VPN			
COLT Zurich			
Detel			
Engin			
Cim			
▼ 6316769669			
• M SNA			
6316769659			
CID ranges			

Repeat step "1" above to add all the DIDs and then click the "**Apply**" button. **Note:** Each DID in this configuration will use the pilot DID as its caller ID when placing outbound calls to the Optimum Business SIP Trunk Adaptor.

Click the Windows **"x**" (close) button (above the Voice Gateway screen) to close the window. **Note**: You may need to restart the PBX ("Service Center">"Restart/Reload" > "Restart") in order to get the PBX to send SIP registration packet to the Optimum Business SIP Trunk Adaptor.

Gateway	
ice Gateway	MSN Entry
H.323 Parameters	
SIP Parameters	Add PISH LIRTY
Codec Parameters	
Internet Telephony Service Provider	Internet Telephony Phone Number
Amis	Internet Telephony Phone Number:
Arcor	
Belgacom	Internal Call Number: 100 STATION 100 V
Cablecom	Defect Enter III
COLT Frankfurt	E E
COLT London	
COLT Paris	
COLT UK & Europe	
COLT VPN	
COLT Zürich	
Detel	
Engin	
* EWN	
▼ 6316769659	
▼ M SNs	
6316769659	
6316769660	
6316769661	
DID ranges	
freenetBusiness	
Gamma StaticiP	
Gamma with Register	
Infopect	
Internode	
OneCentral	
OPAL	

To configure the provider EWN for static IP, follow the steps below:

oice Gateway	Internet Telephony Service Provider	
H.323 Parameters	Edit Internet Telephony Service Provider Delete Internet Telephony S	ervice Provider Add Internet Telephony Station
SIP Parameters		
Codec Parameters		
Amin	Provider Name: EWN	
A strate	Reality Decidery, 173	
Performance	Enable Provider:	
Cablecom	Provider Identifier in System: Provider 1	•
COLT Frankfurt	Dennis Norma 10 10 10 10 10	
COLT London	Domain Name: 10.10.100.1	
COLT Paris	Provider Registrar	
COLT UK & Europe	Use Registrar:	
COLT VPN	Distance in the second s	
COLT Zurich	IP Address / host name, politicition in	
Detel	Port: 5050	
Engin		
▼ EVW	Reregistration Interval at Provider (sec) 120	
6316769659	Provider Proxy	
▶ freenetBusiness	IP Address / Host name: 10.10.100.1	
Camma StatictP		
Camma with Register	Port: 5050	
Infopect	Provider Outbound Proxy	
Internode	Use Outbound Proxy	
OneCentral	the contract of the	
▶ OPAL	IP Address / Host name: 0.0.0.0	
Openii	Det 1	
Priority Telecom	Fuit p	
Sipgate	Provider STUN	
 Skype for SP 	ALC: 10.1	

Click the "**Add Internet Telephony Station**" button to another station under EWN. Enter another DID ("6316769660" in this example).

Leave other fields as default and then click the "**Apply**" button.

sice Gateway	-	Internet Telephony Service Provide	ar.		
H.323 Parameters SIP Parameters Codec Parameters		Edit Internet Telephony Service Provider	Delete Internet Tek	phony Service Provider	Add Internet Telephony Station
Internet Telephony Service Provider Amia Arcor		Intern	et telephony station:	6316769660	2
Belgacom			Authorization name: Password		
COLT Frankfurt COLT London			Confirm Password:		
COLT THK & Europe COLT THK & Europe COLT Zaren COLT Zaren COLT Colt Cong Colt Cong Colt Cong Colt Colt Cong Colt Colt					
 OneCentral OPAL OpenIP Priority Talecom Siggate 					
Skype for SIP					

Click the **second Internet Telephony Station** and then click **"MSNs**" to add a phone number for it. **Note**: The phone number of "6316769659" has already been added for the first Internet Telephony Station.

Enter a DID ("6316769660" in this example) in the "**Internet Telephony Phone Number**" field.

Select next available internal extension from the drop-down list of the "**Internal Call Number**" field.

Leave other fields as default and then click the "Apply" button.



Repeat step "1" and "2" above to add all the stations (one for each DID) and then click the "**Apply**" button. **Note**: Each DID in this configuration will be used as caller ID when placing outbound calls to the Optimum Business SIP Trunk Adaptor.

Click the Windows " ${\bf x}$ " (close) button (above the Voice Gateway screen) to close the window.

bice Gateway	
oice Gateway	MSN Entry
H.323 Parameters	Addition of the second s
SIP Parameters	AND FISH CHUY
Codec Parameters	
Internet Telephony Service Provider	Internet Telephony Phone Number
Amis	Internet Telephony Phone Number
Arcor	
Belgacom	Internal Call Number: 100 STATION 100 -
Cablecom	E Default Entry
COLT Frankfurt	weath Diny.
COLT London	
COLT Paris	
COLT UK & Europe	
COLT VPN	
COLT Zürich	
Detel	
Engin	
▼ EWN	
¥ 6316769669	
· MSNs	
6316769659	
DID ranges	
★ 6316769660	
₩ M Dis	
DID ranges	
¥ 6316769661	
▼ 10306	
6316769661	
DID ranges	
FreenetBasiness	
Comma StaticiP	· · · · · · · · · · · · · · · · · · ·

Navigate to **"Expert mode"**>**"Telephony Server"**>**"Voice Gateway**" to configure codec parameters.

A new window showing the Voice Gateway screen will pop up. Select **"Codec Parameters"**.

For the **G.711 Mu-law** codec, select "**Priority 1**" in the "**Priority**" field, uncheck the "**VAD**" checkbox and select "**20**" msec in the "**Frame Size**" field.

For the **G.711 A-law** codec, select "**Priority 2**" in the "**Priority**" field, uncheck the "**VAD**" checkbox and select "**20**" msec in the "**Frame Size**" field.

For the **G.729A** and **G.729AB** codec, select "**not used**" in the "**Priority**" field. Check the "**Transmission of DTMF Tones according to RFC-2833**" checkbox. Leave other fields as default and then click the "**Apply**" button.

Click the Windows " ${\bf x}$ " (close) button (above the Voice Gateway screen) to close the window.

Voice Gateway	Codec Parameters							
N.323 Parameters SIP Parameters		Edit Codec Para	meters					
Codec Parameters								
Internet Telephony Service Provider	Codec	Priority	Voice Activity		Frame Size			
P Gatekeeper	G 711 A Jaw	Priority 2 -	VAD	11	20			
	0.111 4404	Thomas 2	THU.	-	2.0	msec		
	G.711 µ-law	Priority 1 •	VAD:		20	 msec 		
	G.729A	not used .	VAD		20	msec		
	G.729AB	not used 📼	VAD	Ø	20	- msec		
	T.38 Fax							
		T.38 Fax:	1					
	Use FillBitRemoval:							
	Max. UDP Datagram	n Size for T.38 Fax (bytes):	1472					
	Error Correction Used for T.38 Fax (UDP) t38UDPRedundancy •							
	Misc.							
		ClearChannel	×.	Frame Size:	20 • msec			
	RFC2833							
	Transmission of Fax/Modern To	mes according to RFC2833	N.					
	Transmission of DTMF To	mes according to RFC2833						
	Redundant Transmission of RFC2833 Tones according to RFC2198:							
	Analy Under	make						

Navigate to **"Expert mode"**>**"Telephony Server"**>**"Basic Settings"** to configure gateway parameters.

A new window showing the Basic Settings screen will pop up. Click **"System"** and then click **"Gateway"**.

Make sure the "Use RTP Proxy" checkbox is checked.

Leave other fields as default and click the "Apply" button.

Click the Windows " ${\bf x}$ " (close) button (above the Basic Settings screen) to close the window.

Basic Settings	Gateway	
▼ System	Edit Catavara Despective	-
System Flags	Los Gatemay Properties	
Time Parametera		
Display	General	
DESA	Customer name: -	
Intercept/Attendant/Hotline		
LDAP	Contract number:	
Texts	Pustern Name: One-Paren	
Flexible menu	system Name: OpenScape	
Speed Dials	Gateway Location.	
Gabeway		
• DynDit S	Contact Address:	
AFIEF Codepoints	Sustan Counter Code 118A	
Quality of service	System Country Code. USA	
Date and Time	Gateway IP Address: 192.168.1.14	
Port Management	Gateway Subnet Mask: 255 255 255 0	
Can Charges		
Access Points	International Prefoc	
voicemail	National Profes 1	
	Tracional Press, 1	
	Brand: OpenScape Office MX -	
	Additional Features	
	Use RTP Proxy:	
	Annhy Undo Hein	

Navigate to **"Expert mode**">"**Telephony Server**">"**Routing**" to find out the dial-out access code for SIP trunk (via "EWN" service provider). The dial-out access code is "80" and it is automatically set up by the PBX when "EWN" was added as a SIP Trunk service provider.

A new window showing the Routing screen will pop up. Select "**LCR**" (Least Cost Routing) and then select "**Routing table**". We can find out that the PBX has used Routing Table 4 (according to this example) to set up the dial rules for "EWN".

Routing	🚔 Rou	ting Table					
P IP Routing				Display Routing Ta	ble		
IP Mapping	1						
NAT							
PSTN	-	ndex	Route	-	Dial Rule	min. COS	Warning
Changes Of Service	1	EWN		2 - SIP		15	None
Dial Plan	2	ISDN		1-CO		1	None
▼ Routing table	3					15	None
1 - Table	4					15	None
2 - Table	5					15	None
3 - Table	6					15	None
5 - Table	7					15	None
6 - Table						16	Name
7 - Table	0					10	reging
8 - Table	9					15	None
9 - Table	10					15	None
10 - Table	11					15	None
11 - Table	12					15	None
13 - Table	13					15	None
14 - Table	14					15	None
15 - Table	15					15	None
66 - Table	16					15	None
17 - Lable							
19 - Table							
20 - Table		This is a preco	onfigured, fixed tabl	e entry.			
21 - Table		For configurat	ion use routing tabl	es 13 to 254, please	1. Sec. 1. Sec		
22 - Table							

Select "**Dial Plan**". We can find out that Dial Plan 19 and 20 are set up for Routing Table 4 with dial-out access code of "80". For example, to call (408) 351-7255, you can dial "80 408 351 7255" (Dial Plan 19) or "80 1 408 351 7255" (Dial Plan 20).

Photong Change Dial Plan PArticipant Dial Plan Name Dialed digits Routing Table Acc. code Emergency NAT Dial Plan Name Dialed digits Routing Table Acc. code Emergency Volt Dial Plan Name Dialed digits Routing Table Acc. code Emergency Volt 1 <th1< th=""> 1 <th1< th=""> 1</th1<></th1<>	outing	🚔 Dial Plan							
P Marging P Marging Nat Dial Plan Name Dialed cligits Routing Table Acc. code Emergency Vice 14 1 <th1< th=""> 1 1</th1<>	IP Routing			Change Dial Plan				_	
NAT Dial Plan Name Dialed digits Routing Table Acc. code Emergency LOR Cases of Soviet 1 - <	IP Mapping	1							
Dial Plan Name Dialed digits Routing Table Acc. code Emergency Coases Classes 1 - <th>NAT</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	NAT								
LCR 14 Cases of Service 15 Dat Fax 15 1-Tade 15 2-Tade 17 2-Tade 17 2-Tade 17 2-Tade 17 2-Tade 18 2-Tade 19 2-Tade 19 2-Tade 19 2-Tade 20 2-Tade 21 2-Tade 22 2-Tade 23 2-Tade 24 2-Tade 25 2-Tade 25 2-Tade 25 <td< th=""><th>PSTN</th><th>Dial Plan</th><th>Name</th><th>Dialed digits</th><th>Routin</th><th>g Table</th><th>Acc. code</th><th>Emergency</th><th></th></td<>	PSTN	Dial Plan	Name	Dialed digits	Routin	g Table	Acc. code	Emergency	
Cases 15 1 1 1 - Table 16 Standard 9CR0X.R00.000X 2 - 2 - Table 17 Standard 9CR0X.R00.000X 2 - 2 - Table 17 Standard 9C140X.R00.000X 2 - 3 - Table 18 Standard 9C112 - - 6 - Table 19 Standard 8CC140X.400.000X 4 - 7 - Table 20 Standard 8CC140X.400.000X 4 - 8 - Table 20 Standard 8CC140X.400.000X 4 - 9 - Table 20 Standard 8CC140X.400.000X 4 - 9 - Table 21 Standard 8CC112Z - - 10 - Table 22 Standard 8CC112Z - - 10 - Table 23 Standard 8CC112Z - - 10 - Table 25 Standard 8CC112Z - - 10 -	LCR	14					E3		
Control Control <t< td=""><td>Classes Of Service</td><td>16</td><td></td><td></td><td>1</td><td></td><td>10</td><td></td><td></td></t<>	Classes Of Service	16			1		10		
1 Take 16 Standard 9CX0X.N0X.X0X 2 - 2 1.560 17 Standard 9C1420X40X.X00X 2 - 3 1.560 19 Standard 9C1420X40X.X00X 2 - 4 1.560 19 Standard 9C1420X40X.X00X 2 - 6 1.560 19 Standard 9C1420X40X.X00X 4 - 6 1.560 19 Standard 9C140X40X.X00X 4 - 7 Take 20 Standard 9C140X40X.X00X 4 - 8 Take 20 Standard 9CC140X40X.X00X 4 - 9 Take 21 Standard 9CC140X40X.X00X 6 - 12 Take 22 Standard 9CC140X40X.X00X 6 - 12 Take 23 Standard 8CC140X40X.000X 6 - 12 Take 25 Standard <td>Boution table</td> <td>14</td> <td></td> <td></td> <td></td> <td></td> <td>6.1</td> <td>5.3</td> <td></td>	Boution table	14					6.1	5.3	
2 - Taske 17 Standard SC1400x400xX000x 2 - 2 - Taske 18 Standard 90011Z - - 6 - Taske 19 Standard 90011Z - - 6 - Taske 19 Standard 90011Z - - 6 - Taske 20 Standard 90011Z - - 8 - Taske 20 Standard 8001400x400000 4 - 9 - Taske 20 Standard 80011Z - - 9 - Taske 20 Standard 80011Z - - 9 - Taske 21 Standard 8101400x4000000 6 - 9 - Taske 23 Standard 81011Z - - - 10 - Taske 23 Standard 810011Z - - - 10 - Taske 25 Standard 820100x4000000 8 - - - 10 - Taske 26 Standard	1. Table	16	Standard	9CN00CN00C30000	2	•			
3. Taske 1 Standard 2011 Standard 2011 Standard 6. Taske 115 Standard 9001 Z - • - 6. Taske 19 Standard 9001 Z - • - 7. Taske 20 Standard 8001 K0000000 4 - - 8. Taske 20 Standard 8001 K000000 4 - - 9. Taske 20 Standard 8001 K000000 4 - - 9. Taske 20 Standard 8001 K000000 6 - - 10. Taske 22 Standard 8101 K0000000 6 - - 12. Taske 23 Standard 81001 K2 - - - 13. Taske 24 Standard 81001 K0000000 8 - - - 15. Taske 25 Standard 82010 K000000 8 - - - - 15. Taske 25 Standard 8	2 - Table	17	Standard	901,002,002,2002	2	-	10	10	
4 - Taske 18 Standard 900112 - - 6 - Taske 19 Standard B0C100X-800X 4 - 7 - Taske 20 Standard B0C140X-800X 4 - 8 - Taske 20 Standard B0C140X-800X 4 - 9 - Taske 20 Standard B0C140X-800X 4 - 9 - Taske 21 Standard B0C112 - - 9 - Taske 22 Standard B1C160X-800X 6 - 10 - Taske 23 Standard B1C140X-480X-800X 6 - 12 - Taske 23 Standard B1C112 - - - 13 - Taske 23 Standard B1C112 - - - - 14 - Taske 25 Standard B2C100X-80X-800X 8 - - - - 15 - Taske 25 Standard B2C100X-80X-800X 8 - -	3 - Table		Clandard	30 1980/180/1900	-		-	-	
5 - Table 19 Standard B0C100X400X000X 4 - 7 - Table 20 Standard B0C140X400X000X 4 - 8 - Table 20 Standard B0C140X400X000X 4 - 8 - Table 20 Standard B0C140X400X000X 4 - 9 - Table 21 Standard B0C100X400X000X 6 - 9 - Table 22 Standard B1C140X400X000X 6 - 12 - Table 23 Standard B1C140X400X00X 6 - 12 - Table 23 Standard B1C140X400X00X 6 - 12 - Table 23 Standard B1C140X400X00X 6 - 12 - Table 24 Standard B1C140X40X00X00X 8 - - 15 - Table 25 Standard B2C140X40X00X00X 8 - - - 15 - Table 26 Standard B2C140X40X00X0X 8 - - - <td>4 - Table</td> <td>18</td> <td>Standard</td> <td>9C011Z</td> <td>-</td> <td></td> <td></td> <td></td> <td></td>	4 - Table	18	Standard	9C011Z	-				
6 - Toole Contract	5 - Table	10	Standard	80CN00-N00-2000	4		100	11	
A - Table 20 Standard B0C1400X4000000X 4 • 9 - Table 21 Standard B0C011Z • • • 9 - Table 21 Standard B0C011Z • • • 9 - Table 22 Standard B1CN00440000000 6 • • 92 - Table 23 Standard B1C140004000000000 6 • • 92 - Table 23 Standard B1C140004000000 6 • • • 92 - Table 23 Standard B1C100040000000 6 • • • • 93 - Table 25 Standard B2C100040000000 8 • <td>6 - Table</td> <td></td> <td>Utan star G</td> <td>and the second</td> <td></td> <td></td> <td>-</td> <td></td> <td></td>	6 - Table		Utan star G	and the second			-		
- Table 21 Standard 80C0011Z • 10 Table 22 Standard 81C10004000000 6 • 11 Table 22 Standard 81C10004000000 6 • • 12 Table 23 Standard 81C1400440000000 6 • • 13 Table 23 Standard 81C14004000000 6 • • 14 Standard 81C112 • • • • • 15 Table 25 Standard 82C10004000000 8 • • • 17 Table 25 Standard 82C10004000000 8 • • • 17 Table 25 Standard 82C10004000000 8 • </td <td>7 - Table</td> <td>20</td> <td>Standard</td> <td>80C1-N00-N00-3000X</td> <td>4</td> <td>-</td> <td>1</td> <td></td> <td></td>	7 - Table	20	Standard	80C1-N00-N00-3000X	4	-	1		
19- Table 22 Standard B1CR00x400xx000x 6	9 . Table	21	Standard	80C0117			17	-	
11. Table 22 Standard B1Ch004000,0000 6 - 12. Table 23 Standard B1C1400400,0000 6 - - 12. Table 23 Standard B1C1400400,0000 6 - - - 14. Table 24 Standard B1C1400400,0000 6 - - - 15. Table 25 Standard B1C1400400,0000 8 - - - 17. Table 25 Standard B2C1004400,0000 8 - - - 19. Table 25 Standard B2C1004400,0000 8 - - - 10. Table 26 Standard B2C112 - - - - 10. Table 27 Standard B2C112 - <td>10 - Table</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	10 - Table								
12. Table 23 Standard BIC1480X-400X000X 6 - 12. Table 24 Standard BIC0112 - - 12. Table 24 Standard BIC0112 - - 12. Table 25 Standard BIC00X400X000X 8 - - 12. Table 26 Standard BIC0112 - - - 12. Table 26 Standard BIC0112 - - - 13. Table 26 Standard BIC0112 - - - 13. Table 26 Standard BIC0112 - - - 13. Table 26 Standard BIC0112 - - - - 13. Table 27 Standard BIC0112 - - - - -	11 - Table	22	Standard	81CN00(-N00(-)0000)	6				
13. Table 24. Standard 81:00112 -<	12 - Table	23	Standard	81C1-N006-N006-0000X	6		11	11	
44 - Table 24 Standard 8100112 - - 55 - Table 25 Standard 82010004000.0000 8 - - 155 - Table 25 Standard 8201004400.0000 8 - - - 157 - Table 26 Standard 820112 - - - - 197 - Table 26 Standard 820112 - - - - - 197 - Table 28 Standard 820112 - <td>13 - Table</td> <td></td> <td>organizaro.</td> <td>0101100100000</td> <td>•</td> <td></td> <td></td> <td>-</td> <td></td>	13 - Table		organizaro.	0101100100000	•			-	
15-Table 25 Standard 82CM004400.0000 8 • • 17. Table 25 Standard 82C14004400.0000 8 • • • 18. Table 25 Standard 82C14004400.0000 8 • • • • 19. Table 25 Standard 82C14004400.0000 8 •	14 - Table	24	Standard	81C011Z	-				
19: 188 25: 0atuation 0: 0atuation 0: 0atuation 10: 1able 25: Standard B2C1400x4000x000 0: - 10: 1able 25: Standard B2C1400x400x000 0: - 10: 1able 27: Standard B2C112 - 10: 1able 28: Standard B2C112 -	15 - Table	25	Standard	82CN00_N00_0000	8		12	10	
26 Standard 82C140X400X000X 8 - 19-Table 27 Standard 82C011Z - - 29-Table 28 Standard 82C0002000X 10 -	16 - Table 17 - Table	15	Clandero	OF OLEVELEVELOVEL			-	-	
19- Table 27 Standard 82/001/2 - 20- Table 28 Standard 82/000-0000000 10 -	18 - Table	26	Standard	82C1-N00(-N00(-)0000	8	-			
20 - Table 28 Standard 83(2400.4000.4000.4000.4000.4000.4000.4000	19 - Table	27	Standard	8200117			10	10	
21 Table 28 Standard 83CN0X-N0X-X00X 10 •	20 - Table	21		NEW THE					
	21 - Table	28	Standard	83CN005N0053000X	10		171	11	
	23 - Table	· Analy	tinda	and the second se					

The PBX has also set up Dial Plan 21 with an "80" access code for International call, but it has not included this rule for Routing Table 4. To allow the PBX to place International call:

Select "4" in the "Routing Table" field for Dial Plan 21.

Click the "Apply" button.

Click the Windows " ${\bf x}$ " (close) button (above the Basic Settings screen) to close the window.

Routing	Dial Plan						
P Routing			Channes Dial Blas				_
P Mapping	8		Change that Pain				
▶ NAT							
PSTN	Dial Plan	Name	Dialed digits	Routing	Table	Acc. code	Emergency
▼ LCR	14					8	13
Classes Of Service							_
Dial Plan	15			1			
Routing late	16	Standard	9CN20(-N20(-)000(2	*	E3	1
2 Table		A				100	
3 - Table	1/	Standard	901-1000-1000-0000	2	•		
4 - Table	18	Standard	9C011Z		-	E3	13
5 - Table							_
6 - Table	19	Standard	80CN00-N00-30000	4	•		
7 - Table	20	Standard	80C1-N20I-N20I-3000X	4	-	12	
8 - Table							
9 - Table	21	Standard	80C011Z	4	+		
10 - Table	22	Standard	81CN00-N00-30000	6	*	171	12
11 - 1able 17 - Table						_	
12 - Table	23	Standard	81C1-N00-N00-30000	6	-		
14 - Table	24	Standard	8100117			111	10
15 - Table							
16 - Table	25	Standard	82CN00(-N00(-)0000	8	•	E3	
17 - Table	26	Standard	8201-N00-N00-2000			12	12
18 - Table	20	Standard				-	
19 - Table	27	Standard	82C011Z		-		
20 - Table	28	Standard	RICKYY MYY YOUY	10	-		
21 - 14000	10	CHARLEN IN	D.B. MANIFIAA AAA			-	-

Navigate to **"Expert mode"**>**"Station**" to create an Auto-Attendant. A new window showing a Station screen will pop up. Click **"Station**", click **"Application-Suite**", click

"Auto-Attendant" and click on the **"815 7410**" entry ("815 7410" is the first available entry in the example) to configure an Auto-Attendant.

Note: The Auto-Attendant supports only RFC-2833 DTMF.

Enter a name in the "Auto Attendant" field.

Enter the DID assigned for the Auto-Attendant in the "Direct inward dialing" field.

Leave other fields as default and then click the "**Apply**" button. Once the Auto-Attendant is configured, it will answer external calls to the DID ("631-676-9662" in this example) or internal calls to "7410".

Click the Windows " ${\bf x}$ " (close) button (above the Basic Settings screen) to close the window.

ation	-	Station				
Station						Edu Con a Kenti
P Clients		cont station parameters		Cort station hage		Cost Group/Chin
Analog Stations						
ISON Stations		Station - 815				
Virtual Stations		A.1		7440		
Application-Suite		Ca	i number.	7410		
Auto-Attendant			Name:	Auto Attendant	_	
815 7410 Auto Attendant						
816 7411 -		Direct inwar	rd dialing:	6316769662		
817 7412 -		Dev	ice Type:	virtual		
818 7413 -						
819 7414 -			Clip/Lin:	-		
820 7415 -	=		Access:			
821 7410 -		Darameter				
8227417-				franked a		
874 T448		Extens	ion type:	Standard •		
825 7420 -		L	anguage:	English U.S.		
826 7421 -						
827 7422 -		Call signaling	g internal:	Fong type 1 +		
828 7423 -		Call signaling	external:	Ring type 1 -		
829 7424 -						
830 7425 -		Class of sena	ce (LCR):	15 •		
831 7426 -		Hotli	ine Mode:	Off		•
832 7427 -						
833 7428 -			Hotine:	None -		
834 7429 -	1	Licer	nce Type:	No License		
Fax						
Contact Contor Pax						
Pair King						

Navigate to **"Expert mode"**>**"Telephony Server"**>**"Basic Settings**" to configure the Auto-Attendant to route calls for operator to an extension. A new window showing the Basic Settings screen will pop up. Select **"System"** and then select **"Intercept/Attendant/Hotline**".

Select an extension by name from the drop-down list of the "**Day**" field and the

"Night" field (extension 100 in this example).

Check the **"on RNA**" checkbox.

Check the "on Invalid" checkbox.

Check the "on Incomplete" checkbox.

Enter "0" in the "Call number Internal" field.

Leave other fields as default and click the "**Apply**" button.

Click the Windows **"x"** (close) button (above the Basic Settings screen) to close the window.

Basic Settings	
Basic Settings	Intercept/Attendant/Hotline
▼ System	Edit Intercept/Attendant/Hotline
System Flags	
Time Parameters	
Display Disp	Intercept position
Intercept/AttendantHotline	
LDAP	Day: 100 STATION 100 •
Texts	
Flexible menu	Night: 100 STATION 100 •
Speed Dials	Central intercept position
Gateway	Parter None
Dyn0KS	Koste, Hone -
AFIEF Codepoints	Call scenario
Quality of Service	Call Homoer.
Date and Time	Intercept to intercept position
Port Management	on RNA: 📝
e can charges	and here
Access Points	on Busy.
	on Invalid:
	on Incomplete:
	on unanswered recall:
	Telephone lock intercept
	Call number: None •
	Attendant code
	Call number Internal: 0
	Apply Undo Help

Navigate to **"Expert mode">"Telephony Server">"Voice Gateway"** to add the DID to the SIP trunk service.

A new window showing the Voice Gateway screen will pop up. For SIP registration mode, follow the previous example and navigate to "Internet Telephony Service **Provider**">"EWN">"6316769659">"MSNs".

Enter the DID assigned to the Auto-Attendant in the "**Internet Telephony Phone Number**" field.

Select **"7410 Auto Attendant"** from the drop-down list for the **"Internal Call Number"** field.

Leave other fields as default and then click the **"Apply**" button.

Click the Windows " \mathbf{x} " (close) button (above the Basic Settings screen) to close the window.

Laterway	MSN Entry	
ameters	Add HOI Fatry	
Parameters	ADD FISH CHUY	
c Parameters		
met Telephony Service Provider	Internet Telephony Phone Number	
nia	Internet Telephony Phone Number:	6316769662
cor		
lgacom	Internal Call Number:	7410 Auto Attendant •
Llecom	Default Entry:	•
OLT Frankfurt		
ALT London		
ALT Parts		
ALT UK & Europe		
ALT VPR		
6316769669		
T M Slin		
6316769659		
6316769660		
6316769661		
DID ranges		
renetBusiness		
imma StaticIP		
mma with Register		
lermode		
eCentral		
41		

If the PBX has been set up for static IP mode, follow the previous example and navigate to "Internet Telephony Service Provider">"EWN">"Add Internet Telephony Station" to add another Internet Telephony Station and a phone number for the Auto-Attendant.

e Gateway	
ce Gateway	MSN Entry
1323 Parameters	AM HOLEstry
IP Parameters	
odec Parameters	
sternet Telephony Service Provider	Internet Telephony Phone Number
Amis	Internet Telephony Phone Number: 6316769662
Arcor	
Belgacom	Internal Call Number: 7410 Auto-Attendant -
Cablecom	B Default Entry:
COLT Frankfurt	
COLT London	
COLT Paris	
COLT UK & Europe	
COLIVEN	
Contra Co	
Crigan	
- Contraction	
- Martin	
DE renorm	
× 6316755560	
D M CRIS	
DID ranges	
¥ 6316769661	
MSNs	
DID ranges	
₩ 6316769662	
▼MSNs N	
DID ranges	
	· Andre Hade Hale

Navigate to **"Expert mode"**>"**Telephony Server**">"**Basic Settings**" to enable the system flags needed for supporting conference.

A new window showing the Basic Settings screen will pop up.

Click **"System Flags**".

Check the **"Through-connection for external FWD on**" checkbox.

Check the "Hunting to external call forwarding destination" checkbox.

Check the "SIP Prov. to SIP Prov. Transit" checkbox.

Check the **"External traffic transit**" checkbox.

Leave other fields as default and click the **"Apply**" button.

Click the Windows " \mathbf{x} " (close) button (above the Basic Settings screen) to close the window.



Navigate to "**Setup**">"**Wizards**">"**Central Telephony**" to configure MOH (music on hold).

Click the "Edit" button next to "Music on Hold/Announcements".

					OpenScape O	ffice Assistant	
						service@	system <u>Logo</u>
Home	Administrators	Setup	Expert mode	Data Backup	License Management	Service Center	
ctup		Cent	ral Telephony				
Wizards Basic Insi	tallation						
Network Telephon	/ Internet ies / Subscribers	E	dit CO Trunk ISI Point-to-multip of analog trun	XII / Analog oint connections (MSN) a is	nd PABX number for ISDN connections,	and assignment	
Central T User Tele Security	elephony phony	Edit Internet Telephony Access parameters of the Internet Telephony Service Provider ((TSP), e.g., user account, paramord, SP station number					
		E	Ldit Voicemail Access numbers for integrated voicemail. Set up of voicemail boxes				
			dit Phone Book Set up central	/ Speed Dialing speed-dial destinations fo	or the system's internal phone book		
			dit Call Detail R Set up cal det	ecording al recording connection p	arameters for call detail applications		
			dit Music on Ho Record new m answering	d / Announcements elodies and announcemen	its for Music on Hold and announcement	tbefore	
		e	Edit Entrance telephone Set up cal allocation and access authorization for the entrance telephone at the analog station connection				

Click the "OK & Next" button if the next screen is not about Music On Hold. On the screen with a "Music On Hold" section, check the "Activate internal Music on Hold" checkbox, select "System Internal Music on Hold" from the drop-down list of the "Wave File" field and then click the "OK & Next" button. Click the "Finish" button on the last screen.

Setup - Wizards - Central Yelephony - Music on Hold / Announcements	9)
Step 2 of 5	Â
Music On Hold	
The system internal Music on Hold is used while executing the features Consultation, Hold/Retrieve and Call Park.	
Activate internal Music on Hold : 🛛 😢	
Wave File : System Internal Music on Hold +	
Description : Music On Hold	
Help Abort Back OK & Next	

To back up the current configuration, navigate to "Data Backup">"Backup -Immediate". Enter a comment in the "Comment" field, select the radio button for the device and then click the "OK & Next" button.

Administrators Setup Expert mode Data Backup License Management Service Center ackup - Immediate Schodudd tackup ackup Sets Set up Device Devices Devices Devices Path Login name MM M Mard dok - Immipresident/backup - 5 C USB Dexice	(Office Assistar	OpenScape (
Home Administrators Setup Expert mode Data Backup License Management Service Center Rackup Backup - Immediate Backup - Immediate Immediate Immediate Immediate Schedded Backup Backup - Immediate Commert: EVN/SipTruMService Immediate Setup Devices Device Server address Path Login name M Commert: EVN/SipTruMService Immediate Immediate Immediate Setup Devices Parka Ammediate Immediate Immediate Setup Devices Parka Server address Path Login name M Commert: EVNS Server address Path Login name M Commert: EVNS Server address Path Login name M Commert: EVNS Server address Path Server address Server address Commert: EVNS Server address Path Server address Server address	viceOsystem Loor								
ta tachun Backup - Immediate Scholadd Backup - Immediate Restore Backup Sets Set up Devices Devices Parth Login name Mil		Service Center	icense Management	Data Backup	Expert mode	Setup	Administrators	lome	
Backup - Immediate Scheduled Backup Scheduled Backup Server Comment: EWN_SipTrunkService Devices Device Server address Path Login name IM Hard dak Immediated address Path Login name IM Hard dak Immediated address Immediated addre					Immediate	Deatur		ta Backup	
Schedule diskup Restore Name Schedule diskup Setup Setup Cemman: Schedule diskup Schedule diskup Cemman: Devices Device Device Server address Path Login name M # Hard disk - Math disk -	100	Immediate	Backup -						
Bectore Bectore Set up Devices	Name							Schedule	
Services Devices Device Server address Path Login name Mi Hard disk - /mrt/parsistent/backup - 55 USB Device 100 HITPS 100	Diagnosis			Service	EWN SipTrur	Commer		Restore	
Device Server address Path Login name Mill • Hard disk - /mit/persistent/backup - 5 · USB Device - - 10 • HTTPS - - 10	C sugar					Devices	iets	Backup S	
Hard disk - /mrd/persisten//backup - 5 USB Dexce 10 HTTPS	Max. backup se	Login name	Path	Server addres	Device	Devices	evices	set up the	
C USB Dexice · · · 10 ● HTTPS · · · · ·	5		/mnt/persistent/backup		disk	Han			
• нпрз • • • •	10				Device	C USE			
			2		PS	O HTT			

Most of the configurations do not require a reset to take. When in doubt, back up the current configuration to a file and restart the PBX.

IMPORTANT: The Cablevision network only supports inband DTMF tones. Some functions of the Siemens OpenScape Office MX PBX only supports out-of-band DTMF tones. In order for the Siemens OpenScape Office MX PBX to operate correctly with the Cablevision network, the Optimum Business SIP Trunk Adaptor must be configured to convert out-of-band DTMF tones sent by the Siemens OpenScape Office MX PBX to inband DTMF tones and vice versa. To enable this conversion, log into the Optimum Business SIP Trunk Adaptor using the login and password specified in the Optimum Business SIP Trunk Adaptor Set-up Guide. On the **SIP Trunk Configuration** page, you **must** check the **Convert Inband DTMF** checkbox, and click the **Submit** button to update this setting.

optimum	le i					
Configuration Menu	SIP Trunk Configuration					
Customer LAN Settings	Select your PBX:	Siemens OpenScape Office MX				
SIP Trunk Configuration Diagnostics	 Passive connection using the local, private IP address of the PBX 					
• System	This address must be on the same subnet as the IP Address that is specified for the LAN interface					
	PBX Address:	192.168.1.10				
	Active connection using	registration				
	User Id:					
	Password:					
	Convert Inband DTMF:					
	Submit Reset					
	Trunk Status:	Registered				
	DID's					
	6316769522 (Pilot number) 6316769523 6316769524 6316769525	•				