

Optimum Business Trunking and the Panasonic KX-NCP500 IP PBX V2.0502 Configuration Guide





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1 Overview

The purpose of this configuration guide is to describe the steps needed to configure the Panasonic 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 Configuration		
Configuration Menu • Customer • LAN Sattings SIP Trusk Configuration • Diggnestics • System	Select your PBX: Passive connection u This address must be on the interface PBX Address: Active connection using	Assense Assense to be a specified for the PBX assense subset as the IP address of the PBX assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for the LA assense subset as the IP Address that is specified for	
	User Id: Password: Convert Inband DTMF:	2000E	
	Status: Trunk Status: DID's 5164838899 (Pilot number)	Not Registered	
	5164939768 5164939769 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 Semm.
	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

Field	Description
Pbxinstall Link	Select 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 Change the GUI password by filling in the fields below. The password		<u>Help</u>
Configuration Menu • Customer • LAN Sattings <u>SIP Truck</u> <u>Configuration</u> • Diagnostics • System	Username: Current Password: New Password: Confirm Password: Submit Reset	pbxintali	



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 page describe the minimum configuration required to enable the PBX to use Optimum Business SIP Trunking for inbound and outbound calling. Please refer to the Panasonic KX-NCP500 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 KX-NCP500 V2.0502.

- 1. The PBX, the phones and the Optimum Business SIP Trunk Adaptor should be on the same LAN segment. The PBX is shipped with 2 default IP addresses for the LAN port, one for the IPCMPR card (192.168.0.101/24) and the other the VoIP DSP card (192.168.0.102/24). The IPCMPR card is used to communicate with the SIP Trunk Adaptor using SIP protocol and to communicate with the phones. The phones in this test setup communicate with the PBX using MGCP protocol. The VoIP DSP card is used to send and receive media traffic between the phones and the PBX. The PBX should have its gateway set to the Optimum Business SIP Trunk Adaptor's port 1 LAN IP address (i.e.: 192.168.0.1/24).
- To configure the PBX, a configuration GUI, PBX Unified Maintenance Console, is needed. From the CD that shipped with the PBX, install the configuration GUI by running the "UPCMCv5.1.2.3_US_R1.exe" program.
- 3. Invoke the PBX Unified Maintenance Console program from the PC and you should see a screen with a different level of Programmer Code and Password. Always use the Installer level of Programmer Code and Password when configuring the PBX. Click the "**OK**" button to continue.

PBX Unified Maintenance Console				
Information				
Information before programming				
<< Default Programmer Code (saved in PC) >>				
Installer level : INSTALLER				
Administrator level : ADMIN				
User level : USER				
<< Default Password (saved in PBX) >>				
Installer level : 1234				
Administrator level : 1234				
User level : 1234				
The administrator level password is used for PBX Web Manager also.				
Changing password from default is strongly recommended to prevent unexpected access.				
<< Multi-site PBX Manager >>				
The multi-site PBX manager can modify system data of master PBX and copy to another PBX in				
OK(0)				

4. Enter the installer-level Programmer Code (i.e.: "INSTALLER") in the "Enter Programmer Code" field and click the "OK" button.

PBX Unified Maintenance Console			
	Alter Alter		
Enter Pro	rammer Code :		
(Standard PCMC		
Multi-site PBX Manager			
Multi-site PBX Manager (Demo mode)			
Automatically Login	OK(O) Cancel(C) Information(I)		
All Right Reserved © Panasonic Communications Co. Ltd.2007			

5. Click the "Connect" button to set up a connection with the PBX.



 Select the "LAN" radio button, enter the "IP address of the IPCMPR card" in the "IP Address" field, enter the "installer-level password" in the "Enter Password" field and hit the "Connect" button.

PBX Unified Maintenance Console
Connect
Profile File(P)
Connection Property
PBX Model : KX-NCP500/1000 V
● LAN
LAN Modem RS-232C USB
IP Address : 192.168.0.101
Port : 35300
Enter Password : Save Password *) Please change the password frequently.
Connect(0) Cancel(C)

7. To start configuration of the PBX for SIP Trunk Service from the initial configuration screen, select "**1.Configuration**" and click on "**1.Slot**".

default - KX-NCP Maintena	ance Console		And and a design of the local division of th	
File(F) Disconnect(D) Tool(F) Utility(U) View(V) Window(W)	Help(H)		
I II I				
System Menu	×			
1.Configuration				
I.Slot				
2.Portable Station				
of 3.Option				
4.Clock Priority				
열김 옷 옷 웃었다				
编입망드(State 11)				
2 Custom				
2.System	-			
4 Extension	-			
6 Ontingal Daving				
C Cashua	_			
7 TDC				
e ADC				
9 Driveta Natwork				
40.00 8 Incention Call				
11 Maintenance				
Internetive Vede : default (1.510)	Tree NOTER	Louis Installer	Marrison 002 000	Designed and
Interactive mode : default (LAN)	Type : muebu0	Level, installer	version002-000	Regionuuz-uuz

8. Move the mouse over the **"IPCMPR card**" and select **"card property**" to verify/configure the LAN Setting.

adefault - KX-NCP Maintenanc	e Console - [1. Configuration	1. Slot]		
File(F) Disconnect(D) Tool(T)	Utility(U) View(V) Window	v(W) Help(H)		_62
e 🖉 🔊 🧬				
System Menu	X 1.1 Slot			
1.Configuration				
1.Slot	Refresh(E) C	lose(L) Summary(S)	Activation Key(A) Phys	ical Slot: 5
2.Portable Station				Regular Slot Card >
6 3.Option				DLC8
- Clock Priority			Took Allowed	DLC16
역 이 가격 밖, [일 사] 입				SLC16
	Physic	al Slot	IPCMPR Virtual Slot	OPB3
			IP Phone Registration(R)	T1
				DHI CA
				LCOT4
				PRI23
[[[[안 이 [] : : : : : : : : : : : : : : : : : :				
	Panasonic	ICK-NCP500		
化化合金 化自动检查测试剂				
2.System	3			6
3.Group				
4.Extension	-			
5.Optional Device		PRI23		Card Property
6.Feature	- I -	·		SVM Property
7.TRS				
8.ARS	_			
9.Private Network				
10.CO & Incoming Call				
11.Maintenance				
Interactive Mode : default (LAN)	Type : NCP500	Level : Installer	Version002-000	Region002-002

 Enter the Optimum Business SIP Trunk Adaptor's IP address assigned to port t 1 in the "Default Gateway" field and hit the "OK" button. This is step 2 in the Optimum Business SIP Trunk Set-up Guide.

default - KX-NCP Maintenance Co	onsole - [1.Configuration - 1.Slot - Card Pro	operty - IPCMPR]	
File(F) Disconnect(D) Tool(T) Util	lity(U) View(V) Window(W) Help(H)		_Ø×
🕝 🖪 😰 🧬			
System Menu X	1.1 Slot Card Property - IPCMPR		
1.Configuration			
1.Slot	OK(O) Cancel(C) A	pply(A)	
2 Portable Station			
da 3.Option	LAN Setting VolP-DSP Option Pr	ort Number LAN Status DHCP	
4.Clock Priority	Description	Value	
	DHCP Client	Disable	
	MAC Address for IPCMPR-Card	00:80:F0:A9:38:98	
	IP Address for IPCMPR-Card	192.168.0.101	
	MAC Address for VolP-DSP	00:80:F0:A9:38:99	
	IP Address for VoIP-DSP	192.168.0.102	
	Subnet Mask	205.205.205.0	
	Speed/Duplex for Main Port	Auto Negotiation	
	Speed/Duplex for Maintenance Port	Auto Negotiation	
	LAN Disconnect Decision Time	58	
노글 걸렸는 것 환자님 것	DHCP Port Number	67	
	DHCP Time Out	10 s	
방향상 등 영화 등 (영화 등) 등 등			
2.System			
3.Group			
4.Extension			
5.Optional Device			
6.Feature			
7.TRS			
8.ARS			
9.Private Network			
10.CO & Incoming Call			
11.Maintenance			
Interactive Mode : default (LAN)	Type : NCP500 Leve	el : Installer Version002-000	Region002-002

10. Move the mouse over the "IPCMPR Virtual Slot" and select "Select Shelf".



11. Move the mouse over the "**V-SIPGW16**" card and select "**OUS**" as we need to take the V-SIPGW16 card out of service before making changes to the parameters.

File(F) Disconnect(D) Iooi(T)	HER (II) Very (I) Men	dam (M) Hala (H)				
A	ouny(o) view(v) vie					
System Menu	X 115bt 244 TB	C Callings 2.4.2 Caller ID Ma	Effection 2.1.4 Distancelos	10.1.00 Line 5	allings 2421 gest é se	ana Driavitu 2.6 4 Main
1 Configuration	A 1.1 SIG. S.1.1 IR	S Settings 3.1.5 Caller ID MO	S. 1.4 Dialing plan	TO. T CO Life 3	Settings 3.1.2 EocarAcci	ess Phoney 2.6.1 main
The t Stat	Refresh(E)	Close(L) Summary(S)	Activation Key(A)	IPCMPD Virtua	I Slot 1	
2.Portable Station					VIDEVT22	
0 3.Option	Personal and		anasemie avona		V-SIPEXT32	
5 4. Clock Priority				-	V-IPGW16	
			ina at	() leases	V-SIPGW16	
	Dhu	eleal Slot	IDCMDD Virtual S	lot	V-IPCS4	
	ruy	sical slot	IF CMFR VIItual 3			
			IP Phone Regist	ration(R)		
				20125-233		
				L		
		100.1		-		
	V-IPEXT32				Virtual 32-Channel VolP	Extension Card
	V-IPEXT32				Virtual 32-Channel VolP	Extension Card
	V-IPEXT32				Virtual 32-Channel VolP	Extension Card
	V-IPEXT32	8			Virtual 32-Channel VolP	Extension Card
	Panason	IC КХ-НСР500			Virtual 32-Channel VolP	Extension Card
	Panason				Virtual 32-Channel VolP	Extension Card VIRTUAL SHELF
	Panason		8		Virtual 32-Channel VolP	VIRTUAL SHELF
2.System	Panason		8		Virtual 32-Channel VolP	VIRTUAL SHELF
2.System 3.Group	Panason		8 8 8		Virtual 32-Channel VolP	VIRTUAL SHELF 8 7
2.System 3.Group 4.Extension	Panason	IIC KX-NCP300	<u>*</u>	V-SIPEXT32	Virtual 32-Channel VolP	VIRTUAL SHELF 8
2.System 3.Group 4.Extension 5.Optional Device	Panason	IC KA-HE7500 Trunk	8 8	v-sipext32	Virtual 32-Channel VolP	VIRTUAL SHELF 8 7 6
2.System 3.Group 4.Extension 5.Optional Device 6.Feature	Panason	ic KANCOSO Trunk	© ©	V-SIPEXT32 Question	Virtual 32-Channel VolP	VIRTUAL SHEU VIRTUAL SHEU 8 7 6
2 System 3 Group 4 Abtension 5 Optional Device 6 Fedure 7 TRS	Panason	iiC KANCISSO Trunk	0 0 0 Vostrovitev	V-SIPEKT32 Contact V-JPEKT32	Virtual 32-Channel VolP	VIXTUAL SHELF VIXTUAL SHELF 7 6 5
2.System 3.Group 4.Extension 6.Feature 7.TRG 8.ARS	Panason ⁶ 0 2 1	IC XX+KCP300	S S S S S S S S S S S S S S S S S S S	V-SIPEXT32 Corosar V-IPEXT32 Corosar	Virtual 32-Channel VolP	VIRTUAL SHEF 8 7 6 5
2.System	Panason Panason 2 1	LC KX-NC2500 Trunk	S S S S S S S S S S S S S S S S S S S	V-SIPEXT32 Context V-IPEXT32 Context V-IPEXT32 Context	Virtual 32-Channel VolP	VIRTUAL SHELF 8 7 6 5
2 System 3. Group 4. Stension 5. Optional Device 6. Feature 7. Feature 8. ARS 9. Physite Network 1. ICO & B. Aconteg Call	Panason ¹ ⁰ 0 2 1	Trunk	S S Stwortsv Stwortsv	V-SIPEXT32 Corner V-IPEXT32 V-IPEXT32	Virtual 32 Channel VolP	VIXTUAL SHELF 9 7 6 5
2.5ystem 3.Group 4.Extension 6.Feature 7.TRS 8.ARS 9.Private Network 10.C0 & Incoming Cat 11.Maintenance	Panason Panason %	Trunk Sheff Property Card Property Use	S S V-SIPCUP Survey Toward	V-SIPEKT32 Por Internet V-IPEKT32 V-IPEKT32 V-IPEKT32 V-IPEKT32	Virtual 32 Channel VolP	VIRTUAL SHEF 8 7 6 5

12. Move the mouse over the "V-SIPGW16" card and select "**shelf property**" to access the parameters on the SIP gateway.



13. Note the warning messages about taking the V-SIPGW cards out of service before changing the parameters would appear if you had not taken the card out of service. Click "OK" to continue.

File(F) Disconnect(D) Tool(T)	Utility(U) View(V) Winde	ow(W) Help(H)			-62
💣 📓 🚇 🥔					
System Menu	X 1.1 Slot				
1.Configuration	Refresh(E)	Cinse(I) Summary(S) Act	vation Kev(A)	IPP Virtual Slot: 1	
2 Portable Station			in ca		
of 3.Option	Present and	Present news		V-IPEAT32	
4.Clock Priority				V-IPGW16	
				V-SIPGW16	
			The second line is	V-IPC S4	
	KX-NCF	Maintenance Console			
홍영(LECT) M 가장(S		W000031			
		You must change all V-SIPGW cards	status to OUS(Out Of Servi	ce) before	
		changing the parameter.			
	V-IPE)			32-Channel Vo	IP Extension Card
	2				
		OK(0			
	Pa	-			VIRTUAL SHELF
	40		4	A CONTRACTOR OF THE OWNER	
	6		8		8
2.System	10		4		
3.Group	0		3		7
4.Extension	,		V-S	IPEXT32	
5.Optional Device		Trunk	9	- Card State	6
6.Feature		041	V-SIPGW16 NEEP V-I	IPEXT32	5
7.TRS	1			ter linte	
8.ARS					
9.Private Network					
10.CO & Incoming Call					
11.Maintenance					
Interactive Mode : default (LAN)	Type : NCP500	Level : Installer	Version00	02-000 Region	002-002

 Enter "5060" in the "SIP Client Port Number" field. Make sure the "NAT Traversal" field is set to "Off" and the "STUN Ability" field is set to "Disable". Hit the "OK" button.

File(F) Disconnect(D) Tool(T)	Utility(U) View(V) Window(W) Help(H)		_6
of 🚨 🚨 🧬			
System Menu >	1.1 Slot Shelf Property - Virtual SIP Gateway		
1.Configuration			
1.Slot	OK(O) Cancel(C) Apply(A)		
2 Portable Station			
3.Option	Main Timer		
4. Clock Priority	Description	Mahan	
	CD Client Ded Mumber	FOED	
	SP Clent Port Number	000	
	NAT Makes (DTD) UDD Part No.	16000	
	NAT - Keen Alive Packet Sending Ability	Enable	
	NAT - Keep Alve Packel Type	Blank UDP	
	NAT - Keep Afve Packet Sending Interval (s)	20	
	NAT - Fixed Global IP Address		
	STUN Ability	Disable	
	STUN Client Port Number	33478	
	STUN External Address Detection Retry Counter	1	
	STUN Resending Interval	500 ms	
	SIP Called Party Number Check Ability	Disable(High->Low)	
	Symmetric Response Routing Ability	Enable	
	100rel Abiity	Enable(Passive)	
	Ringback Tone to Outside Caller	Disable	
	*) Perform System Reset for changes to take effect.		
Sustam			
Orana			
Group			
Extension			
Optional Device			
Feature			
TRS			
ARS			
Private Network			
0.CO & Incoming Call			

15. Select **"1.Configuration**", select **"1.Slot**" and select **"Card Property**" to manually set the DNS server addresses.



16. Click the "Common Settings" button. The "DNS Server IP Address Method" field should be set to "Manual". Enter the DNS IP addresses in the "Manual Preferred DNS Server IP Address" field and the "Manual Preferred DNS Server IP Address" field and hit the "OK" button.

default - KX-NCP Maintenance Co	onsole - [1. Co	nfiguration - 1. Slot - Card P	roperty - Virte	ual SIP Gateway]	A DECISION OF THE OWNER		×
File(F) Disconnect(D) Tool(T) Uti	ilty(U) View(V) Window(W) Help(H)				-	ð X
I I I I I I I I I I I I I I I I I I I							
System Menu X	ne Settings	3.1.2 Local Access Priority	2.6.1 Main	2.6.2 Quick Dial	Shelf Property - Virtual SIP Gateway	Card Property - Virtual SIP Gateway	• •
1.Configuration							
1.Siot 2 Portable Station 3 Option 4.Clock Priority	OK(C S Comm	i) Cance(C) A helf: Virtual Slot on Settings(S)	pply(A)				
	Descriptio	in		Value		1. The second	7
	DNS Serv	er IP Address Method		Manual			
	DHCP Pre	ferred DNS Server IP Address					
	DHCPAN	mate DNS Server IP Address					
12년 ⁴¹ 년 12년 21년 12년 12년 12년 12년 12년 12년 12년 12	Manual Pr	eferred DNS Server IP Address					
지금 전 (동그)(영영)()	Manual Al	ternate DNS Server IP Address					
	Manual Di	NS Server Port Number		53			
	DNS Port	Number		30053			
	DNS Retry	y Interval Timer (s)		3			
	DNS Retry	y Counter		2			
	DNS SRV	Record Resolve Ability		Enable			
1. A. 1984	Descr	Nfiguration - 1. Slot - Card P K(O) Cancel(C)	Apply(A)	val SIP Gateway -	Common Settings		
2.System	DNS S	Server IP Address Method		Manual			
3.Group	DHCP	Preferred DNS Server IP Addre	55	DHCP			
4.Extension	DHCP	Alternate DNS Server IP Addres	55	Manual			
5.Optional Device	Manu	al Preferred DNS Server IP Add	ress	4222			
6.Feature	Manua	al Alternate DNS Server IP Addr	ess	4.2.2.1			
7.TRS	Manu	I DNS Server Port Number		53			
8 ARS	DNS F	Port Number		30053			
9 Private Network	DNS F	Retry Interval Timer (s)		3			
	DNS F	Retry Counter		2			
11.Maintenance	DNS S	RV Record Resolve Ability		Enable			
Interactive Mode : default (LAN)	Тур					Region002-002	4

17. Select **"1.Configuration**", select **"1.Slot**" and select **"Port Property**" to access SIP trunk configuration parameters.



- 18. Select the **"Main**" tab to start configuring the SIP trunk parameters.
 - a. From entry number 1 (Slot 1 Port 1), select "Basic channel" in the "Channel Attribute" field, enter a descriptive name for the Optimum Business SIP Trunk Adaptor in the "Provider Name" field, enter the Optimum Business SIP Trunk Adaptor's IP address in both the "IP Address" field and the SIP Service Domain field, enter "5060" in the "SIP Server Port Number" field and enter the subscriber number in the "Subscriber Number" field. Note that the subscriber number we entered in this example is the same as the Pilot DID.
 - b. From entry number 2 to 5 (Slot 1 Port 2 to 5), select "Additional channel for Ch1" in the "Channel Attribute" field and enter "5060" in the "SIP Server Port Number" field. Note that the number of additional channels to add depends on the number of SIP trunks you are licensed to have. In this example, the number of licensed SIP trunks is 4.
 - c. Hit the "OK" button.

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ystem Menu	×	3.1.40)ialing p	ian 1	10.1 CO L	ine Settings	3.1	2 Local Access Priorit	26.1	Main 2.6.2 Qu	ick Dial	Shelf Prop	erty - Virtual SP	Gateway	Card	Property - Virtual	SP Gateway	Port Propert	y - Virtual SIP Gatewa
Configuration																			
1.561	1	OK	(0)	C	incel(C)	App	(A)												
									-										
3.Option		Comm	and(M)		Select Pro	wider(S)		Add Provider(P)											
4 Cleck Priority		Main	Act	count	Register	NAT	Option	Calling Party	Called Party	Voice/FAX	RTP/R	CP T.38	T.38 Option	OSP	Supple	mentary Service			
			_	1								-							
				-	~					Provider Name			SIP Server Lo	cation		SIP Server	SP Service D	omain	C. hundred Barry
		1	NO.	SAOR	PUIL	Connectio		Changestratione		(20 characters)		Name (100 charact	ers)	PAdd	ress	Port Number	(100 charact	rrs)	Satiscriber Name
		1	1	1	1	00	5	Basic channel		EM-4552		M-4552		192.10	8.0.1	5060	192.168.0.1		6316769608
			2	1	2	00	s	Additional channel fo	r Ch1							5060			
			3	1	3	00	5	Additional channel fo	r Ch1							5060			
			4	1	4	00	s	Addtional channel fo	r Ch1							5060			
			5	1	5	OU	\$	Additional channel fo	ir Ch1							5060			
			6	1	6	00	5	Not Used								5060			
			7	1	7	00	\$	Not Used								5060			
			8	1	8	00	5	NotUsed								5060			
			9	1	9	00	s	NotUsed								5060			
		-	10	1	10	00	5	NotUsed								5060			
		1	11	1	11	00	s	NotUsed								5060			
			12	1	12	00	•	NotUsed						_		5060			
vstem			13	1	13	00	s	NotUsed						_		5060			
			14	1	14	00		NotUsed						-		5060			
stensing			15	1	15	00	>	NotUsed						-		5060			_
attended Designs			10		10	00	•	Indiosed								5060			
poonal Device																			
iature	_																		
RS																			
RS																			
rivate Network																			
CO & Incoming Call																			
		11	_	-			_		_		-			-	_			_	

19. Select the "Account" tab to configure User Name, Authentication ID and Authentication Password for the SIP Trunk Service. From entry number 1 (Slot 1 – Port 1), enter username in the "User Name" field, enter password in the "Authentication Password" field and hit the "OK" button. This is step 3 of the Optimum SIP Trunk Set-up Guide. In this example, the pilot DID, 6316769608, is used for both the username and the password. Note that these configurations are used only when the Optimum Business SIP Trunk Adaptor is configured to expect SIP registration from the PBX.

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System Menu >	2 Local Act	cess Pr	riority	2.6.1 Ma	in 2.6.2 Quick Di	al Shelf Property - Virtual SIP	Sateway Card Property - Vi	rtual SIP Gateway	ort Proper	ty - Virtual SIP Gateway
I.Configuration										
1.Sbt	ОК	(0)	(Cancel(C)	Apply(A)					
2 Portable Station										
3.Option	Comm	and(N)		Select Pr	ovider(S)	Add Provider(P)				
4.Clock Priority	Main	Ac	count	Registe	r NAT Option	Calling Party Called Party	Voice/FAX RTP/RTCP	T.38 T.38 Option	DSP	Supplementary Service
		1	_						-	
		No.	Slot	Port	Connection	User Name (64 characters)	Authentication ID (64 characters)	Authentication Passv (32 characters)	vord	
		1.			000	021070000	6316769699	6316769600		
		2	1	2	005	0310703000	0310703000	0310703040		
		3	1	3	OUS					
		4	1	4	OUS	1				
		5	1	5	OUS	ĵ				
		6	1	6	OUS	j				
		7	1	7	OUS)				
		8	1	8	OUS)				
		9	1	9	OUS)				
		10	1	10	OUS)				
	<u>s</u>	11	1	11	OUS)				
		12	1	12	OUS	ļ				
Sustam		13	1	13	OUS				_	
Oroup		14	1	14	OUS]				
Extension		15	1	15	005					
Ontinenal Daving		10	-	10		1				
Easture										
reature										
IRS										
AKS										
Private Network										
0.CO & Incoming Call										
1.Maintenance										

20. Select the "Register" tab to configure the PBX for SIP registration mode or static IP address mode. From entry number 1 (Slot 1 – Port 1), select "Enable" in both the "Register Ability" field and the "Un-Register Ability when port INS" field if the Optimum Business SIP Trunk Adaptor is configured to receive SIP registration from the PBX; select "Disable" if the Optimum Business SIP Trunk Adaptor is configured to communicate with the PBX via the PBX's static IP address.

Note: When using registration mode, all CLIP ID's **must** match the Pilot DID. In non-registration mode, the CLIP ID's can be any DID on the SIP Trunk.

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ystem Menu	× 2 Local Ad	cess P	riority	2.6.1 Mai	in 2.6.2 Quick Di	I Shelf	Property - Virtual S	P Gateway Car	Property - Virtual SIP Gateway	Port Property - Y	/irtual SIP Gateway
.Configuration											
1.Slot		K(0)		ancel(C)	Apply(A)						
2 Portable Station											
3.Option	Com	mand(M)	Select Pro	wider(S)	Add Provi	der(P)				
4.Clock Priority	Hain			Denister	NAT Option	Callera	Darthy Called Day	ty Moion/EAV			unclamantany Canuing
	BION I		count	riegister		Canny	Fairty Caleura	ity voceniex	RIPRICE 1.30 1.30 0p		approvidentially Service
									Registrar Se	rver	
		No.	Slot	Port	Connection	Register	Register Sending	Un-Register	IS Name		Registrar Serve
						(unity	and run (o)	Solidy When port	(100 characters)	IP Address	FortHumber
	1	1	1	1	OUS	Enable 💂	360	Enable			5060
		2	1	2	OUS	Disable	3600	Enable			5060
		3	1	3	OUS	Enable	3600	Enable			5060
		4	1	4	OUS	Enable	3600	Enable			5060
		5	1	5	OUS	Enable	3600	Enable			5060
		6	1	6	OUS	Enable	3600	Enable			5060
		7	1	7	OUS	Enable	3600	Enable			5060
		8	1	8	OUS	Enable	3600	Enable			5060
		9	1	9	OUS	Enable	3600	Enable			5060
		10	1	10	OUS	Enable	3600	Enable			5060
	<u></u>	11	1	11	OUS	Enable	3600	Enable			5060
		12	1	12	OUS	Enable	3600	Enable			5060
ivstem		13	1	13	OUS	Enable	3600	Enable			5060
Provin		14	1	14	ous	Enable	3600	Enable			5060
Evlansion		15	1	15	ous	Enable	3600	Enable			5060
ational Davias		16		10	005	Enable	3600	Enable			5060
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21. Select the "Voice/FAX" tab to configure codec priority. For each entry, G.711A and G.711Mu should be used for IP Codec Priority's "1st" and "2nd" fields. Hit the "OK" button if you make any changes.

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File(F) Disconnect(D) Tool(T)	Utility(U)) Vie	w(V)	Windo	w(W) H	elp(H)										le le	
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System Menu	×	3.1.2 L	ocalAo	cess Pr	nority 2	2.6.1 Main 2.6.2	Quick Dial	Shelf Pro	perty - Virtua	I SIP Gateway	Card	Property - Virt	ual SIP Ga	ateway Por	t Property	- Virtual SIP Gateway	y
.Configuration				_													
1.Skt		OK	(0)	C	ancel(C)	Apply(A)	J										
2.Portable Station		Comm	and/M)		Select Pro	wider(S)	Add Prov	ider(P)	1								
3.Option		00000	dire(m)		000000000				_								
4.Clock Priority		Main	Acc	truo:	Register	NAT Opto	n Calin;	Party C	alled Party	Voice/FAX	RTP/RT	CP T.38	T.38 Op	ption DSP	Supple	mentary Service	
			1					IP Codec Pri	arity								-
		-	No.	Slot	Port	Connection	1st	2nd	3rd	Packet Samp (G.711A)	ing Time	Packet Samp (G.711Mu)	ling Time	Packet Samplin (G.729A)	ig Time	Voice Activity Detect for G.711	ion
			1	1	1	OUS	G 711A	G 711Mu	G 729A	20 ms		20 ms		20 ma		Disable	
		-	2	1	2	OUS	G711A	G 711Mu	G 729A	20 ms		20 ms		20 ms		Disable	
			3	1	3	OUS	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
			4	1	4	OUS	6.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
			5	1	5	OUS	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
			6	1	6	OUS	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
			7	1	7	OUS	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
			8	1	8	OUS	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
			9	1	9	OUS	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
			10	1	10	OUS	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
		2	11	1	11	OUS	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
			12	1	12	OUS	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
System			13	1	13	OUS	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
0	-111		14	1	14	ous	G.711A	G.711Mu	G.729A	20 ms		20 ms		20 ms		Disable	
Eutanaine			15	1	15	005	0.711A	G.711Mu	0.723A	20 ms		20 ms		20 ms		Disable	
Defension		_	10		10		Jurnia	G.FTING	G. Faller	20 114		20110		20110		Citable	
optional Device	-111																
Feature																	
RS																	
ARS																	
Private Network																	
CO & Incoming Call																	
Maintenance		1.1		-													

22. Select the "Calling Party" tab to configure CLIP (Calling Line Identification Presentation) for the outbound calls. In entry number 1, select "PBX-CLIP" for the From Header's "User Part" field and hit the "OK" button. This configuration tells the PBX to use the extension's "CLIP ID" as the outbound call's caller ID.

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ystem Menu X	1.1 Slot	Port P	roperty	- Virtual S	SIP Gateway						
Configuration			_								
1.Slot	ОК	(0)	Car	ncel(C)	Apply(A)						
2.Portable Station	Comm	and(M)	-	elect Dro	vidar(S)	Add Provider/P)					
3.Option	Comm	uno(m)		ACCOUNT O		Add Flowmer(F)					
4.Clock Priority	Main	Acco	unt	Register	NAT Option	Calling Party Called Part	ty Voice/FAX	RTP/RTCP	T.38	T.38 Optio	n DSP (
								From Header	r		P-Pref
	-	No.	Slot	Port	Connection	Header Type	User Part	SIP-URI			User Part
			1	1	OUS	From Header	PBY-CLIP	(100 chara	ciers)		lser Nama
		2	1	2	OUS	From Header	User Name				Jser Name
		3	1	3	OUS	From Header	User Name				Jser Name
		4	1	4	OUS	From Header	User Name			1	Jser Name
		5	1	5	OUS	From Header	User Name			1	Jser Name
		6	1	6	OUS	From Header	User Name			1	Jser Name
		7	1	7	OUS	From Header	User Name				Jser Name
		8	1	8	OUS	From Header	User Name				Jser Name
		9	1	9	OUS	From Header	User Name				Jser Name
		10	1	10	OUS	From Header	User Name				Jser Name
	<u>s</u>	11	1	11	OUS	From Header	User Name				Jser Name
		12	1	12	OUS	From Header	User Name				Jser Name
untom		13	1	13	OUS	From Header	User Name			1	Jser Name
ysiciii		14	1	14	OUS	From Header	User Name				Jser Name
stoup		15	1	15	OUS	From Header	User Name				Jser Name
xtension		16	1	16	OUS	From Header	User Name				Jser Name
Optional Device											
eature											
RS											
RS											
rivate Network											
CO & Incoming Call											
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23. Select **"I.Configuration**", select **"I.Slot**" and click on the **"IP Phone Registration**" button to see the extensions that are used by the registered phones.

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ystem Menu ×	1.1 Slot	Port Prop	erty -	Virtua	I SIP Gateway 4	1.1 Extension Setting	s Port Pro	perty - Virtual	P Extension		
Configuration	1		-								
1 Slot		K(O)	Cano	(C)	Apply(A)						
2 Portable Station			_								
3 Option	C	ommand(M)		R	egistration(R)	De-registration(D)	Force	d De-registrati	on(F)		
4 Clock Priority		_									
	Main	Option									
	-	No.	Slot	Port	Extension Number	Extension Name (20 characters)	Connection	Status	IP Phone Registration ID (MAC Address)	Current IP Address	Program Ver.
		1	5	1	101	Panasonic x101	NS	Registered	00-80-F0-37-97-F1	192 168 0 141	02.003
		2	5	2	102	Panasonic x102	NS	Registered	00:80:F0:37:97:F0	192,168.0,161	02.003
		3	5	3	103	Panasonic x103	NS	Registered	00:80:F0:37:97:EF	192,168.0.163	02.003
		4	5	4	104		Fault	None	00:00:00:00:00:00	0.0.0.0	
		5	5	5	105		Fault	None	00:00:00:00:00	0.0.0.0	
		6	5	6	106		Fault	None	00:00:00:00:00:00	0.0.0.0	
		7	5	7	107		Fault	None	00:00:00:00:00:00	0.0.0.0	
		8	5	8	108		Fault	None	00:00:00:00:00:00	0.0.0.0	
		9	5	9	109		Fault	None	00:00:00:00:00:00	0.0.0.0	
		10	5	10	110		Fault	None	00:00:00:00:00:00	0.0.0.0	
	1	11	5	11	111		Fault	None	00:00:00:00:00:00	0.0.0.0	
		12	5	12	112		Fault	None	00:00:00:00:00:00	0.0.0.0	
		13	5	13	113		Fault	None	00:00:00:00:00:00	0.0.0.0	
System		14	5	14	114		Fault	None	00:00:00:00:00:00	0.0.0.0	
Broup		15	5	15	115		Fault	None	00:00:00:00:00:00	0.0.0.0	
Extension	1	16	5	16	116		Fault	None	00:00:00:00:00:00	0.0.0.0	
Optional Device		17	5	17	117		Fault	None	00.00.00.00.00	0.0.0.0	
Feature		18	5	18	118		Fault	None	00:00:00:00:00	0.0.0.0	
		19	5	19	119		Fault	None	00:00:00:00:00	0.0.0.0	
n.3		20	5	20	120		Fault	None	00:00:00:00:00	0.0.0.0	
ARS	- I I I I I I I I I I I I I I I I I I I	21	5	21	121		Fault	None	00:00:00:00:00	0.0.0.0	
Private Network		22	5	22	122		Fault	None	00:00:00:00:00	0.0.0.0	
CO & Incoming Call		23	5	23	123		Fault	None	00:00:00:00:00:00	0.0.0.0	
Maintenance		_	-	-							,

24. Select "10.CO Line & Incoming Call", select "DID Table" to assign DID for each extension in use. For each extension in use, enter the assigned DID number in the "DID Number" field, enter a DID name in the "DID Name" field, enter the same extension number in the "Day/Lunch/Break/Night" fields. Hit the "OK" button after you finish assigning DIDs for all the extensions.

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ystem Menu X	1.1 Slot	Port P	Property -	Virtual SIP	Gateway	4.1.1	Extenr	sion Sett	ngs	Port Pro	perty - Vir	tual IP Extens	sion 10	.1 CO Line	Settings	10.3 DID Ta	ble
Configuration																	-
Sustem	0	K(0)	Can	cel(C)	Apply(A)												
Group																	
Extension	Au	tomatic R	egistration	n(U)	Name	Genera	ite(N)					Destination	Setting(S)	,			
Ontingel Device	1-1	00 10	1 200	201 2	00 201	400	401	600	601 60		01 700	701 800	801 (000 000	1 1000		
.Optional Device			1-200	201-3	3013	400	401-	500	501-00		01-700	701-000	001-0	300 30	1-1000		-
Feature		1	DID		-			DID De	stination		Treest	A DA Touch		CLI R	ing for DID		
TRS	-	No.	Nur	nber	(20 charact	ters)	Day	Lunch	Break	Night	Number	Group No.	Day	Lunch	Break	Night	
ARS			(32	digits)									-				
Private Network		1	631	3769608	Pilot DID/mai	in num	101	101	101	101	1	1	Disable	Disable	Disable	Disable	- 5
0.CO & Incoming Call		2	631	3769609	first non-pik	ot DID	102	102	102	102	1	1	Disable	Disable	Disable	Disable	-17
≽ 1.CO Line Settings		3	631	5769610	sec non-pik	st DID	103	103	103	103	1	1	Disable	Disable	Disable	Disable	-
😸 2.DL Table & Port Settings		4					-				1	1	Disable	Disable	Disable	Disable	
🚰 3.DID Table		5									1	1	Disable	Disable	Disable	Disable	
4.Miscellaneous		7					-				1	1	Disable	Disable	Disable	Disable	
		8									1	1	Disable	Disable	Disable	Disable	
		9					<u> </u>				1	1	Disable	Disable	Disable	Disable	
		10									1	1	Disable	Disable	Disable	Disable	
	1	11						-			1	1	Disable	Disable	Disable	Disable	
		12									1	1	Disable	Disable	Disable	Disable	
		13								-	1	1	Disable	Disable	Disable	Disable	
		14									1	1	Disable	Disable	Disable	Disable	
		15									1	1	Disable	Disable	Disable	Disable	
		16									1	1	Disable	Disable	Disable	Disable	
		17									1	1	Disable	Disable	Disable	Disable	
		18									1	1	Disable	Disable	Disable	Disable	
		19									1	1	Disable	Disable	Disable	Disable	
		20									1	1	Disable	Disable	Disable	Disable	
		21									1	1	Disable	Disable	Disable	Disable	
		22									1	1	Disable	Disable	Disable	Disable	
		23									1	1	Disable	Disable	Disable	Disable	
		24									1	1	Disable	Disable	Disable	Disable	

25. Select "4.Extension", select "1.Extension Settings" and select "ISDN CLIP" to assign CLIP ID (Caller ID) for each extension. For each extension in use, enter the extension name in the "Extension Name" field and enter a DID number in the "CLID ID" field. Hit the "OK" button after you finish assigning CLIP ID for all the extensions.

When using registration mode, all CLIP ID's must match the Pilot DID. In non-registration mode, the CLIP OD's may match any DID on the SIP Trunk.

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ystem Menu X	2.6.1 M	an	2.7.1 COS	5 Setting	5 25	9 System Options	s 3.1.1 TRG Settin	gs 3.1.4 Dial	ing plan 4.1.1 Ex	tension Settings		
Configuration		_			_						1	
Sustem		K(0)		ancel/C)		Apph(A)			Find Next(N)	Copy to(T)	CLIP Generate(G)	
Dreup												
a coup	Mair		ntercept De	estination	n Inte	arcept No Answe	er Time ISDN CLIP	Option 1	Option 2 Option	3 Option 4	Option 5 Option 6	Option 7 Option 8 Option 9 FWE
Extension		ĩ										
1. Wired Extension		No	Shelf	Sht	Port	Extension	Extension Name	CIPD	CLIP on	CLIP	COLR	
1.Extension Settings						Number	(20 characters)		Extension/CO			
2FW0/DND	1	11	Virtual	5	1	101	Panasonic x101	6316769608	Extension	Disable	Disable	
a speed that	6	2	Virtual	5	2	102	Panasonic x102	6316769609	Extension	Disable	Disable	
Reverse Button		3	Virtual	5	3	103	Panasonic x103	6316769610	Extension	Disable	Disable	
Contraction Contraction		4	Virtual	5	4	104			Extension	Disable	Disable	
2 Chubba Link Data - Selu		5	Virtual	5	5	105			Extension	Disable	Disable	
2 Dortable Station		6	Virtual	5	6	106			Extension	Disable	Disable	
2 DCC Connells		7	Virtual	5	7	107			Extension	Disable	Disable	
2.000 Consue		8	Virtual	5	8	108			Extension	Disable	Disable	
		9	Virtual	5	9	109			Extension	Disable	Disable	
		10	Virtual	5	10	110			Extension	Disable	Disable	
		11	Virtual	5	11	111			Extension	Disable	Disable	
		12	Virtual	5	12	112			Extension	Disable	Disable	
		13	Virtual	5	13	113			Extension	Disable	Disable	
		14	Virtual	5	14	114			Extension	Disable	Disable	
		15	Virtual	5	15	115			Extension	Disable	Disable	
		16	Virtual	5	16	116			Extension	Disable	Disable	
		17	Virtual	5	17	117			Extension	Disable	Disable	
		18	Virtual	5	18	118			Extension	Disable	Disable	
lotional Device		19	Virtual	5	19	119			Extension	Disable	Disable	
ashira		20	Virtual	5	20	120			Extension	Disable	Disable	
TOC .		21	Virtual	5	21	121			Extension	Disable	Disable	
KD		22	Virtual	5	22	122			Extension	Disable	Disable	
RS		23	Virtual	5	23	123			Extension	Disable	Disable	
rivate Network		24	Virtual	5	24	124			Extension	Disable	Disable	
CO & Incoming Call		25	Virtual	5	25	125			Extension	Disable	Disable	
Maintenance		26	Virtual	5	26	126			Extension	Disable	Disable	

26. Select "10.CO Line & Incoming Call", select "1.CO Line Settings" to prepare for dialing "9" to access the SIP trunks. For each SIP trunk in use (i.e.: the "Shelf" field set to "Virtual"), enter "SIP trunk" or some descriptive name in the "CO Name" field and enter "1" or some other number in the "Trunk Group Number" field. Hit the "OK" button after you finish assigning a same trunk group number for each SIP trunk. Note that the trunk group number must be the same for all the SIP trunks.

e(F) Disconnect(D) Tool(T) Ut	iity(U) ∨	lew(V) Window(W) I	Help(H)				
tem Menu X	Port	Property - Virtual SIP Gatev	way 4.1	.1 Extension Sel	ttings	Port Property - Virtual IP Extension	10.1 CO Line Settings
onfiguration					-		
vstem		OK(O) Cancel(C)	App	oly(A)			
iroun							
vtension	-	CO Line Number	Shelf	Slot Por	rt (CO Name (20 characters)	Trunk Group Number
ational Davias					-		
Juonal Device		1	Physical	1 1	F	PRITrunk	2
ature		2	Physical	1 1	P		2
S		3	Physical	1 1	P		2
S		4	Physical	1 1			2
vate Network		5	Physical	1 1			2
0 & Incoming Call		7	Physical	1 1		PRI drunk	2
1.CO Line Settings		7	Physical	4 4			2
2.DIL Table & Port Settings		0	Dhysical	1 1			2
3.DID Table		5	Dhysical	1 1			2
4.Miscellaneous	-	10	Dhysical	1 1		Pltrunk	2
		12	Physical	1 1		Plitunk	2
		12	Physical	1 1		PRI trunk	2
		14	Physical	1 1		PRI trunk	2
		15	Physical	1 1		PRI trunk	2
		16	Physical	1 1		PRI trunk	2
		17	Physical	1 1	F	PRI trunk	2
		18	Physical	1 1	F	PRI trunk	2
		19	Physical	1 1	F	PRI trunk	2
		20	Physical	1 1	F	PRI trunk	2
	1	21	Physical	1 1	F	PRI trunk	2
		22	Physical	1 1	F	PRI trunk	2
		23	Physical	1 1	P	PRI trunk	2
		24	Virtual	1 1	5	SIP trunk	1
		25	Virtual	1 2	5	SIP trunk	1
		26	Virtual	1 3	5	SIP trunk	1
		27	Virtual	1 4	S	SIP trunk	1
		28	Virtual	1 5			1

27. Select "3.Group", select "1.Trunk Group" and select "Local Access Priority" to configure dialing "9" to access the SIP trunks only. Select the "trunk group number and SIP trunk" in the "Trunk Group No. & Name" field for the Priority 1 entry, select blank in the "Trunk Group No. & Name" field for the Priority 2 entry and hit the "OK" button.

File(F) Disconnect(D) Tool(T) Ut	ility(U) V	iew(V)	Window(W) Help(H)		
C 🛛 🛍 🔛 🖊					
system Menu X	@ Extensi	on	10.1 CO Line Settings 10.3 DID Table	3.1.2 Local Access Priority	3.1.4 Dialing plan 3.1.1 TRG Settings
I.Configuration					
2.System		0K(O)	Cancel(C) Apply(A)		
Group		Drinrih	Trunk Group No. 8 Name		
💐 1.Trunk Group		4	1 · SID truck		
1.TRG Settings		2	1. SP duik		
该 2.Local Access Priority		2	3.		
3.Caller ID Modification		4	4:		
⊱ 4.Dialing plan		5	5		
2.Extension Group		6	6:		
C 3.Call Pickup Group		7	7:		E
4.Paging Group		8	8:		
5.Incoming Call Distribution Group		9	9:		
6.Extension Hunting Group		10	10 :		
7.VM(DPT) Group		11	11 :		
8.VM(DTMF) Group		12	12 :		
9.PS Ring Group		13	13 :		
10.Air Synchronization Group		14	14 :		
		15	15 :		
		16	16 :		
		17	17 :		
		18	18 :		
		19	19 :		
		20	20 :		
		21	21:		
Extension		22	22 :		
Ontional Device		23	23 :		
Eastura		24	24 :		
1000010		25	23.		
IKS		20	20.		
ARS		28	28 :		
Private Network		29	29 :		-
0.CO & Incoming Call					
11.Maintenance					

28. Select **"3.Group**", select **"1.Trunk Group**" and select **"Dialing Plan**" to add more dialing plans if the default dialing plans are not enough.

File(F) Disconnect(D) Tool(T) Utilit	tv(U) View(V)	Window(W) Help(H)				_8
a a s a						
System Menu X	4.1.1 Extension	Settings Port Property - Virtual IP Extension	10.1 CO Line Settings	10.3 DID Table	312 Jacal Access Priority	3.1.4 Dialing plan
1 Configuration					,	
2 Sustam	OK(0)	Cancel(C) Apply(A)	Auto Assign(U)	Diali	ng Plan Table 1	
2. Openin						
S.Group	- No.	Leading Number (32 digits)	Removed	Number of Digits	Added Number (32 digits)	-
1. Irunk Group	1	N11	0			
1. IRG Settings	2	NDONDODOOX	0			
2. Collect D Medification	3	1ND0(ND000000	0			
A Dialog plan	4		0			
2 Extension Group	5		0			
at 3 Call Pickup Group	6		0			
M 4 Paping Group	7		0			
Sincomino Call Distribution Group	8		0			E
6 Extension Hunting Group	9		0			
7.VM(DPT) Group	10		0			
8.VM(DTMF) Group	11		0			
No. 9.PS Ring Group	12		0			
10.Air Synchronization Group	13		0			
	14		0			
	15		0			
	16		0			
	17		0			
	18		0			_
	19		0			
	20		0			
	21		0			_
4.Extension	22		0			
5.Optional Device	23		0			-
6.Feature	24		0			-
7 TPS	25		0			-
9 4.00	26		0			
0 Policete Material	21		0			
9.PTIVAte NétWORK	20		0			-
10.CO & Incoming Call						
11.Maintenance						

29. Select **"1.Configuration**", select **"1.Slot**", move the mouse over the **"V-SIPGW16**" card and select **"INS**" to put the V-SIPGW16 card in service since we have finished making changes to the parameters.



30. Select "1.Configuration", select "1.Slot" and select "Port Property" and the SIP trunk configurations should reflect the INS (in service) status. Note that you may need to reboot the PBX as some changes may require a reset to take effect.

🚝 default - KX-NCP Maintena	nce Conso	le - [1.C	onfigu	ration	- 1.Slot - I	Port Prope	erty - Virt	ual SIP Gateway]				- • ×
File(F) Disconnect(D) Tool(T) Utility(l	J) Viev	v(V)	Windo	w(W) H	elp(H)						_8
I 🖉 🚨 🥵												
System Menu	×	1.1 Slot	Port	Propert	y - Virtual	SIP Gatewa	ay 4.1	.1 Extension Settin	gs Port Pro	operty - Virtual IP I	Extension	0.1 CO Line 4
1.Configuration	10						-					
1.Slot		ОК	(0)	С	ancel(C)	App	ly(A)					
2.Portable Station												
d 3.Option		Comm	and(M)		Select Pro	vider(S)		Add Provider(P)				
4.Clock Priority		Main	Acc	ount	Register	NAT	Option	Calling Party	Called Party	Voice/FAX	RTP/RTCP	T.38 T.38
			_	_	_							
						Connection				Provider Name		SIP S
		-	No.	Slot	Port			Channel Attribute		(20 characters)	Name (100 c	characters)
			1	1	1	IN	S	Basic channel		EM-4552	EM-45	52
			2	1	2	IN	S	Additional channel	l for Ch1			
			3	1	3	[IN	S	Additional channel	for Ch1			
			4	1	4	[IN	S	Additional channe	I for Ch1			
			5	1	5	01	IS	Additional channe	I for Ch1			
			6	1	6	Fa	ult 🛛	Not Used				
			7	1	7	Fa	ult	Not Used				
			8	1	8	Fa	ult	Not Used				
			9	1	9	Fault Fault		Not Used	Used			
			10	1	10			Not Used				
			11	1	11	Fa	ult	Not Used				
			12	1	12	Fa	ult	Not Used				
			13	1	13	Fa	ult	Not Used				
2 System			14	1	14	Fa	ult	Not Used				
2.09300			15	1	15	Fa	ult	Not Used				
3.Group			16	1	16	Fa	ult	Not Used				
4.Extension												
5.Optional Device												
6.Feature												
7.TRS												
8.ARS												
9.Private Network												
10.CO & Incoming Call												
11.Maintenance							m					
nteractive Mode : default (LAN)	Type : NO	P500			Level:	Installer		Version00	2-000	Regio	n002-002	

31. To enable the auto attendant, go to page 1.3 and assign a DID to extension 501.



em Menu X	10.3 D	D Table	5.3.2 DISA	Message												
nfiguration	1			-												
stem		OK(0)	Cancel	C) Apply(A)			Extension	List View	V(L)		D	estination	Setting(S	5)	
oup		1			_											_
tension		OGM	Floating	Name		1			1 Digit AA Destination (Exten:			usion Number)				F
tional Device		Number	Number	(20 characters)	Dial 0	Dial 1	Dial 2	Dial 3	Dial 4	Dial 5	Dial 6	Disl 7	Dial 8	Dial 9	No.	Е
due.	5	1	501	DISA 01		101	102	103							None	
sure		2	502	DISA02		101	Ton.	100							None	
•		3	503	DISA 03		-		-				-		-	None	
S		4	504	DISA 04			-	-	-	-					None	
ate Network		5	505	DISA 05						-					None	
0 & Incoming Call		6	506	DISA 06											None	
1.CO Line Settings 2.DIL Takle & Port Settings 3.DID Table		7	507	DISA 07											None	
		8	508	DISA 08					_						None	
		9	509	DISA 09											None	
4 Miscellaneous		10	510	DISA 10											None	
	eous 9 509 10 510 11 511 12 512	511	DISA 11											None		
		12	512	DISA12											None	
		13	513	DISA13											None	
		14	514	DISA 14											None	
		15	515	DISA 15											None	
		16	516	DISA 16											None	
		17	517	DISA 17											None	
		18	518	DISA 18											None	
		19	519	DISA 19											None	
		20	520	DISA 20											None	
	<u></u>	21	521	DISA 21											None	
		22	522	DISA 22											None	
		23	523	DISA 23											None	
		24	524	DISA 24											None	
		25	525	DISA 25											None	
	<															>

Then go to page 5.3.2 to assign button presses to extensions.

32. To enable Simple Voice Messaging (SVM), go to page 4.1.2 and do the following: Select the extension that you want to modify, and then select which mode you want to modify and then enter "591" in the box to the right. Ensure that the checkbox marked "For both external calls and internal calls" is checked if you don't want to configure these separately.

🚝 default - KX-NCP Mainten	ance Console - [4. Extension -	1. Wired Extension - 2	. FWD/DND]		- 🛛
File(F) Disconnect(D) Tool(T)	Ubity(U) View(V) Vindow(W)	Help(H)		6	
@ 🖪 🔉 🦸					
System Menu	× 4.1.2 FWD.0ND				
1.Configuration					
1 Slot	OK(O) Cancel	C) Apply(A)	Copy to(T)		
2.Portable Station	Extension Municer (Mass	101 (December 10)			
di 3.Option		Inter Paralities and Alter			
4 Clock Priority	Playward / DND				
	For external ca	is Busy / No Answer	591		
	For internal ca	lls Busy / No Answer	S91		
		For both external cal	is and internal calls		
	Forward: No Anower Timer	(8)			
		15	-		
				R.	
2.System					
3.Group					
4.Extension					
5.Optional Device					
6.Feature					
7.TRS					
8.ARS					
9.Private Network					
10.00 8 Incoming Call					
11 Maintenance					
Interactive Mode : default (LAN)	Type : NCP500	Level : Installer	Version002-000	Region002-002	1 .11

Note: The Auto Attendant and SVM are both capable of detecting in-band and out-of-band DTMF tones. No additional configuration changes are needed to enable this capability.

See the manufacturer's user guide for recording a greeting for the Auto Attendant, the SVM, and basic voicemail usage. This is not covered by this document.