Setup Reference guide for KX-NS Series
(Tested with NS1000 Ver4.42)
“I-Net Connect” SIP Trunk service
with External Router

Panasonic

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◆ SUMMARY

This document is a reference for configuring “**I-Net Connect**” SIP trunks onto KX-NS Series systems and includes the settings required for Incoming Call DDI routing and Outgoing Call CLI presentation. SIP trunk specific account details are provided to you by **I-Net Connect**.

◆ Attention:

This document was created based on the results of test environment accounts.
Panasonic cannot guarantee SIP Trunk operation in all environments, however as a result of completing this Inter-Operability Test Panasonic will provide technical support for any issues experienced an assist as far as possible in providing a resolution.
Please obtain relevant information from Service provider before configuration of SIP trunks.
Panasonic will not be held liable for any information provided in this guidance document.
Information used in this document is for interoperability testing.
Information and Specifications in this document are subject to change without notice.

◆ Note

When using multiple lines

It is not possible to assign two or more lines to one ID. Make multiple line agreement and obtain multiple IDs.

Busy

If there are incoming calls when all lines are busy, the caller hears ROT instead of Busy.

Transfer / Forward

When the Transfer/forwarding destination is PSTN, the CLI is not call originator but PBX's CLI.

FAX

Fax that send to PSTN (Call to Japan PSTN) had failures by signaling filtered.

Ringing time

When receiving a call, the bell rings for 1 minute, but on the calling side it keeps calling for about 17 seconds longer.

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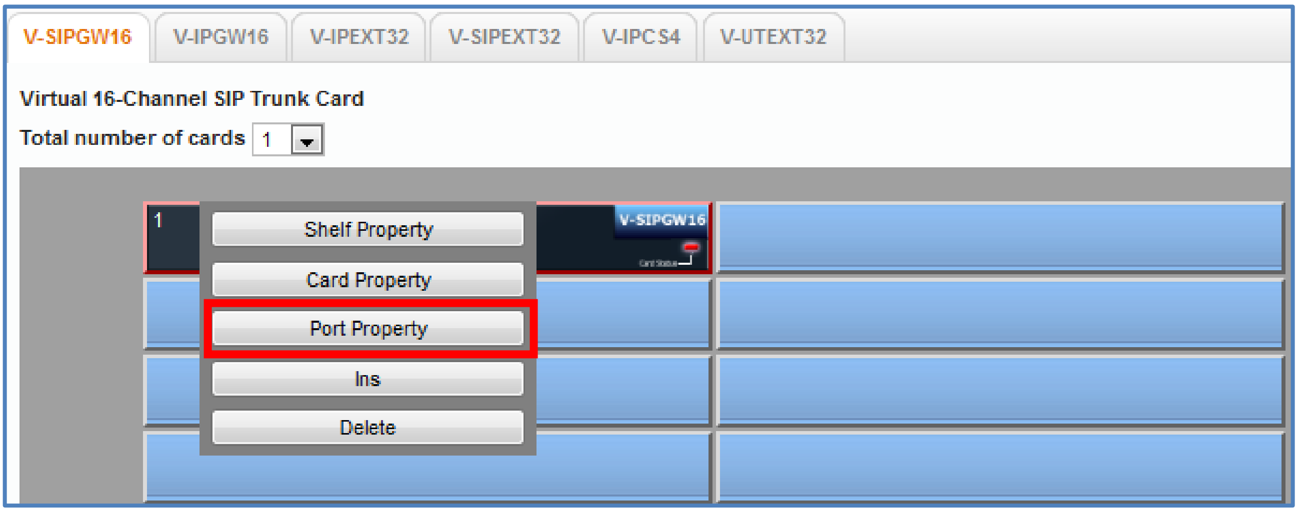
(1) Provisioning the SIP Trunk

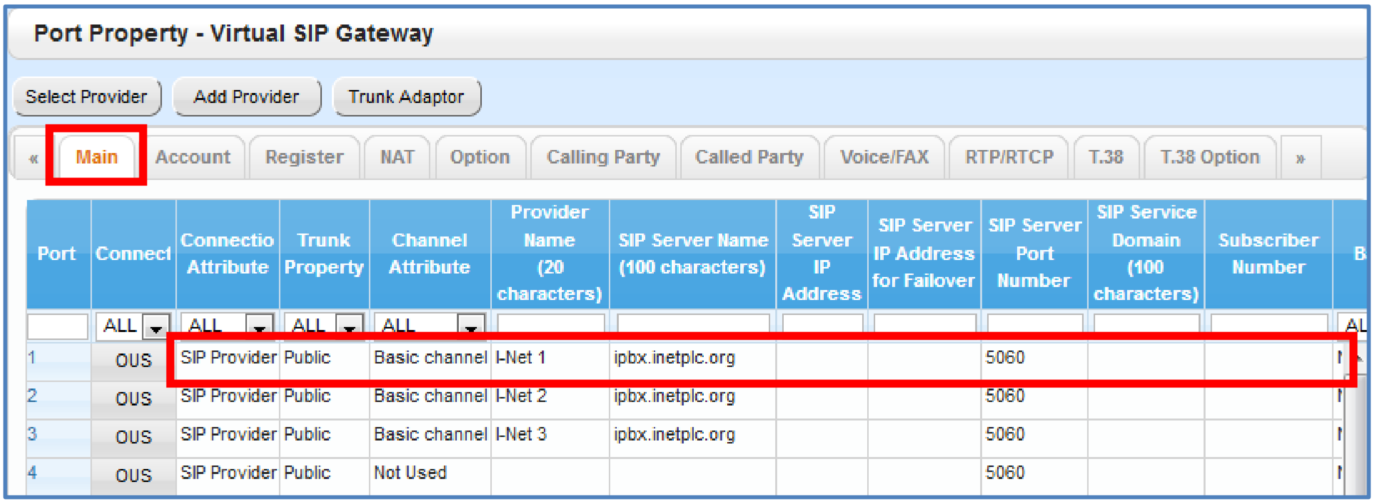
SIP Trunk – Port Property

Set the **[V-SIPGW16]** card to **[OUS]** and then select **[Port Property]**



[Main] Tab

1. **Channel Attribute:** ***Basic Channel***
2. **Provider Name:** ***Enter a name – reference only***
3. **SIP Server Location – Name:** ***ipbx.inetplc.org – (I-Net Connect provided)***
4. **SIP Server Location – IP Address:** *Not required*
5. **SIP Server port Number:** *Leave at 5060*
6. **SIP Service Domain:** *Not required*
7. **Subscriber Number:** *Not required*



SIP Trunk – Port Property continued

[Account] Tab

1. **User name:** ***Enter the Username as supplied by I-Net Connect.***
   (Note this is username without @ipbx.inetplc.org)
   For example: Username = 12345670
   Enter: 12345670
2. **Authentication ID:** ***Enter the Authentication ID as supplied by I-Net Connect.***
   (Note this is Authentication ID without @ipbx.inetplc.org)
   For example: Authentication ID = 12345670
   Enter: 12345670
3. **Authentication Password:** ***Enter the password as supplied by I-Net Connect.***
   For example: password = passwordABCD
   Enter: passwordABCD

« | Main | Account | Register | NAT | Option | Calling Party | Called Party | Voice/FAX

No.	Shelf	Slot	Port	Connect	User Name (64 characters)	Authentication ID (64 characters)	Authentication Password (32 characters)
	ALL			ALL			
1	Virtual	1	1	OUS	12345670	12345670	passwordABCD
2	Virtual	1	2	OUS	12345671	12345671	passwordEFGH
3	Virtual	1	3	OUS	12345672	12345672	passwordJKLM
4	Virtual	1	4	OUS			

[Register] Tab

1. **Register Ability:** *Leave enabled*
2. **Register Interval:** ***Enter: 120***
3. **Un-Register Ability:** *Leave enabled*
4. **Registrar Server – Name:** *Not required*
5. **Registrar Server – IP Address:** *Not required*
6. **Registrar Server port number:** *Leave at 5060*

« | Main | Account | Register | NAT | Option | Calling Party | Called Party | Voice/FAX | RTP/RTCP | T.38 | T.38 Option | »

No.	Shelf	Slot	Port	Connect	Register Ability	Register Sending Interval (s)	Un-Register Ability when port INS	Registrar Server Name (100 characters)	Registrar Server IP Address	Registrar Server IP Address for Failover	Registrar Server Port Number
	ALL			ALL	ALL		ALL				
1	Virtual	1	1	OUS	Enable	120	Enable				5060
2	Virtual	1	2	OUS	Enable	120	Enable				5060
3	Virtual	1	3	OUS	Enable	120	Enable				5060

Click **[OK]** to apply the changes.

Select **[INS]** on the **[V-SIPGW16]** card to bring the SIP trunk ports into service.

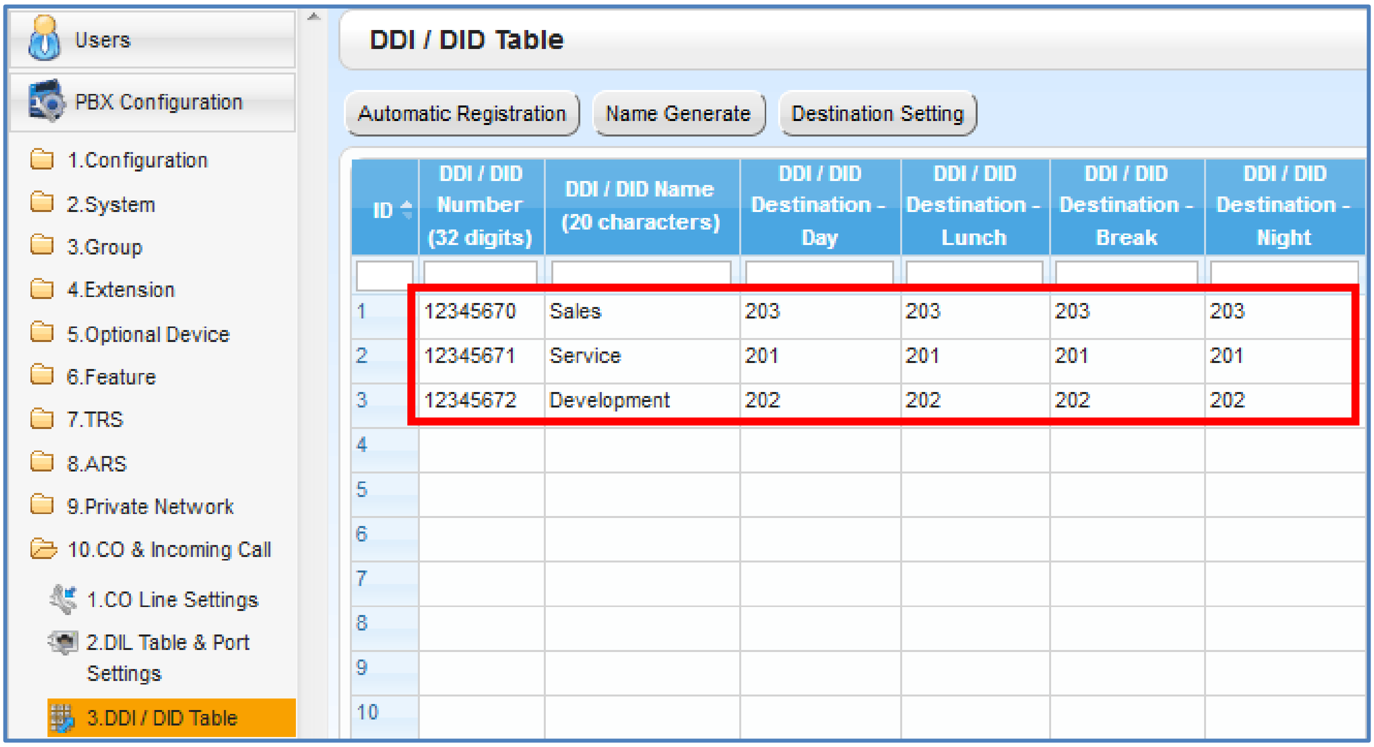
(2) Incoming Call Routing

Go to **[CO & Incoming call]** and select **[3.DDI /DID Table]**

1. DDI/DID Number: *Enter the Username in the format (as below)*
Example: 12345671
Enter: ***12345671***

2. DDI/DID Name: *Determined by the installer (optional setting)*

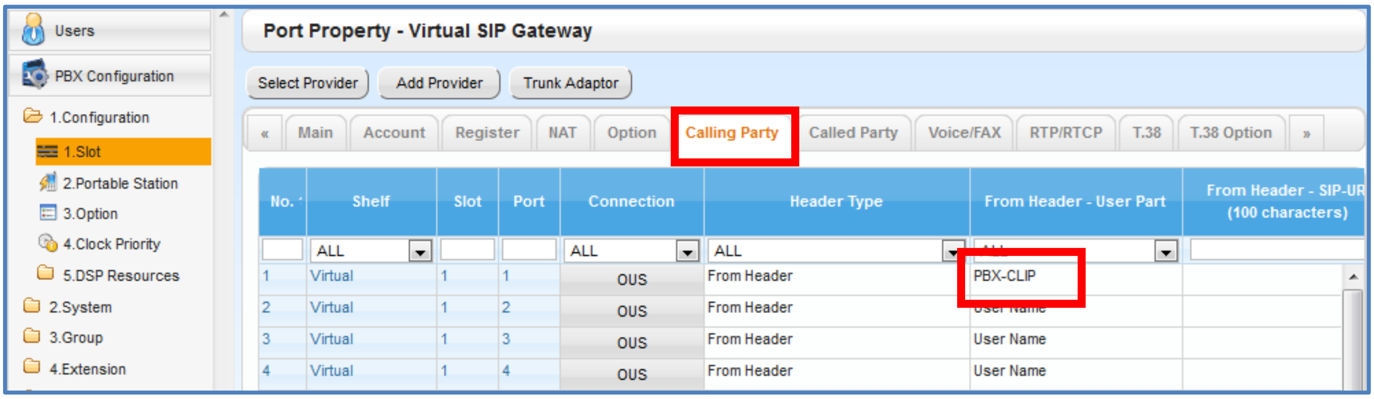
3. DDI/DID Destination: *Determined by the installer (extension number, group etc)*



(3) Outgoing Call CLI

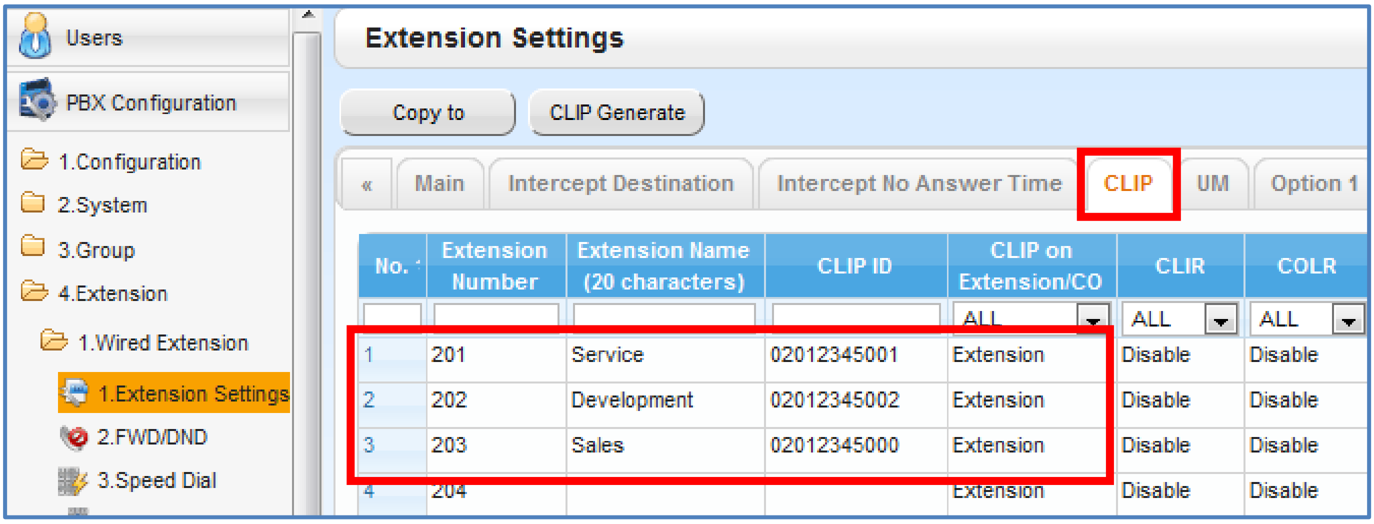
Set the **[V-SIPGW16]** card to **[OUS]** and then select **[Port Property]** and **[Calling Party] Tab**

From Header – User Part: ***PBX-CLIP***



Click **[OK]** and then set the **[V-SIPGW16]** card back to **[INS]**.

Go to **[4.Extension] – [1.Wired Extension] – [1.Extension Settings]** and select **[CLIP] tab**
Enter a valid CLI number for each required extension in the ***CLIP ID*** field and then Click **[OK]**



(4) CLIR Outgoing Call (Withholding Number)

Dial using the 141 prefix in order to withhold CLI presentation number.
(e.g.)   141 055 1234 0020

(5) Appendix

UDP hole punching for keeping in Router/Firewall Port Forwarding

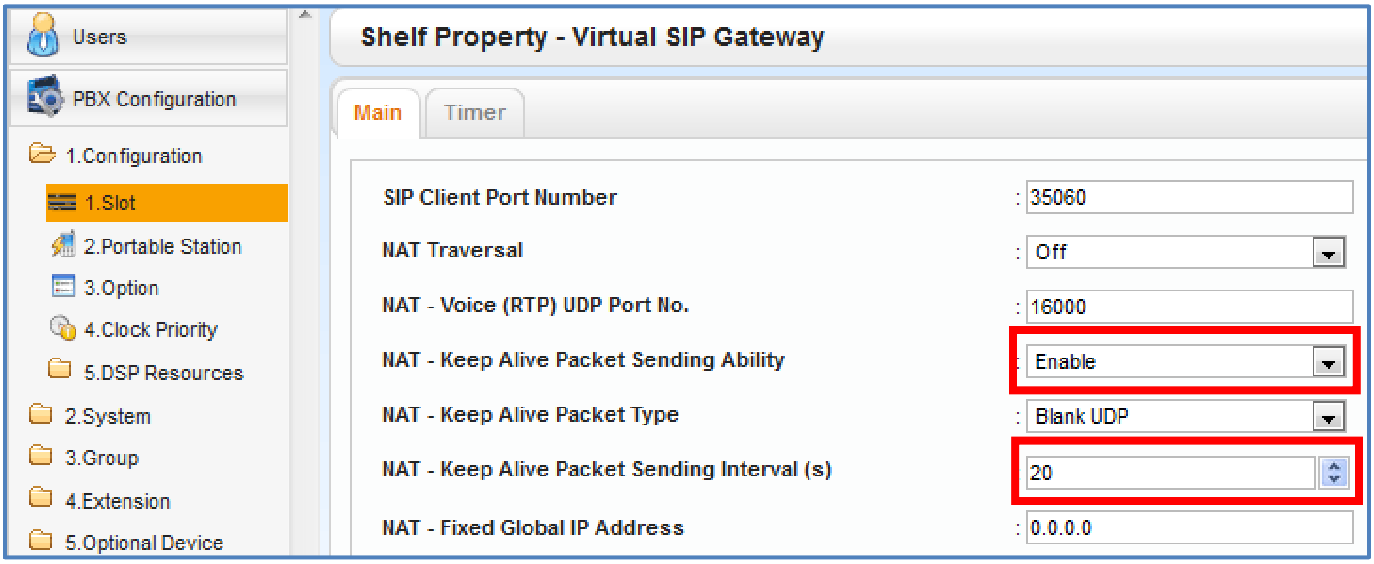
If required, for keeping port forwarding table in installed router, configure the BLANK UDP to enable as keep-alive with UDP hole punching on the PBX shelf property.

Set the **[V-SIPGW16]** card to **[OUS]** and then select **[Shelf Property]**

NAT - Keep Alive Packet Sending Ability: ***Enable***

NAT - Keep Alive Packet Sending Interval(s): *leave at 20*

Note: It is desirable shorter than expire time of router port forwarding.



Click **[OK]** and Select **[INS]** on the **[V-SIPGW16]** card to bring the SIP trunk ports into service.

IMPORTANT!

To secure the PBX from illegal attacks, please restrict the above port forwarding ports to *only* be accessible from the *I-Net Connect* source IP addresses.

END OF DOCUMENT