Setup Reference guide for KX-NS Series
(Tested with NS1000 Ver5.0)
"TBC" SIP Trunk service
with External Router

Panasonic

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◆ SUMMARY

This document is a reference for configuring "**TBC**" 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 **TBC**.

◆ 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

FAX

Need to check a FAX communication in advance if need to connect it.
We had a failure between international/Japan.

Refer

Use PBX "Transfer to CO" function. TBC does not work properly for SIP REFER messages.

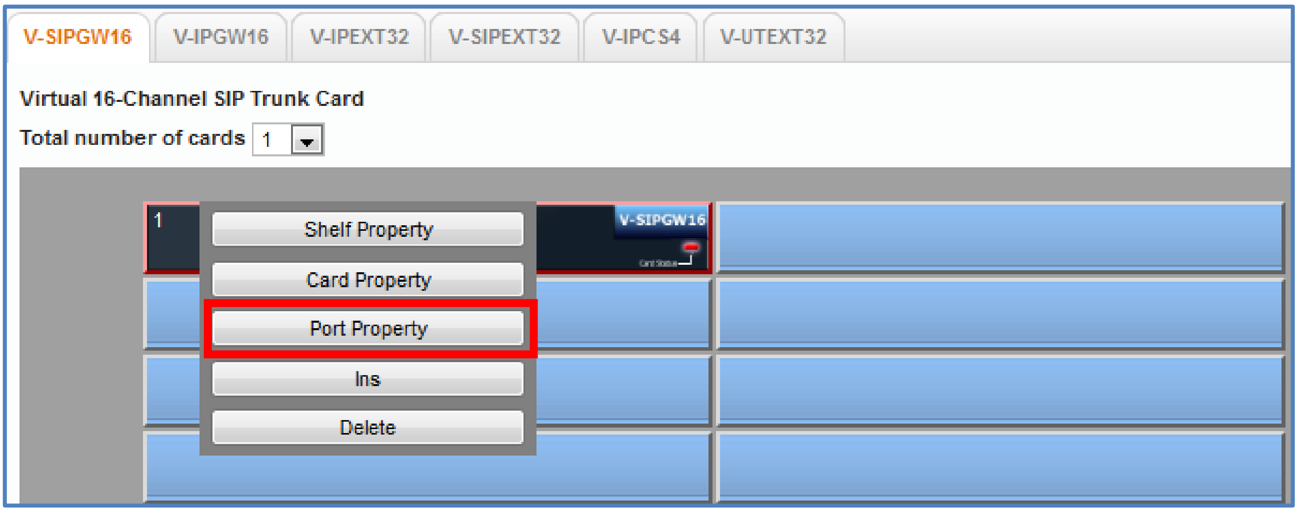
P-Asserted-Identity (PAI) Header

Not use the PAI header. When PAI header is attached, the number will not be notified correctly.

◆ Table of Contents

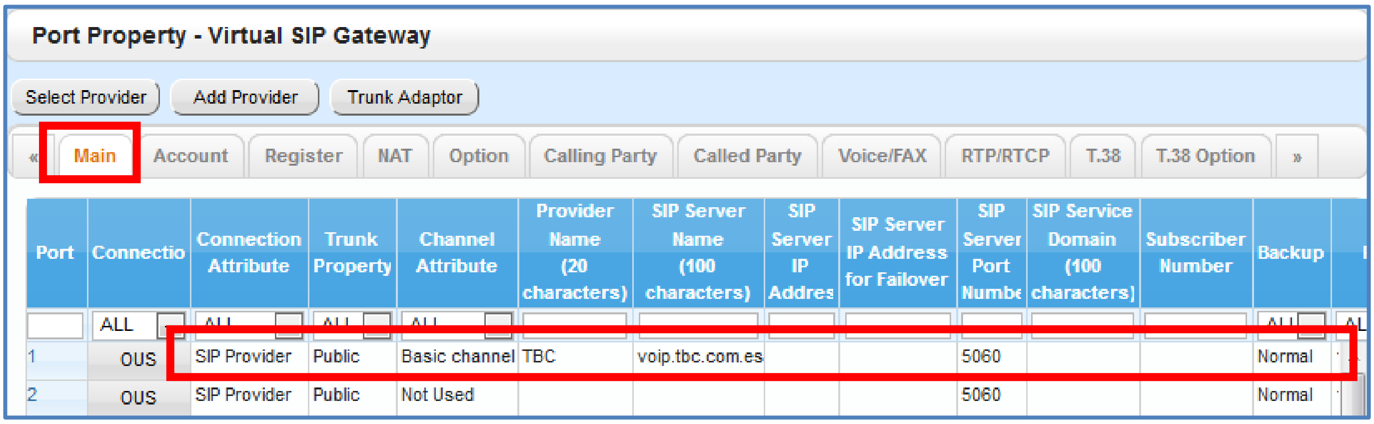
(1) Provisioning the SIP Trunk
SIP Trunk – Port Property

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



[Main] Tab

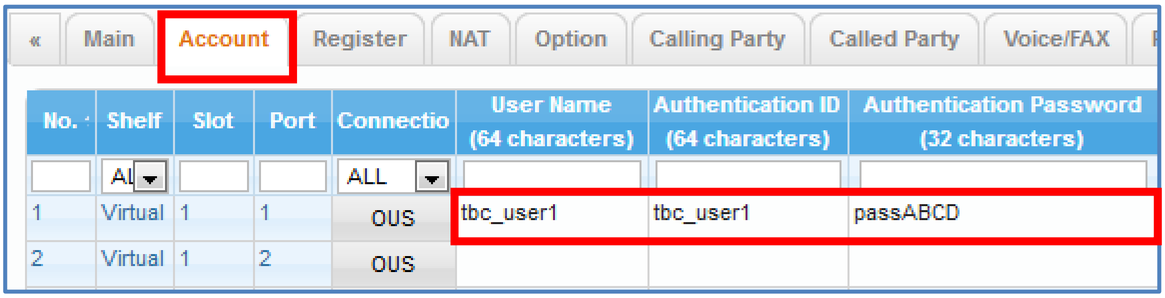
1. **Channel Attribute:** ***Basic Channel***
2. **Provider Name:** ***Enter a name – reference only***
3. **SIP Server Location – Name:** ***voip.tbc.com.es – (TBC provided)***
4. **SIP Server Location – IP Address:** *Not required*
5. **SIP Server port Number:** *Leave at 5060*
6. **SIP Service Domain:** *Not required*
7. **Subscriber Number:** *Not required*



SIP Trunk – Port Property continued

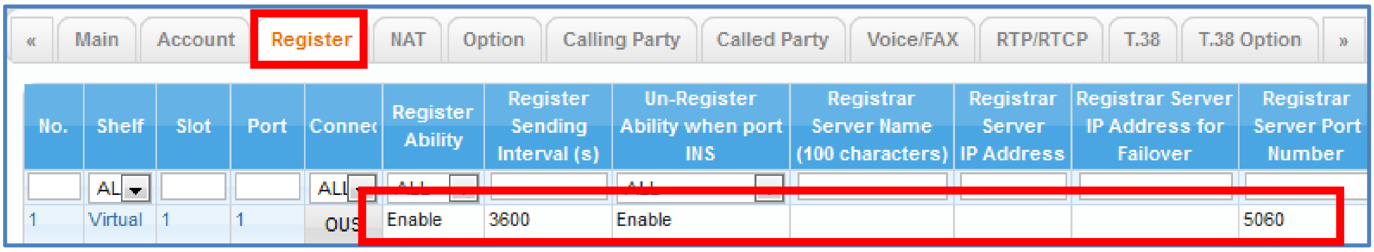
[Account] Tab

1. **User name:** ***Enter the Username as supplied by TBC.***
   (Note this is username without @voip.tbc.com.es)
   For example: Username = tbc_user1
   Enter: tbc_user1
2. **Authentication ID:** ***Enter the Authentication ID as supplied by TBC.***
   (Note this is Authentication ID without @voip.tbc.com.es)
   For example: Authentication ID = tbc_user1
   Enter: tbc_user1
3. **Authentication Password:** ***Enter the password as supplied by TBC.***
   For example: password = passABCD
   Enter: passABCD



[Register] Tab

1. **Register Ability:** *Leave enabled*
2. **Register Interval:** *Leave at 3600*
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*

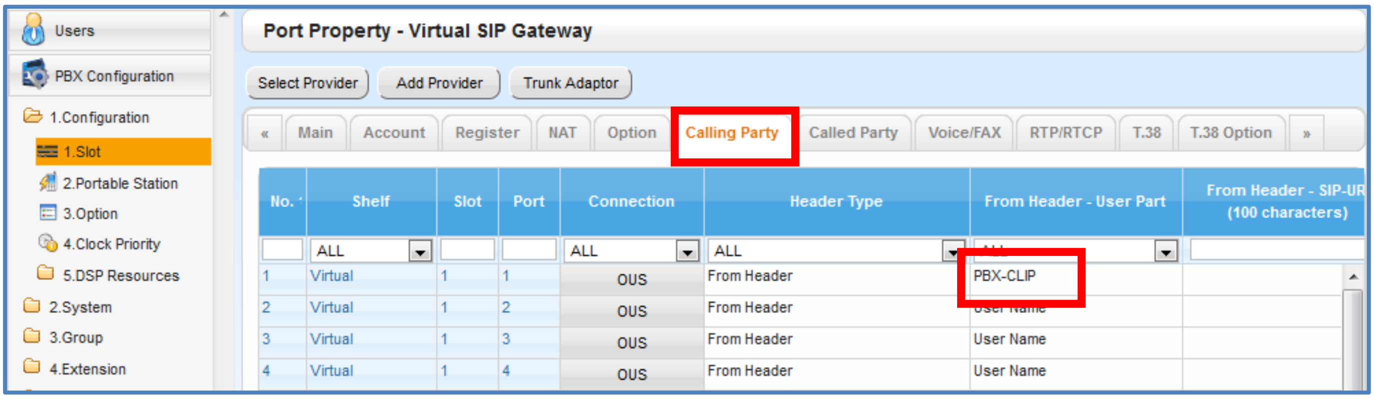


Click **[OK]** to apply the changes.

(2) Outgoing Call CLI

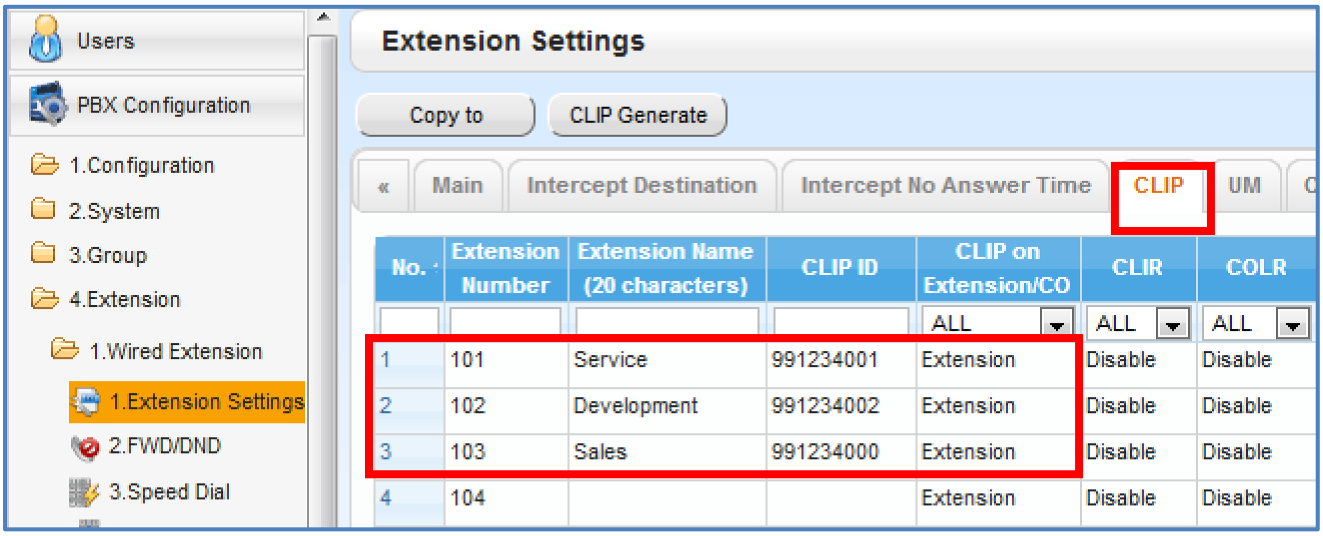
Go to **[Calling Party] Tab**

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



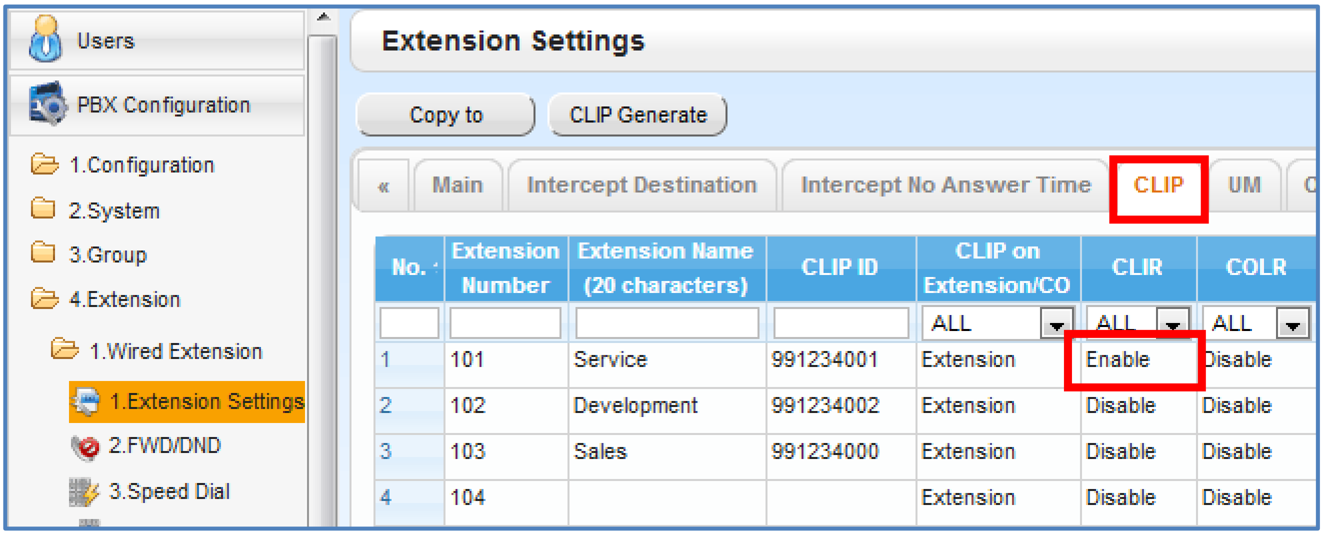
Click **[OK]** and then set the **[V-SIPGW16]** card back to **[INS]**.

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]**



(3) CLIR Outgoing Call (Withholding Number)

Go to **[4.Extension] - [1.Wired Extension] - [1.Extension Settings]** and select **[CLIP] tab**
Under **CLIR:** select ***Enable*** and Click **[OK]**.



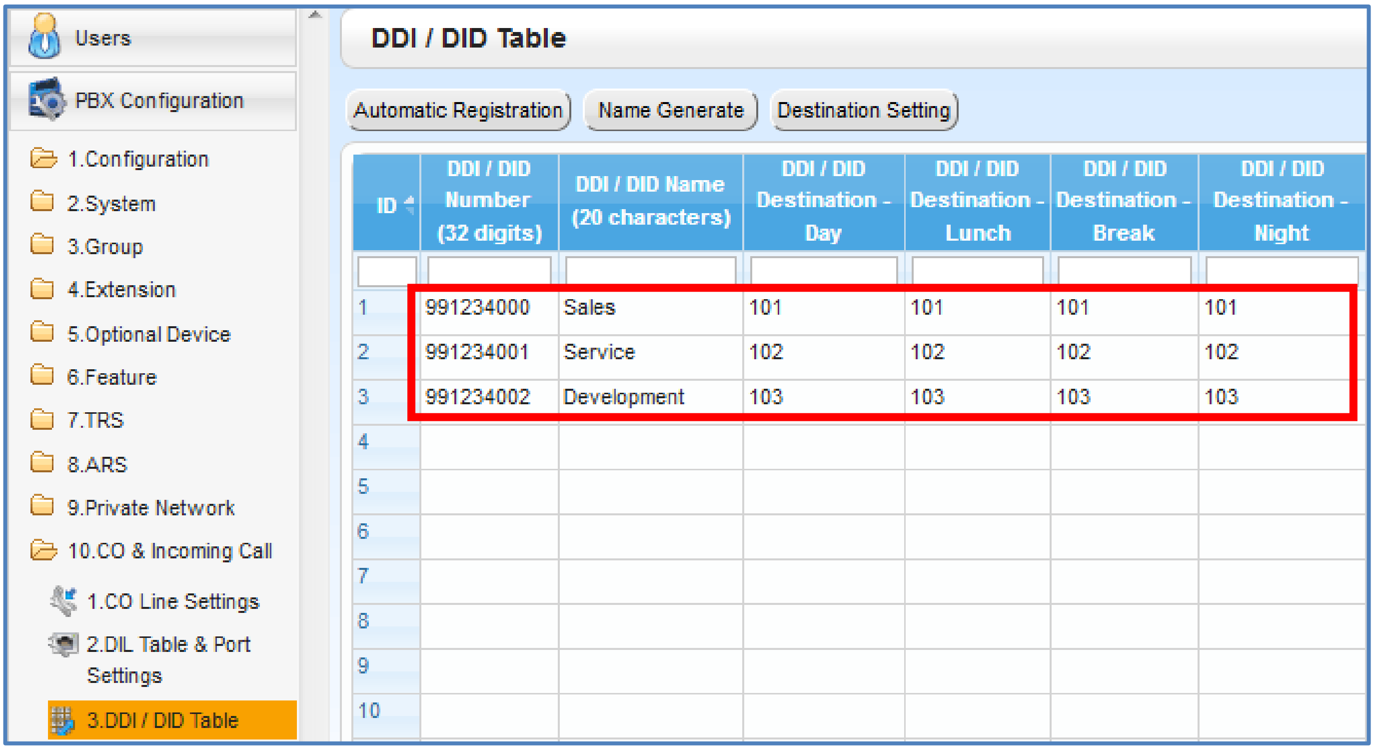
(4) Incoming Call Routing

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

1. DDI/DID Number: *Enter the DDI number in the format (as below)*
Example: 99 123 40 00
Enter: ***991234000***

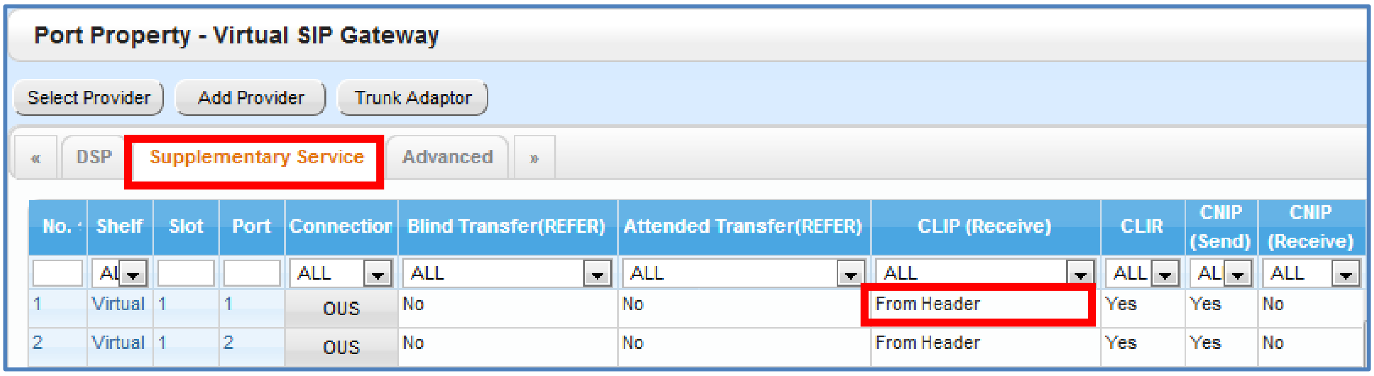
2. DDI/DID Name: *Determined by the installer (optional setting)*

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



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

1. CLIP (Receive): ***From Header***



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

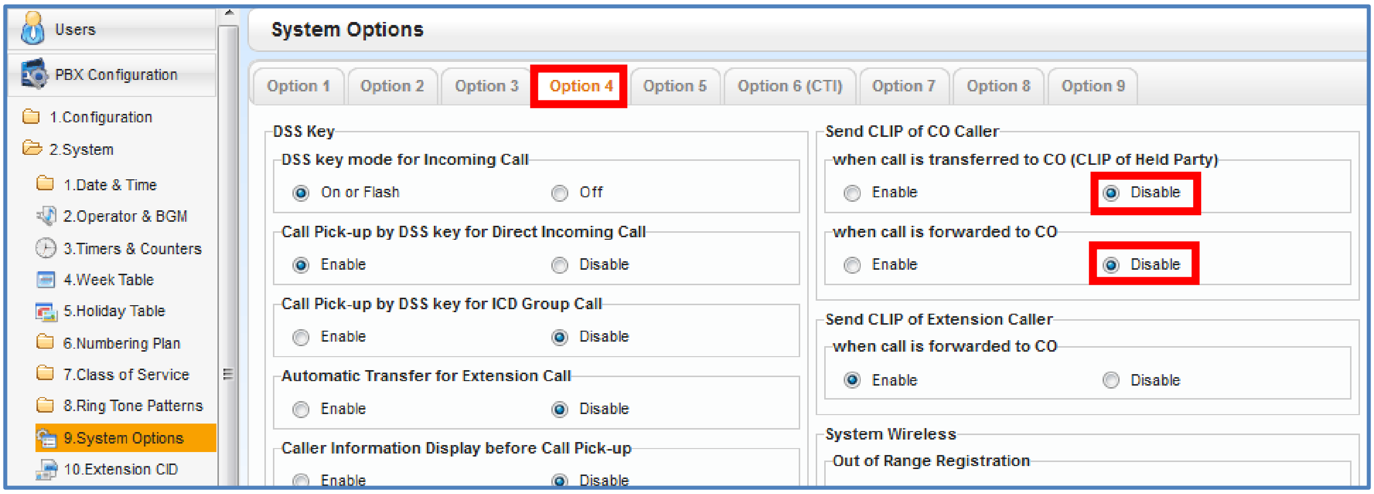
When using Transfer/Forward, the TBC will not notify the CLIP of the first caller. In order to notify the forwarder CLIP, change the setting of System Options.

Go to **[System]** and select **[9.System Options]**

[Option 4] Tab

1. when call is transferred to CO (CLIP of Held Party): ***Disable***

2. when call is forwarded to CO: ***Disable***



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

(5) Appendix

UDP hole punching for keeping in Router/Firewall Port Forwarding

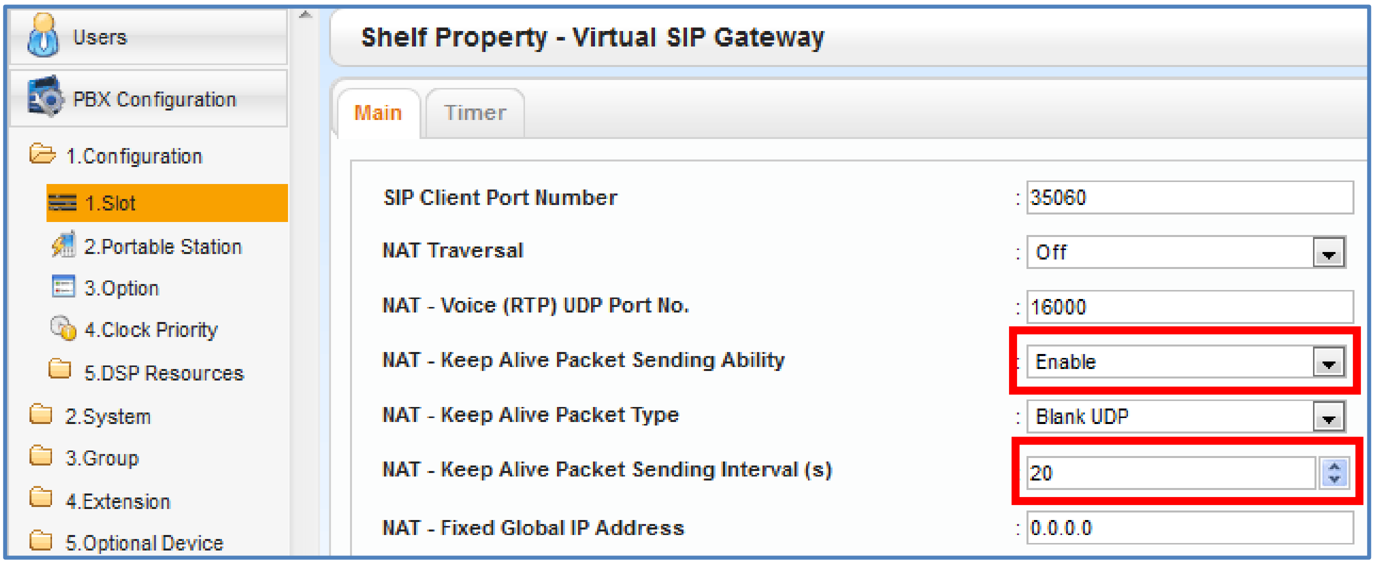
If TBC's Keep Alive message (e.g. OPTIONS) is not effect to keep port forwarding for external router, configure the BLANK UDP to enable as keep-alive message on the PBX shelf property.

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 *TBC* source IP addresses.

END OF DOCUMENT