

### **Broadvox SIP Trunks Configuration Guide**

### **PBX Platform: KX-NS1000**



### Overview

This document describes the configuration procedures required for the KX-NS1000 to make full use of the capabilities of Broadvox SIP Trunks Services.

The SIP trunks services of the KX-NS1000 PBX are provided through virtual CO line cards (V-SIPGW16) which are designed to be easily integrated into an Internet Telephony Service provided by an ITSP (Internet Telephony Service Provider).

This guide describes the specific configuration items for the virtual SIP Gateway card in addition to the PBX basic configuration related to SIP trunks functionality. It also describes basic Network configuration to familiarize dealers with the network setup. It does not describe the purpose and use of all configuration options on the virtual SIP Gateway card. For those details, see the KX-NS1000 Programming Manual for Virtual SIP CO Line Card and the KX-NS1000 Manuals available from Panasonic Communication Solutions.

#### **DSP** card and Activation keys

- $\checkmark$  The PBX has to be equipped with a DSP card.
- ✓ Activation keys for SIP-Trunks has to be installed in the PBX to provide the SIP-trunks functionality

To check the number of activation keys installed into the PBX and add new licenses please refer to Page 11 in this guide

### **Architecture Overview**

The following diagram illustrates simple VOIP networks connecting the NS1000 PBX: The Case of Broadvox Setup: Broadvox will provide its services over the Public Internet





### **Basic V-SIPGW16 Settings for Broadvox Trunks**

### 1- Log into the KX-NS1000 Web Portal

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192.193.192.101/Web/K_Users/log/	Web Maintenance Console Username INSTALLER Password Inter Login		

### 2- Click on the Main KX-NS1000 site

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### 3- Go to the Virtual Shelf



4- Install the V-SIPGW card

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👌 Users	Slot		
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🗁 1.Configuration	Select Shelf : Physical Virtual Legacy-GWI	egacy-GW2	
SEE 1.Slot	Refresh Close Summary Activation Key	P Phone Registration	
2.Portable Station	System Property UM Card Property UM Card Property UM Port Property	)	
🚳 4.Clock Priority	V-SIPGW16 V-IPGW16 V-IPEXT32 V-SIPEXT32 V-IPCS4 V-UTEXT32		
5.DSP Resources	Virtual 16-Channel VolP SIP Gateway Card		^
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4.Extension	1 31 V-SIPGW16	9	
5.Optional Device			
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a Private Network			
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# 5- KX-NS1000 Network Settings (The settings provided in this guide is just an example, please follow your site network configuration or consult with your Network administrator for details.)

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🗀 2.Server Feature	<ul> <li>Obtain an IP address automatically</li> </ul>					
🗀 3.Client Feature	Use the following IP address		•			
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	Subnet Mask	: 255.255.255.0				
	Default Gateway	: 192.168.192.1				
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	DNS Setting					
	Port Number	: 53				
	<ul> <li>Obtain DNS server address automatically</li> </ul>					
	Use the following DNS server				~	~

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	OSP IP Setting     Obtain DSP IP address     automatically     Use the following DSP IP address     DSP Card #1 - 1	. 10.07 / 4.102	
	ID Adda	OK OK	Cancel Apply

### 6- The V-SIPGW Card and Shelf Properties

#### The settings of the card and shelf property should be as Default settings



### 7- The V-SIPGW Port Property

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🚳 4.Clock Priority		ALL 💌			ALL 💌	ALL 💌	ALL 💌		
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2.System	2	Virtual	31	2	INS	SIP Provider	Additional channel for Slot 31 Ch 1		
3.Group	3	Virtual	31	3	INS	SIP Provider	Additional channel for Slot 31 Ch 1		
4.Extension	4	Virtual	31	4	Fault	SIP Provider	Not Used		
5.0ptional Device	5	Virtual	31	5	Fault	SIP Provider	Not Used		
6.Feature	6	Virtual	31	6	Fault	SIP Provider	Not Used		
7.TRS	7	Virtual	31	7	Fault	SIP Provider	Not Used		
3 8.ARS	8	Virtual	31	8	Fault	SIP Provider	Not Used		
9.Private Network	9	Virtual	31	9	Fault	SIP Provider	Not Used		
10.CO & Incoming Call	10	Virtual	31	10	Fault	SIP Provider	Not Used		
11.Maintenance	11	Virtual	31	11	Fault	SIP Provider	Not Used		
UM Configuration	12	Virtual	31	12	Fault	SIP Provider	Not Used		
Network Service	<		1	101).					>
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#### SIP Server Address should be obtained from your Broadvox Welcome Letter

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#### User Name = BTN number (From Your Welcome Letter) Authentication ID = Same as BTN Authentication Password is obtained from your welcome letter

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5.Optional Device	5	Virtual		31	5	Fault								
6.Feature	6	Virtual		31	6	Fault								
7.TRS	7	Virtual		31	7	Fault								
8.ARS	8	Virtual		31	8	Fault								
9.Private Network	9	Virtual		31	9	Fault								
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🔁 3.Group	3	Virtual	31	3	INS	Enable	3600	Enable	
4.Extension	4	Virtual	31	4	Fault	Enable	3600	Enable	
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7.TRS	7	Virtual	31	7	Fault	Enable	3600	Enable	
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9.Private Network	9	Virtual	31	9	Fault	Enable	3600	Enable	
🗀 10.CO & Incoming Call	10	Virtual	31	10	Fault	Enable	3600	Enable	
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#### Change the CNIP Receive (ALL channels) to Yes

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### **Essential PBX Configuration:**

Please locate your DID information in the Broadvox Welcome letter/account Portal

To Assign the DID numbers destinations, Go to 10-3.CO & Incoming Call→ DDI/DID table

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Users	DDI / DID Table				
PBX Configuration					
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2.System	ID + DDI / DID Number	DDI / DID Name	DDI / DID Destination -	DDI / DID Destination -	DDI / DID Destination -
3.Group	(32 digits)	(20 characters)	Uay	Lunch	Break
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5.Miscellaneous	11				
11.Maintenance	12				
UM Configuration	13				
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#### SIP trunks Activation keys:

1- To obtain additional activation keys, you need to purchase the appropriate activation key codes (For IP Trunks) and access the Key Management System. You can download the activation keys as an activation key file from the Key Management System. To download the activation keys, enter the MPR ID number shown on the IPCMPR Card in the PBX, and activation key number and registration ID provided on each activation key code.

2- To check the Number of Activation Keys Installed into your system Go to PBX Configuration, 1- Configuration, 1-Slot, click on Activation Keys (Top of the PBX image)

### **Important Notes:**

1- <u>E911</u>:

Please Work Closely with *Broadvox* team to ensure that E911 service is configured and tested properly