# HKBN Sip Trunk (PSTN) Configuration

What is HKBN Enterprise SIP Trunk?



Hong Kong Broadband Network's Enterprise SIP Trunk service is fully designed to enhance and support a full range of business communications. Utilizing the client's network as its focal point, it significantly reduces telecom overheads while offering a rich array of features.

The Enterprise SIP Trunk is an IP access solution that enables direct service provider to enterprise connections of IP PBX or SIP gateways over IP. Unlike a time-division multiplexing (TDM) trunk, a SIP Trunk is a direct SIP-to-SIP connection to the public switched telephone network (PSTN) without converting from TDM.



### Hardware Connection



### **HKBN Default Setting**

PBX IP Address: 192.168.0.101

SIP Trunk Gateway:192.168.0.1

Subnet Mask: 255.255.255.0

Check Firmware Version

To do the HKBN SIP Trunk Configuration with Sipdex M200 IPPBX, please make sure that the firmware version is V1.05 or above, and Patch1 ( Download ) is installed.

Sipdex		Logout
• Home	Home 🌣	Move the mouse over a field to see tooltins
Operator	System Info	
Basic	Network	
Inbound Control	Ethernet IP: 192.168.188.92 MAC: 68:69:2E:04:0B:9B	
Advanced	Storage	
Network Settings	Disk Total: 3.0G Used: 183.5M Ext Disk Total: N/A Used: N/A	
Security	- Slot Info	
Report	SLOT 1	
System	1 2 3 4 N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	
	Device Info	
	Model No.: M-200 IPPBX System Version: 1.0.5	
	Current Time:07/11/14 11:54 Run Time:5 min	



If you need to upgrade the system, please visit our website (http://www.sipdex.com), download files and updates. Then go to the management interface, press Upgrade, select WEB Upgrade and Restore Default Set, and select the upgrade file, then press Upload.

#### Sipdex Logout Upgrade Restore Default Settings: Home If checked the option, the system will restore factory Upgrade System Package Operator settings after upgrade. Basic WEB Upgrade OTFTP Upgrade 2. Inbound Control **4-** 3. Restore Default Set: Advanced Please choose file to upload: 選擇檔案 uImage-md5.u50...eutral.patch1 Network Settings **4**. 5. Upload Security Report System • Time Settings Module Settings Data Storage Management Backup • Reset & Reboot - 1. Upgrade

Note: After the system update requires a restart, and all settings will be restored to factory condition.

### Sipdex M-200 IPPBX Configuration

### Step 1) set up a SIP account

Click Basic > Extensions > New User > Enter SIP ACCOUNT information.

New						
General						
SIP:		IAX2:				
Name:	800	Extension:	800			
Password:	MbAiK_U9SV	Outbound CID:				
DialPlan:	DialPlan1 🔹	Analog Phone:	None 🔻			
Voicemail						
Enable:	<b>√</b>	Password:	1234			
Delete VMail:		Email(Fax/Voicemail):				
Other Option	15					
Web Manage	r: 🗹 Agent:	Call Waiting:	<b></b>			
Mobility Exter	nsion: Mobility	Extension Number:				
VoIP Setting	5					
NAT:	Transpor	t: UDP 🔻	SRTP:			
DTMF Mode:	RFC2833 V	Permit IP:				
Video Option	IS					
Video Call:	H.261	L H.263 H.263+ H	1.264			
Audio Codec	5					
g722 g726 gsm speex		aw aw 729				
Disallowed Allowed						
Save Cancel						

## Step 2) Create SIP Trunk

Click Basic > Trunks > New VoIP Trunk > Set up SIP Trunk

Description : Enter SIP Trunk name, for e.g.HKBN SIP Trunk

Protocol : select SIP

Host : enter the IP Address proviced by HKBN

Maximum Channels : Enter Applied SIP Trunk value

Without Authentication : Tick

Press Save

New VoIP Trunk		Х
Description: 5. HKBN SIP Trunk Protocol: 6. SIP • Peer Mode: Host: 7. 10.15.236.68 Maximum Channels* 8. 99 Prefix: Outbound CID: Without Authentication 9. Advanced Options 10. Save Cancel	:5060	

### Step 3) Create Outbound Routes

Click Basic > Outbound Routes > New DialRule

Rule Name : Enter DialRulen ame , for Eg HKBN SIP Trunk

Place this call through : Move the HKBN Sip trunk to Selected Trunks

Custom Pattern : Enter outbound Rule。 To call out by HKBN SIP trunk when XXX over than 3 Digits

### Remarks : Custom Pattern must be CAPITAL LETTER



### Step 4) Create New Inbound Routes

Click Inbound Control > Inbound Routes > Number DIDs > New Number DID

DID Number : Enter last 3 digit of the DDI Range , For 3123 4572 - 3123 4581 , Then Enter 572。

Destination : To select different Destination. For e.g. If you want to ring 800 Ring group for 31234572 in bound calling.Select Goto Extension and 800, Then press save.

New Number DID	
15. DID Number: 572 Destination: 16. Goto Extension ▼ 800(800) ▼ 17.	
18. Save Cancel	

### Step 5) Setup Virtual Interface

Click Network Settings > Network > IPv4 Settings > Virtual Interface

IP Address V1 : Select , Enter HKBN PBX IP Address , For e.g. *192.168.0.101* Subnet MaskV1 : Enter HKBN Subnet , For e.g. 255.255.255.0

Then press Save

• Home	Network			
Operator	20.	IPv4 Settings	IPv6 Settings	VLAN Settings
Basic				
Inbound Control	Ethernet P	ort Setup		
Advanced		IP	Assign: Static 🔻	]
Network Settings		IP A	ddress: 192.168.1.1	00
<ul> <li>Network 19.</li> </ul>		Subnet Mask: 255.255.255.0		
• 3G Network		Prim	ary DNS: 8.8.8.8	
Static Routing		Alter	mate DNS:	
VPN Server	Virtual Inte	erface		
VPN Client	21 🖃 🛛	0 Address V1 - 102 16	9 0 101 <b>22</b> Subpat M	
DHCP Server		P AddressV1: 192.10 P AddressV2:	Subnet M	laskV2:
• DDNS Settings			23 Save Cancel	
SNMPv2 Settings			20. Dave Cancel	

### Step 6) create Static Route

Click Network Settings > Static Routing > Static Routing > New Static Routing

Destination IP: Enter the SIP Trunk 的 Network IP provided by HKBN, For Eg.10.15.236.0

Subnet Mask : Enter THE Subnet IP provided by HKBN , For Eg.255.255.255.0

Gateway : Enter THE Gateway IP provided by HKBN , For Eg. 192.168.0.1

Press Save

New Static Routing				
Destination Network: Subnet Mask: Gateway: <b>27.</b> Save	10.15.236.0 255.255.255.0 192.168.0.1 Cancel	24. 25. 26.		

## Step 7) Connection Test

Click Network Settings > TroubleShooting > Ping , Enter HKBN SIP Server / SIP Proxy IP。

Troubleshooting			
	Ping	Traceroute	2
Ping 10.15.236.68 P	ackets: <u>4</u>	Run Stop	
PING 10.15.236.68 (10.1	15.236.68):	56 data byte	:3
64 bytes from 10.15.230	6.68: icmp_s	eq=0 ttl=57	time=12.1 ms
64 bytes from 10.15.230	6.68: icmp_s	eq=1 ttl=57	time=1.0 ms
64 bytes from 10.15.230	6.68: icmp_s	eq=2 ttl=57	time=1.1 ms
64 bytes from 10.15.230	6.68: icmp_s	eq=3 ttl=57	time=1.1 ms
10.15.236.68 ping s 4 packets transmitted, round-trip min/avg/max	statistics - 4 packets r = 1.0/3.8/1	 received, 0%	packet loss