Connect 3CX to VoIP GSM Gateway via VoIP Trunk

1. Introduction

This application note shows how to connect 3CX to VoIP GSM Gateway using VoIP Trunk. In this guide, we tested VoIP GSM Gateway with 3CX Phone System.

Target:

- 1. Make outbound calls from 3CX via VoIP trunk of VoIP GSM Gateway directly.
- 2. Receive calls through VoIP trunk of VoIP GSM Gateway.

Description

IP address of VoIP GSM Gateway: 192.168.6.55

IP address of 3CX: 192.168.6.88

2. Connect 3CX to VoIP GSM Gateway

2.1 Get ID and password of an account

Login 3CX WEB.Click Extension Status.Select an account which has not been registered.Double click on it.



Get ID:nito4001

Password:pin123456

2.2 Create a VoIP Trunk on VoIP GSM Gateway

Path:Gateway-> VoIP Configuration->VoIP Trunk.Click"Add".

MAXINCOM	VolP GSM Gat	eway remak
System Information	VolP Trunk Edit	31
Network Configuration Mobile Configuration Routing Configuration	Description 0	1. 192.168.6.88
Manipulation Configuration VoIP Configuration	Type Hostname/IP 0	2. 192.168.6.88 5060
SIP/IAX Account IP Trunk VolD Trunk	User Name 0 Password 0	nito4001
VOIP Trunk Group Configuration System Configuration	Authorization Name	nito4001
Reports System Tools	Domain O From User O	192.168.6.88 10007
		UDP •
	RTP Encryption(SRTP)	No V
	Qualify 0	Yes 💌
	Send outbound via:	ulaw,alaw,ysiii
	C Proxy Address	3.
		Back

Description:192.168.6.88 Hostname/IP:192.168.6.88 User Name:nito4001 Password:pin123456 Authorization Name: nito4001 Domain: 192.168.6.88 From User:10007

Note: User Name and Authorization Name must be the same with ID.

After saving and applying the changes, you will see the trunk is "OK" in "Status".

Path:System Information->SIP/IAX Information->Status

MAXINCOM		Noil Cateway									
System Information System Information	SIP	P Information Status	Trunk Type	Name	SIP/IAX	Transport	User Name	Hostname/IP Address			
SIP/IAX Information Network Configuration		Registered	Trunk	voip-sip30	SIP	udp	305	192.168.6.110			
Mobile Configuration Routing Configuration Monipulation	3.	Registered	Trunk	voip-sip31	SIP	udp	10007	192.168.6.88			
Manipulation Configuration VolP Configuration Croup Configuration		Registered	Account	1000	SIP	udp	1000	192.168.6.205			
System Configuration Reports		Unregistered	Account	1002	SIP	udp	1002	(Unspecified)			
+ System Tools		Unregistered	Account	1007	SIP	udp	1007	(Unspecified)			

2.3 Register an account on IP Phone.

3CX->Extension Status.Select an account but it is not 10007. Double click on it.

3CX Server	r Ma	ana	iger 🕨 Extens	ion Status				Manage	Add	View	Settir	ıgs	Help
Ports/Trunks Status		X	Disconnect Call 🍸 Sho	w Filter							Serv	er Time:	09:34:54
Extension Status 1.			Status	Extension	User Status	DND	Queues	Name		IN/OUT	C	Caller ID	
🛤 System Extensions Status			Registered (idle)	10000	Available	OFF	OUT						
🕫 3CXPhone Clients			Not Registered	10001	Available	OFF	OUT						
📇 Remote Connections			Not Registered	10002	Available	OFF	OUT	lin zhiwe					
Phones	2.		Registered (idle)	10003	Available	OFF	OUT						
Server Activity Log			Registered (idle)	10004	Available	OFF	OUT						
🗔 Server Event Log			Registered (idle)	10005	Available	OFF	OUT						
😵 Services status			Not Registered	10007	Available	OFF	OUT						
> 🚨 Extensions													
💷 WebRTC Gateway													
💷 VoIP/PSTN Gateways													
> IVOIP Providers													
Inbound Rules													
Bridges													
OutBound Rules													
> 👷 Digital Receptionist													
🚢 Ring Groups													
Call Queues													
Fax Machines													
> 🗘 Settings													
Dpdates													
> 6 Links													
> 🔞 Help													

Get ID:nito2007

Password:yw123456

Ports/Trunks Status	nager Edit Extension - 10003 Manage Add View Settings Help Edit Extension settings and click OK or Apply to save changes.	
Extension Status Extension Status System Extensions Status Garce Status Server Activity Log Server Event Log Server Event Log Server Event Log Server Event Log Server Status Settings UotP Providers DutBound Rules Digital Receptionist Ring Groups Call Queues Settings Updates Settings Updates Settings WebR Help	Ote Mail Forwarding Rules Phone Provisioning 3CXPhone Other Option Office Hours Scheduling Rights	

Login IP Phone.Account->Basic Account : Account 1 Display Label:10003 Display Name:10003 Register Name:nito2007(Must be the same with ID) User Name:10003 Password:yw123456

Server IP:192.168.6.88

Then, click "Submit", and we can check the account status.

tus	Account-Basic		Help
ount 1.	SIP Account		
	Status	7. Registered	Note :
asic 2.	Account	Account 1	Max length of characters for input box:
Ivanced	Account Active	Enabled 🔹	255: Broadsoft Phonebook server
	Display Label	10003	address
twork	Display Name	4. 10003	127: Remote Phonebook URL &
one	Register Name	nito2007	63: The rest of input boxes
	User Name	10003	
neBook	Password	•••••	Warning :
jrade	SIP Server 1		Field Description :
	Server IP	5. 192.168.6.88 Port 5060	
curity	Registration Period	1800 (30~65535s)	Submit Concel
	SIP Server 2		Submic Cancer
	Server IP	Port 5060	
	Registration Period	1800 (30~65535s)	
	Outbound Proxy Server		
	Enable Outbound	Disabled	
	Server IP	Port 5060	
	Backup Server IP	Port 5060	
	Transport Type		
	Transport Type	UDP 💌	
	NAT		
	NAT	Disabled	
	Stun Server Address	sip.pfingo.com Port 3478	

3. Mobile to IP

In this section, we will configure incoming call to 3CX through VoIP GSM Gateway.

3.1 Create a "Mobile to IP" Route on VoIP GSM Gateway

Path: VoIP GSM Gateway->Routing Configuration,Tel->IP Routing,click "Add".



MAXINCOM	NoIP GSM Ga	ateway aremak		
 System Information Network Configuration Mobile Configuration Routing Configuration Routing Parameter IP->Tel Routing Tels-Pi Routing) Blacklist Manipulation Configuration Group Configuration System Configuration Reports System Tools 	Tel->IP Routing Edit Index 0 Description 0 Source Prefix 0 Source 0 Destination Prefix 0 Destination 0	30 VoIPTrunk-3CX any Port Port Port Group any C Account C Service Provider VoIP Provider C IP Group	2 v 31 <default> v 28 <1007aa> v 31 <192.168.6.88> v 30 <test> v Back</test></default>	

Description: VoIPTrunk-3CX Source Prefix:any Source: Port(2) Destination Prefix:any Destination: VoIP Provider(31<192.168.6.88>) Save it and apply the changes.

Now we can make call to IP Phone. For example, tel dial port 2's number on GSM gateway. When connected, dial IP Phone' account (10003).

4. IP to Mobile

In this section, we will configure outbound call from 3CX through VoIP GSM Gateway.

4.1 Create an "IP to Mobile" Route on VoIP GSM Gateway

Path:VoIP GSM Gateway->Routing Configuration, IP->Tel Routing

MAXINCOM		Gatev Catev	vay ^g)					
 System Information Network Configuration Mobile Configuration 	3.	IP->Tel Routin	nç					
Routing Configuration Routing Parameter		Index	Description	Source	Source Prefix	Destionation Prefix	Destination	Options
 IP⇒Tel Routing 2. 		27	test	29 (Account)	any	any	2 (Port)	
 Tel->IP Routing Blacklist 		28	test	31 (VoIP)	any	any	4 (Port)	
Manipulation Configuration		29	1003toport2	29 (Account)	any	any	2 (Port)	
VolP Configuration		30	1002toport4	30 (Account)	any	any	1 (Port)	
Group Configuration System Configuration		31	default	28 (Account)	any	any	2 (Port)	
+ Reports								

MAXINCOM		ateway aremat
Custom Information	IP->Tel Routing Edit	
System monitation Network Configuration Routing Configuration Routing Configuration Routing Parameter IP>>141 Routing Blacklist Manipulation Configuration VoIP Configuration System Configuration System Configuration	Index O Description O Source Prefix O Source O	28 VoIPTrunk-3CX any C Any C Account 28 <1007aa> C Service Provider VoIP Provider 31 <192.168.6.88> C IP Group 30 <test> X</test>
Reports System Tools	Destionation Prefix 0	any
	Destination 0	Port 2
		Save Resetting A Back

Description: VoIPTrunk-3CX

Source Prefix:any

Source:VoIP Provider(31<192.168.6.88>)

Destination Prefix:any

Destination:Port(2)

Save it and apply the changes.

Try to use IP Phone call to tel.For example, pick up the phone, and select account 1(10003). Dial 10007, when it reached, dial the tel number.