



# THINKTEL COMMUNICATIONS TALKSWITCH VS

TALKSWITCH VS - THINKTEL SIP TRUNK & DID





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#### **1.1 INTRODUCTION**

This Document explains how to configure a SIP-TRUNK between Talkswich and the National CLEC THINKTEL COMMUNICATIONS.

The Primary way to connect the Talkswitch to the outside world is via IP connection and a SIP account called SIP-TRUNK.

THINKTEL COMMUNICATIONS as a VOIP Provider gives you an account with accompanying credentials (username - password - Proxy IP Address)



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#### STARTING THE MANAGEMENT SOFTWARE 1.2

- Connect your Talkswitch to the Network
- Plug in the power adapter and turn on your Talkswitch
- Your PC should be connected to the same network
- Start the phone system Management software. The software attempts to detect your phone system

s TalkSwitch Hanagement Software File Tools Options Troubleshooting Help	
talkswitch <sup>®</sup> management software	English • Français O Español O
Searching for available systems	
RETRY AUTO-DISCOVERY VIA IP	OPEN A CONFIGURATION FILE OR TEMPLATE
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• Select Your language

•Once the software detects the system, click on "Configure Auto-Detected System". The software loads the configuration from the Talkswitch and the following window appears









#### **1.3 IP CONFIGURATION**

• Click on "IP Configuration"

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File Tools Options Troubl	eshooting Help	- 11 -
Configuration Menu	IP Configuration	6
Global Settings	r System IP Settings	0
About		1
Administration	Use configured IP and DNS information	
Scheduling	Unit 1 IP address: 192 . 168 . 1 . 20 Subnet mask: 255 . 255 . 0	
On-Hold / Ringback     Email Service	Unit 2 IP address: 192 168 0 .101 LAN IP address of frewalk 192 168 1 .1	
VolP Configuration	Unit 3 IP address: 192 . 168 . 1 . 202 Preferred DNS server: 192 . 168 . 1 . 1	
Cicensed Add-Uns	Unit 4 IP address: 192 . 168 . 1 . 203 Alternate DNS server: 0 . 0 . 0 . 0	
Extensions and Voicemail		
A Local Extensions / Fax	- Local Proxy	
Remote Extensions		<b>.</b>
Ring / Page Groups	Unit acting as proxy: Unit 1 Change Proxy	
General Voice Mailboxes		
Voicemail Preferences	- Public IP Address -	
Voicemail Broadcast		9
Permissions	Type of public address: Static public IP address	
System Speed Dials	Current public IP address: 94 . 187 . 93 . 16	
Lines and Greetings	Public domain name (FQDN): talkswitch.domain.com	
Telephone Lines		
VolP Numbers	- Firewall Settings -	
CLID Based Routing		<b>.</b>
Line Hunt Groups	LAN IP address of firewalt 192168.1.1 It is recommended that you perform the firewall test to ensure router port mappings are correct for Viola calls	st 🛛
Auto Attendants	iti vur dans.	
	Firewall settings: Automatic (UPnP Enabled) Check Firewall	
Call Cost Reduction Features		
Auto Route Selection		
Call Bridge (DISA)		
Muto Call Back		
Prompted Call Back		
@ 2042 Fastingt Inc. All sights a		Custom

- •On "Public IP Address" select "Static Public IP address"
- On "Current public IP address" enter your Public IP Address
- On "Public domain name " you can leave it blank or enter the FDQN of the Talkswitch

#### **1.4 ROUTER CONFIGURATION**

• Click on "Automatic (UPnP Enabled)"

Description	Port	System IP	Protocol	Router Status
SIP (VoIP signalling)	5060	192.168.1.20	UDP	Requires attention
RTP Audio (Unit 1, Port 1)	6000	192.168.1.20	UDP	Requires attention
RTP Audio (Unit 1, Port 2)	6002	192.168.1.20	UDP	Requires attention
RTP Audio (Unit 1, Port 3)	6004	192.168.1.20	UDP	Requires attention
RTP Audio (Unit 1, Port 4)	6006	192.168.1.20	UDP	Requires attention
TFTP (IP Phone Configuration )	69	192.168.1.20	UDP	Requires attention
HTTP (XML Service)	8484	192.168.1.20	TCP	Requires attention
is possible for a router to report tha insure proper operation, only trust th lote: it can take up to 5 minutes to re-	t all ports are p le results of the	properly mapped e firewall test.	even if there	might be a conflict. In order to





- The Manual Port Mapping window appears , it lists the packet type, port number and IP address of each required port
- You have to forward all these selected ports in your WAN Router with their protocol to your Talkswitch
- When all selected ports are forwarded click on "Check Firewall"

Service	Status	Service	Status	
Internet Access		RTP Audio (Unit 1,	Port 4)	
HTTP (XML Service)		SIP (VoIP signalling	)	
RTP Audio (Unit 1, Port 1)		TFTP (IP Phone Co	ifiguration )	
RTP Audio (Unit 1, Port 2)				
RTP Audio (Unit 1, Port 3)				
				1
				Dataila xx Toot Dorto

• Click on "Test Ports"



•If all selected ports have been well forwarded in the WAN Router the status of this test should be • Click on "Close"

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# 1.5 SIP-TRUNK CONFIGURATION

- Click on "VoIP Configuration"
- Select an unused Service Provider example "SP1"

Contraction TalkSwitch Management File Tools Options Trouble	(Software - TS-BECK	↔ _D×
Configuration Menu	VolP Configuration	Ø
Bobal Settings       About       Administration       Scheduling       P Configuration       Vol Configuration       Vol Configuration       Licensed Add-Ons	Profile     Profile       HB     Mulb-branch       SP1     Service Provider 1       SP2     Service Provider 2       SP3     Service Provider 3       SP4     trxbox         Image: Service Provider 3       SP4     trxbox         Image: Service Provider 3       SP4     trxbox         Image: Service Provider 3         Image: Service Provider 4         <	
Extensions and Voicenail	Codec Options  Provisioning Details  ProxylRegistrar server name:  Registrar server name:  Outbound proxy.	0
Lines and Greetings Telephone Lines VolP Numbers Caller ID Based Routing Line Hunt Groups Auto Attendants	Realividomain:	
Call Cost Reduction Features Auto Route Selection Call Bridge (DISA) Auto Call Back Prompted Call Back	VoP Caler D VoP C	
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- Check "Activate Profile"
- On "Service Provider" choose "Manual Setup"
- On "Profile name" choose "Thinktel"
- Uncheck "Disable public IP substitution"
- Check "Register with authentication username"
- Check "Enable NAT keep alives"
- Click on "Codec Options"

lf your Interne bandwidth), T	t connection can su he default setting is	pport high bandwidth o G.729 (25 kbps band)	content, you can select G.711 (100 kbps width).
G.729		<b>G</b> .711A	Voice activity detection (VAD
Preferred cod	lec: G.729 💌		
Not sure of yo	our bandwidth capa	city? Use our VolP Te	st Utility.

- Choose your Codes and your preferred Codec
- Click on "OK"
- On "Proxy Registrar server name" enter the SIP domain name given by Thinktel
- Idem for "Registrar server Name" & "Outbound proxy" & " Realm/domain"

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File Tools Options Troub	leshooting Help	
<b>Configuration Menu</b>	VoIP Configuration	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
Obela Settings	Profile World Name         MB       Multi-branch         SP1       Thirds         SP2       Service Provider         SP3       Service Provider         SP4       trubox         Profile name:       Thinktel         Disable public P address substitution         Image:       Register with suthertication username         Image:       Enable NAT keep alves         Setting:       Codec Options         ProxyRegistrar server name:       for fit.tpm.ca         Registrar server name:       for fit.tpm.ca         Quibound proxy:       for fit.tpm.ca         Registrat nerver name:       for fit.tpm.ca         View All Registrations.       View All Registrations.	
Call Cost Reduction Features Auto Route Selection Call Bridge (DISA) Auto Call Back Prompted Call Back	VoP Caller D VoP c	
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• Click on "File" >> "Save"

Save X
Saving changes to the system. Please wait

• Click on "Option" >> "VoIP Trunking"

SIP server registration	0
Re-registration interval: 2 minutes	•
VoIP ports	0
SIP signalling port: 5060	
Base RTP port: 6000	

- •The "SIP signalling port" must be "5060"
- Click on "VoIP Numbers"

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File Tools Options Troub	xleshooting Help			
Configuration Menu	VolP Numbers		8	3
Clobal Settings       O Ahout       O Ahout       O Ahout       O Ahout       O Shoduing       P Configuration       Ver Configuration       Ver Configuration       O Local Stensions / Fax       Renice Extensions       Renice Extensions       Renice Extensions       Volumear       Renice Extensions       Volumear       Volumear       Volumear       Volume Extensions       Volumear       Volumear       Volumear       Volumear       Valo Cal Based Routing       Lines and Greetings       Valo Cal Based Routing       Auto Alteroatist       Call Cost Reduction Features       Auto Alteroatist       Call Cost Reduction Features       Auto Call Back       Prompted Call Back	O       VoP Number         1       422         2	DS.		
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- Choose one unused "ID"
- Check "Activate VoIP Number"
- On "Select a VoIP Profile" and choose "Thinktel"
- On "Country code" enter "1" for US and Canada
- On "City or area code" enter your "NPA" example for Montreal "438"
- On "Number" Enter your last 7 digits
- On "User/Account" enter your pilot number provided by Thinktel
- On "Password" enter your password provided by Thinktel
- Click on "File" >> "Save"

C TalkSwitch Management	t Software - TS-BECK		↔ <u> </u>
Hie Tools Options Trouble	eshooting Help		
Configuration Menu	VoIP Numbers		
Global Settings		Activate VolP Number	0
About	ID VolP Number		
Administration	1 422	Select a VolP Profile: Thinktel	
Scheduling	2 1-438-8998425	Phone Number Username and Password	<b>(</b>
lP Configuration	3		— ¶
Non-Hold / Ringback	4	Country code: 1 User/Account: 4388998425	
Email Service	5	City or area code: 438	-
🤣 VoIP Configuration	7		
Ricensed Add-Ons	8	Number: 8998425	
	9		
Extensions and Voicemail	10		
Local Extensions / Fax	11	Registration Status	
Remote Extensions	12		٦
Ping / Page Groups		Status: Registered View All Registrations	
General Voice Mailboxes			
Voicemail Preferences		Call Handling-	
Voicemail Broadcast		Mode 1 Holda 2 Holday Node	
Permissions		mode z homey mode	1
System Speed Dials		When a call comes in on this phone number, perform the following action:	
• • • •		go to local extension 💌 118 - Delor lphone	
Lines and Greetings		Busy or unanswered calls will follow the call handling options configured for this extension	
Telephone Lines			
VOIP Numbers			
Caller ID Based Routing			
Line Hunt Groups			
Auto Attendants			
Call Cost Reduction Features			
Auto Route Selection			
all Bridge (DISA)			
auto Call Back			
Prompted Call Back			
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•Click on "View All Registrations"

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	Registration Status	•	×
Activate VolP Number	Registration Status		
Select a VolP Profile: Thinktel	Client	Status	Expires
r Phone Number	422	Registered	1707
	1-438-8998425	Registered	3477
Country code: 1			
City or area code: 438			
Number: 8998425			
-			
Registration Status			
Status: Desistered View All Desistrations			
View All Registrations			
r Call Handling			
Mode 1 Mode 2 Holiday Mode			
When a call comes in on this phone number, per			
go to local extension 💌 118 - Delor Iphor			Refresh Close

• Check that the "Status" of Thinktel's SIP-TRUNK is "Registered"

### 1.6 SIP-TRUNK CONFIGURATION

- On the main menu click on "Line Hunt Groups"
- Choose and select one free "HG" example "88"

File Tools Options Troub	eshooting Help	
onfiguration Menu	Line Hunt Groups	
Ibbal Settings About Administration Administration Con-Hold / Ringback Fraining Con-Hold / Ringback C	HG     Name       9     6519920744       81     Hunt Group name       82     belutit       84     Line type: Phone Lines       86     Move Up       88     Move Up       Move Down     Move Down	)  
nes and Greetings Telephone Lines VolP Numbers Caller ID Based Routing Line Hunt Groups Auto Attendants	Hunting Order for Outgoing Calls Hunt lines in the following order: Order specified above	@ @ 
all Cost Reduction Features Auto Route Selection Call Bridge (DISA) Auto Call Back Prompted Call Back	Overflow Tone Notification	

- Check "Activate Hunt Group 88"
- On "Hunt Group name" enter "Thinktel"
- On "Line type" choose "SIP VoIP Service (Thinktel)"
- Click on "File" >> "Save"
- Now you can make outgoing calls through Thinktel's SIP-TRUNK by dialling 88-NPA-XXXXXXX

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S TalkSwitch Managemen	ent Software - TS-BECK	⇒ _□2
File Tools Options Troub	bleshooting Help	
Configuration Menu	Line Hunt Groups	5
Global Settings About Administration Scheduling P Configuration G On-Hold / Ringback Email Service	HG         Name           90 19920744         Finite           81         90 19920744           82         beinut           83         volptak           Hunt Group name:         Thinktel           90 19920744         Hunt Group name:           Hunt Group Line Assignments         Line type:           84         Line type:	0
VoIP Configuration Licensed Add-Ons	00         VoP lines will be selected automatically. To modify the number of VoP lines available for the VoP Configuration page.           87         trobox           88         Thinktel           Number of thes reserved 0	or each Service Provider, go to
Local Extensions / Fax Remote Extensions Ring / Page Groups General Voice Mailboxes Voicemail Preferences Voicemail Broadcast Voicemail Broadcast System Speed Dials		
Lines and Greetings Telephone Lines VoIP Numbers Caller D Based Routing	Hunting Order for Outgoing Calls	0
Line Hunt Groups Auto Attendants	Hunt Group Busy Overflow for Outgoing Cals	<b>O</b>
Call Cost Reduction Features Auto Route Selection Call Bridge (DISA) Auto Call Back	Coverflow Tone Notification	
© Prompted Call Back	Pay notification tone when overflowing to another hunt group.	Connected - Syste

# **1.7 DID CONFIGURATION**

- On the main menu click on "VoIP Numbers"
- Choose and select the "ID" Of Thinktel's VoIP Number
- On "Call Handling" section Choose any combination for an incoming call to Thinktel's DID Example : "Go to local extension" "156 - Work Shop"

🔁 TalkSwitch Managemen	t Software - TS-BECK		
File Tools Options Troubl	eshooting Help		
Configuration Menu	VoIP Numbers		3
Global Settings		Activate VolP Number	0
About	ID VolP Number		<b>4</b>
Administration	1 422	Select a VolP Profile: Thinktel	
Scheduling	2 1-438-8998425	- Phone Number	
B P Configuration	3		¶
🕬 On-Hold / Ringback	4	Country code: 1 User/Account: 4388998425	
Email Service	5	City or area and a 122	_
🤣 VoIP Configuration	7	City of area code. 430 Password. ELie 134iliaz	
R Licensed Add-Ons	8	Number: 8998425	
	9		
Extensions and Voicemail	10		
Legal Extensions / Fax	11	Registration Status	
Demote Extensions / Fax	12		۳.
Ring / Page Groups		Status: Registered View All Registrations	
General Voice Mailhoxes			
Voicemail Preferences		Call Handling-	
Voicemail Broadcast		Mode 1 Hada 2 Holday Mode	
Permissions		mode 2 Hokey mode	
System Speed Dials		When a call comes in on this phone number, perform the following action:	
		go to local extension 💌 156 - Work Shop	
Lines and Greetings		Busy or unanswered calls will follow the call handling options configured for this extension	
Telephone Lines			
VolP Numbers			
CLID Based Routing			
Line Hunt Groups			
Auto Attendants			
Call Cost Reduction Features			
Auto Route Selection			
all Bridge (DISA)			
Auto Call Back			
Prompted Call Back			
	1		
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a a construction of the real registre in		•	Contraction Contraction

- Click on "File" >> "Save"
- For an incoming call to 438-899-8425 the local extension 156 will ring

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