



Analog Active Card

Configuration with 3CX Phone Systems

ALLO Analog Card configuration with <u>3CX Phone System</u>

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This document describes a typical deployment scenario of ALLO Analog Card with 3CX Phone System in an Office Telephony environment. The Analog Card provides the following functionalities.

FXS Modules – connectivity to analog phones and fax machines, analog trunking to legacy PBX

FXO- PSTN Line Termination for outbound/Inbound calls



System Requirement:

- Operating System : Windows XP/ Windows 7/ Windows Server 200X
- 3CX phone system 10 and above
- Dual Core Processor with 1 GB RAM
- Available PCIe slot

1. 3CX Phone System Configuration

 Go to VoIP/ PSTN gateways and click "Add PSTN Gateway". Select the Brand as Generic & Model as "Gateway Device"

\mathbf{O}	VoIP/PSTN Gateways	
	😒 Add Gateway Wizard	
3CX Phone System …⋛? Ports/Trunks Status	Add PSTN Gateway	
	Name	Analog_GW 🕜
3CX MyPhone Clients	Brand	Generic 🔽 🔽
	Model	Gateway Device 🛛 🗸 🤡
Server Activity Log	Description	Custom Generic Gateway Device
	URL	http://www.3cx.com
- ⊘ Extensions - ≫ VoIP/PSTN Gateways	More vendor supported	gateways can be found here: <u>http://www.3cx.com/voip-gateways/index.html</u>

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 Click Next and enter gateway IP address (this is the same IP that is assigned to ALLO Analog Card) as below.

In this example, the Gateway ip address(Analog Card IP address) is 192.168.0.68

\mathbf{O}	VoIP/PSTN Gateways		
JUX	🖘 Specify VoIP Gateway Details		
3CX Phone System Ports/Trunks Status	VOIP Gateway		
Extension Status	Gateway Hostname or IP	192.168.0.68	0
W System Extensions Status 	Gateway Port (default is 5060)	5060	(?)
Remote Connections	Number of ports	1	0
🥢 Phones 🥑 Server Activity Log	Туре	Analog	▼ 2
I Server Event Log	Number of channels per port	1	0
All Services status			

3) Click Next and it will generate the following parameters

The "Create Lines" page allows you to configure each channel's parameters, namely:

- a. Virtual Extension Number
- b. Authentication ID
- c. Authentication Password
- d. Number of simultaneous calls that the channel can handle
- e. The Port Identification (External Number) of the channel

f. The destination of calls that are received by the channel – These values are pre-populated, but may be changed at this point based on your need. 3CX configuration file will be generated using the parameters supplied in this page.

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OCV	VoIP/PSTN Gate	eways						
	🖘 Create ports							
3CX Phone System Ports/Trunks Status & Extension Status Øystem Extensions Status	The following ports w identification purpose should be different fro route).	ill be created in the "C s, and the internal line om the extension numl	Create Ports'' screen. Y e number is used by 3C ber range. You can cor	ou can edit the Port identificatic < Phone System to address the figure to which extension incor	n and authenti line connecteo ning calls shoul	cation settings before the I to the port on the VOIP (d be routed based on whe	vare created. Note that t àateway. Therefore the I ather they are inside or o	the Port i nternal L utside off
- 3CX MyPhone Clients	Remove selected	Virtual extension	Authentication ID	Authentication Password	Channels	Port Identification	Inbound Route Da	y In
- 2 Phones		10005	10005	b9stuxa	1	10005	100	✓ 10
- 🧭 Server Event Log							C	4 D
							L	< Bac
Extensions								
🖥 🖘 VoIP/PSTN Gateways								

4) Click next and it will prompt you to create outbound rules.

In this example we have given "9" as a prefix & stripping Digit "1"

	VoIP/PSTN Gate	eways							
	🚸 Create an Outb	ound Call Rule	to configure on which PSTM	N port, VOIP provider or b	ridge an out	bound calls shou	ld be placed on		
3CX Phone System Forts/Trunks Status & Extension Status	General Rule Name			Rule for An	alog_GW		0		
System Extensions Status 30 30 MuPhone Clients	Apply this rule to the	ese calls							
	Define to which out	bound calls th	e rule must apply						
	Calls to number	s starting with	prefix	9			0		
Services status	Calls from exter	nsion(s)					(2)		
With the second se	Calls to Numbe	rs with a lengt	h of				0		
VolP Providers Inhound Bules	Calls from exter	nsion group						Select] 🕐
Bridges	Make outbound cal	ls on							
Outbound hates Jogital Receptionist Ping Groups	Configure up to 3 ro	utes for calls.	The second and third route	will be used as backup. Fo	or each route	e, digits can be s	ripped or added.		
a Call Queues					Strip D	igits	Prepend		
	Route	1	Analog_GW	~	1	~			?
🗉 💥 Settings	Route	2		~	1	~			?
ia@ 3CX Phone System Updates ia@ Links	Route	3		~	1	~			0
🗈 🤄 Help									

5) Go to VoIP/PSTN gateways and Select and Edit the gateway

	VoIP/PSTN Ga	teways				
	🧐 Add Gateway	🚵 Edit Gateway	💢 Delete Gate	way (Refresh Registration	
ĺ	Gateway Name	Host .	/ IP Address	Туре	•	
	Analog_GW	192.16	58.0.68	Analo)g	

6) Click on Edit gateway and Go to Inbound parameters. Make the Following Call source Identification: SIP Field: "Contact: Host Part" Variable: "Custom IP Range" Custom Value: Enter the Gateway IP Address (Analog card IP) (Eg: 192.168.0.68)

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Edit Gateway

	···					
•	Edit Gateway settings and click OK or Apply to s	ave changes.				
Ge	General Advanced Outbound Parameters Inbound Parameters DID					
	Call Source Identification					
	The source of incoming calls must be identified	Configure how	3CX Phone System shou	ld identify calls from this gate	way.	
	Matching Strategy	Match	All Fields	*		
	SIP Field		Variat	ble	Custom Value	
	Contact : Host Part	Custor	n IP Range	~	192.168.0.68	
	Add/Update Delete		Clear Selection]		
	SIP Field		Variable		Custom Value	
	L					

Click Add/Update.

Edit Gateway	Edit Gateway					
😒 Edit Gateway settings and click OK or Apply	to save changes.					
General Advanced Outbound Parameters	Inbound Parameters DID					
Call Source Identification						
The source of incoming calls must be identi	fied. Configure how 3CX Phone System should identify calls from thi	is gateway.				
Matching Strategy	Match All Fields					
SIP Field	Variable	Custom Value				
Contact : Host Part	Custom IP Range	✓ 192.168.0.68				
Add/Update De	lete Clear Selection					
SIP Field	Variable	Custom Value				
Contact : Host Part	Custom IP Range	192.168.0.68				

Click Apply and OK.

7) Click finish and Go to Port/Trunks Status

	Ports/Trunks Status						
	🐹 Disconnect Call						
3CX Phone System	Status	Virtual Extension Number	Туре	Name	IN/OUT	Caller ID	Dest
Ports/Trunks Status Status Extension Status	Not Registered	10005	Gateway	Analog_GW			

8) Double click on the 10005 and note down the username and password details, which need to be configured in Analog gateway as a SIP trunk.

2. ALLO Analog Card configuration

For Analog card installation, refer quick installation guide:

1) Open GUI of the analog gateway and Go to Trunks (Analog&SIP) and Click on VOIP Trunks and Create New SIP trunk.

Create New SIP trunk	x
Туре: 📃 💌	
Context Naming 🛈: Based on Username 🛛 💌	
Provider Name 🛈:	
Hostname 🛈:	
Hostport ①:	
Username 🛈:	
Password :	
DID Routing : 🔲	
Registration : 🔲	
Save €	

 Select Type SIP and enter all the details as shown below. In this example, the IP address of 3CX IPPBX is 192.168.0.104

Create New SIP trunk		X
Туре:	SIP 💌	
Context Naming 🛈:	Based on Username 💌	
Provider Name 🛈:	3CX	
Hostname 🛈:	192.168.0.104	
Hostport 🛈:	5060	
Username 🛈:	10005	
Password :		
DID Routing :		
Registration :		

Note: Username and Password should be the same as provided in 3CX trunk Configuration.

If you want DID routing, you can check the DID Routing Check Box. All the calls coming inside the gateway through this 3CX trunk will go to DID routing table.

3) Click SAVE and APPLY CHANGES. You can see the registered Status in the System Status page.

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4) Create Outgoing Calling Rule for the gateway to reach the 3CX PBX and add it to Dial Plan.

Edit Calling Rule	x
Calling Rule Name 🛈 : OUT	
Pattern ①:_9X.	
Caller ID①:	
🔽 🗖 Send to Local Destination 🛈 ———————————————————————————————————	
Destination :	
Send this call through trunk:	
Use Trunk 🛈 3CX 💌	
Strip ① 1 digits from front	
and Prepend these digits 🛈 👘 🛛 before dialing	
using this filter: ①	
🔽 🗖 Use FailOver Trunk 🛈 :	
fail over Trunk 🛈 🔤	
Strip 🛈 🗾 digits from front	
and Prepend these digits 🛈 👘 before dialing	
using this filter: 🕕	
Scancel E Save	
Edit DialPlan X	

Edit DialPlan X
DialPlan Name: DialPlan1
Include Local Contexts: 🔽 default 🗹 sayip
Include Outgoing Calling Rules: 🗹 OUT
Save Earcel

5) Creating Incoming Calling Rules in Analog gateway. Go to Incoming calling rules and Create New incoming Calling Rule

New Incoming Rule		x
Trunk : Time Interval : Pattern ① : Destination :	3CX None (no Time Intervals matched) _X. User Extension 1000	
	Scancel 💾 Update	

Click Update and Apply Changes. All the calls are coming from 3CX PBX to gateway will land on extension 1000.



Thank you