



FIBERME Communications LLC.

Configuring FEG4301 with 3CX

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OVERVIEW

This document describes basic configuration to interconnect 3CX series and FEG4301. In this document, we are using FEG4301 as an example. This is typically applied to the scenario where users would like to add a FEG4301 as an external ISDN trunk.



CONNECT 3CX TO FEG4301 USING PEER SIP TRUNK

Create Digital Receptionist On 3CX

On the 3CX web GUI, create an Digital Receptionist extension under **Digital Receptionist** ->**Add**.

You can assign the " Menu Options " to different destinations.

Key	Action	Destination
0	Connect to Extension	100
1	Nothing	
2	Nothing	

Figure 1: Create Digital Receptionist on 3CX



Create Peer SIP TRUNK On 3CX

On the 3CX web GUI, create a peer SIP trunk under **SIP Trunks ->Add SIP Trunk**. In this example, the FEG4301 IP address is 192.168.99.237.

The screenshot displays the 3CX web interface for creating a new SIP trunk. The left sidebar shows navigation options like Dashboard, Phones, Extensions, Groups, SIP Trunks, Inbound Rules, Outbound Rules, Messaging, Digital Receptionists, Ring Groups, Backup and Restore, Call Log, Security, Advanced, Settings, and 3CX Portal. The main content area is titled 'Convergja' and has tabs for General, DIDs, Caller ID, Options, Inbound Parameters, and Outbound Parameters. The 'General' tab is active, showing the 'Trunk Details' section with the following fields: 'Enter name for Trunk' (FEG4301), 'Registrar/Server/Gateway Hostname or IP' (192.168.99.237), a port field (5060), an 'Auto Discovery' checkbox (unchecked), 'Outbound Proxy' (empty), another port field (5060), another 'Auto Discovery' checkbox (unchecked), and 'Number of SIM Calls' (10). Below this is the 'Authentication' section with 'Type of Authentication' set to 'Do not require - IP Based', 'Authentication ID (aka SIP User ID)' (empty), 'Authentication Password' (empty), and a '3 Way Authentication Password' checkbox (unchecked).

Figure 2: Create Peer SIP Trunk on 3CX

Configure Outbound Rule on 3CX

On the 3CX web GUI, go to **Outbound Rules ->Add** to create a new outbound rule. This would allow the extension on the 3CX to reach numbers in ISDN network via the peer SIP trunk we just configured.



Route	Strip Digits	Prepend	Outbound Caller ID
1	FEG4301	1	
2	BLOCK CALLS	0	

Figure 3: Configure Outbound Rule on 3CX

In this example prefix "9", 9 is the first dialing digit and it will be stripped off when the call goes out.

Configure Inbound Rule on 3CX

On the 3CX web GUI, go to **Inbound Rules ->Add DID Rule** to create a new inbound rule. Let's say that we have 30 numbers on the PRI starting from 1122334450 to 1122334479. In this example, we create the DID as **11223344XX** to receive calls through all the 30 numbers.



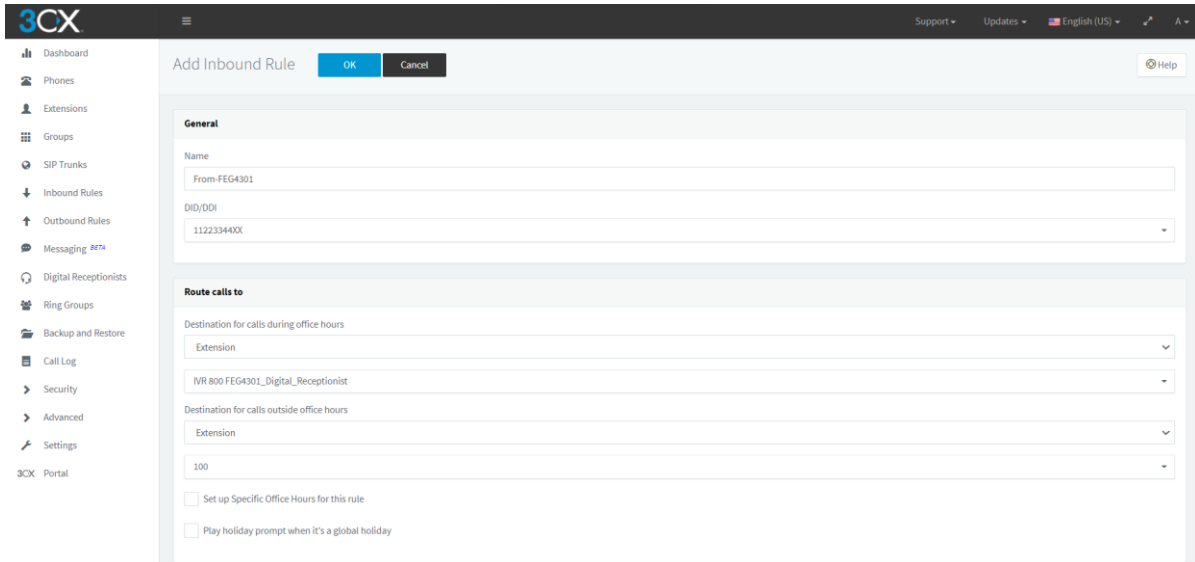


Figure 4: Configure Inbound Rule on 3CX

The default destination is configured to IVR. Ensure to select the proper extension for the IVR.

Connect FEG4301 with 3CX

1. On the FEG4301 web GUI, go to the **VoIP->SIP Trunk** page and click on **Add New** button. Then, enter the IP address of the 3CX that you are peering with in Remote Address. In the following example, 3CX has IP address 192.168.99.50.

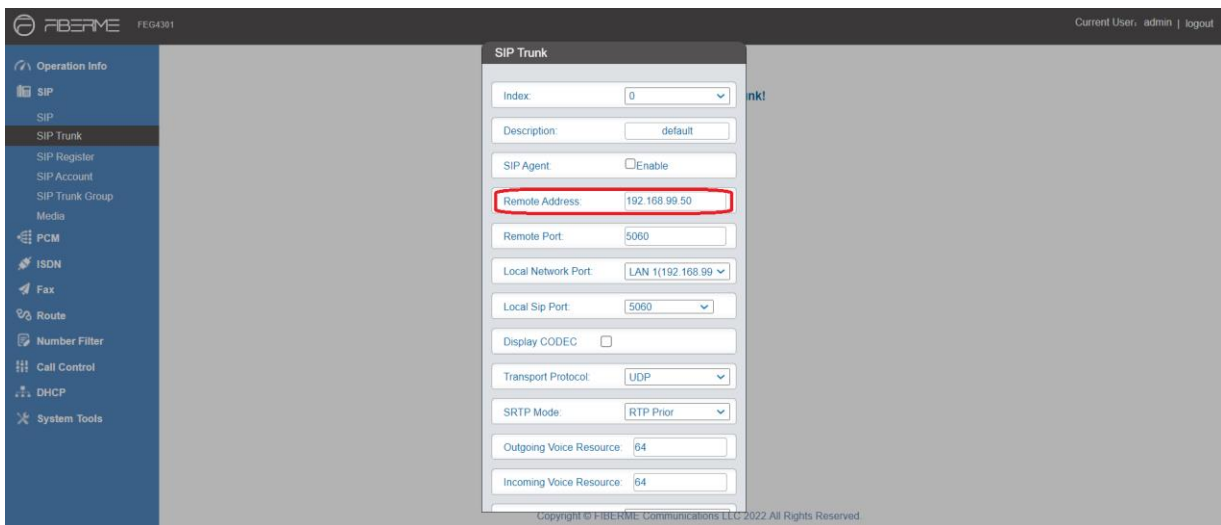


Figure 5: Connect FEG4301 with 3CX: Remote Address

2. Go to the **VoIP->SIP Trunk Group** page and click on **Add New** button. Then check on the trunk we've created.



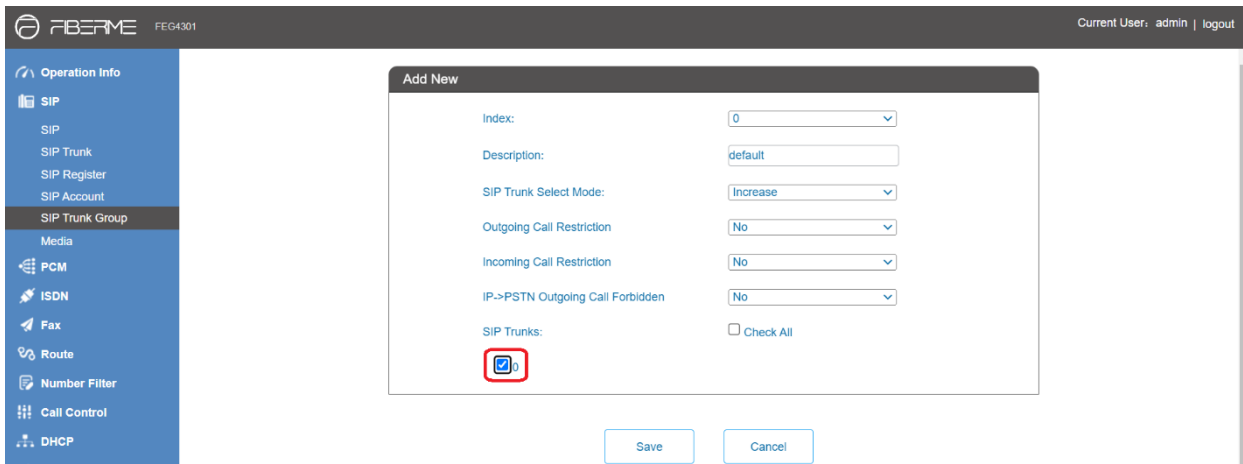


Figure 6: Connect FEG4301 with 3CX: SIP Trunk Group

Create PCM Trunk Group on FEG4301

1. On the FEG4301 web GUI, go to the **PCM ->PCM Trunk Group** page and press “Add New”. Then, check mark on the PCM trunk.

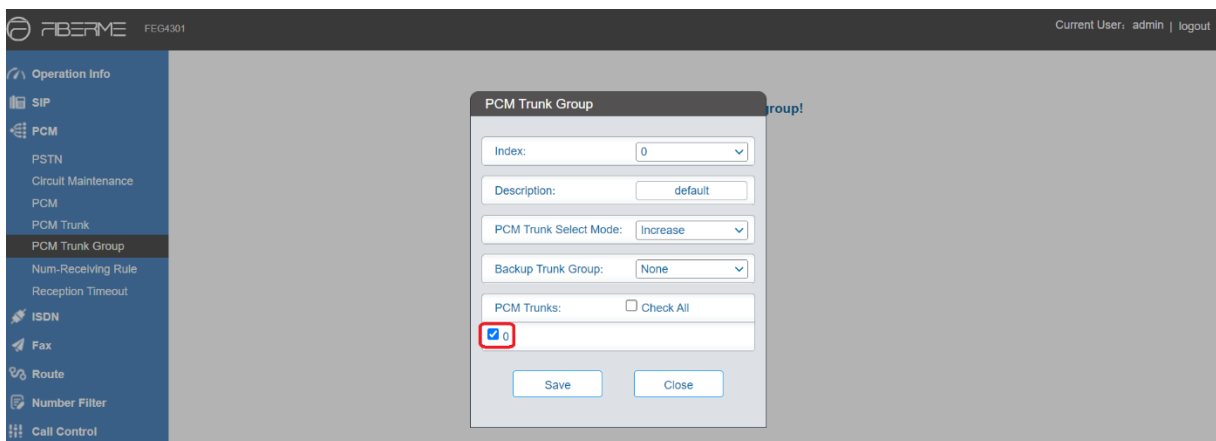


Figure 7: Create PCM Trunk Group on FEG4301



FEG4301 CALL Routing

Configure IP to PSTN on FEG4301

1. On the FEG4301 web GUI, go to the **Route-> IP->PSTN** page, Press “Add New”.

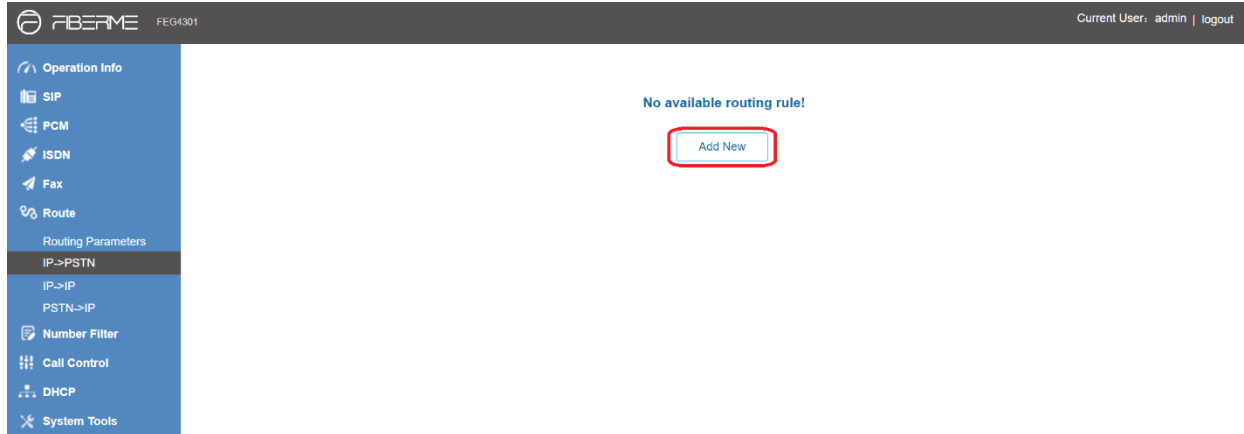


Figure 8: FEG4301 – IP to PSTN

2. Select the SIP Trunk Group in “Call Source” and the PCM Trunk Group in “Call Destination”.

The screenshot shows the "IP->PSTN Routing Rule" configuration dialog box. It contains several fields: "Index" (255), "Call Source" (SIP Trunk Group [0]), "CallerID Prefix" (*), "CalleeID Prefix" (*), "Call Destination" (PCM Trunk Group [0]), "Number Filter" (none), and "Description" (default). The "Call Source" and "Call Destination" dropdown menus are highlighted with red boxes. At the bottom are "Save" and "Close" buttons.

Figure 9: IP to PSTN Settings



Configure PSTN to IP on FEG4301

1. On the FEG4301 web GUI, go to the **Route-> PSTN->IP** page, Press “Add New”.

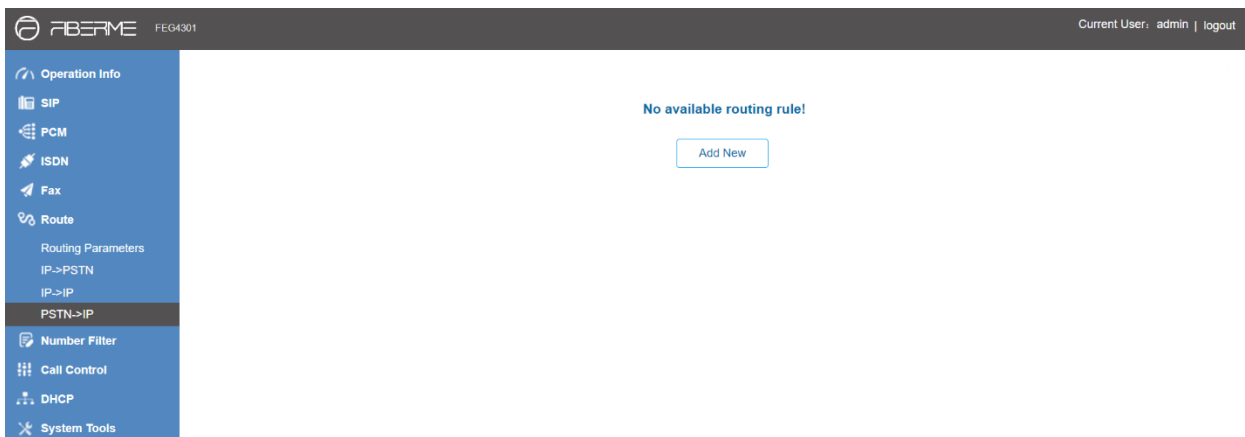


Figure 10: FEG4301 – PSTN to IP

2. Select the PCM Trunk Group in “Call Initiator” and the SIP Trunk Group in “Call Destination”.

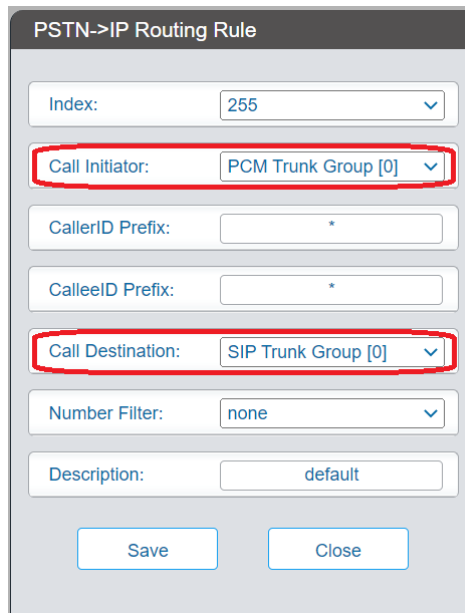
The image shows a 'PSTN->IP Routing Rule' configuration window. It contains several fields: 'Index' (255), 'Call Initiator' (PCM Trunk Group [0]), 'CallerID Prefix' (*), 'CalleeID Prefix' (*), 'Call Destination' (SIP Trunk Group [0]), 'Number Filter' (none), and 'Description' (default). The 'Call Initiator' and 'Call Destination' fields are highlighted with red rectangles. At the bottom, there are 'Save' and 'Close' buttons.

Figure 11: PSTN to IP Settings

