FIBERME Communications LLC.

Configuring FEG4301 with FreePBX

Table of Contents

Table of Figures

OVERVIEW

This document describes basic configuration to interconnect FreePBX 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 FreePBX TO FEG4301 USING PEER SIP TRUNK

Create IVR On FreePBX

On the FreePBX web GUI, create an IVR extension under **Applications ->IVR ->Add IVR**.

In IVR settings, if "Direct Dial " is enabled, the calls dialing into the FreePBX IVR will be able to reach the internal extensions registered to the FreePBX. Also, you can assign the "IVR Entries" to different destinations.

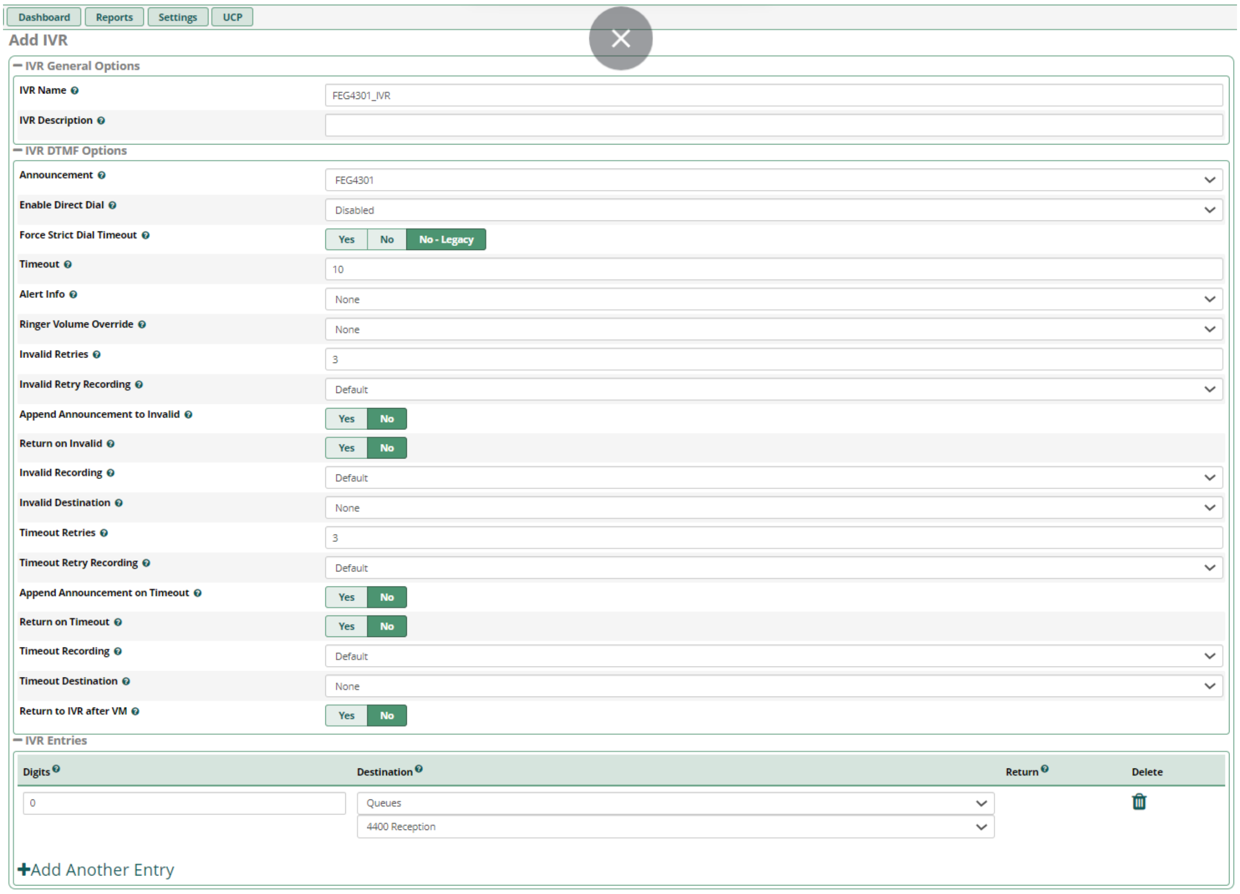

Figure 1: Create IVR on the FreePBX

Create Peer SIP TRUNK On FreePBX

On the FreePBX web GUI, create a peer SIP trunk under **Connectivity ->Trunks ->Add SIP (Chan_pjsip) Trunk**. In this example, the FEG4301 IP address is 192.168.99.237.

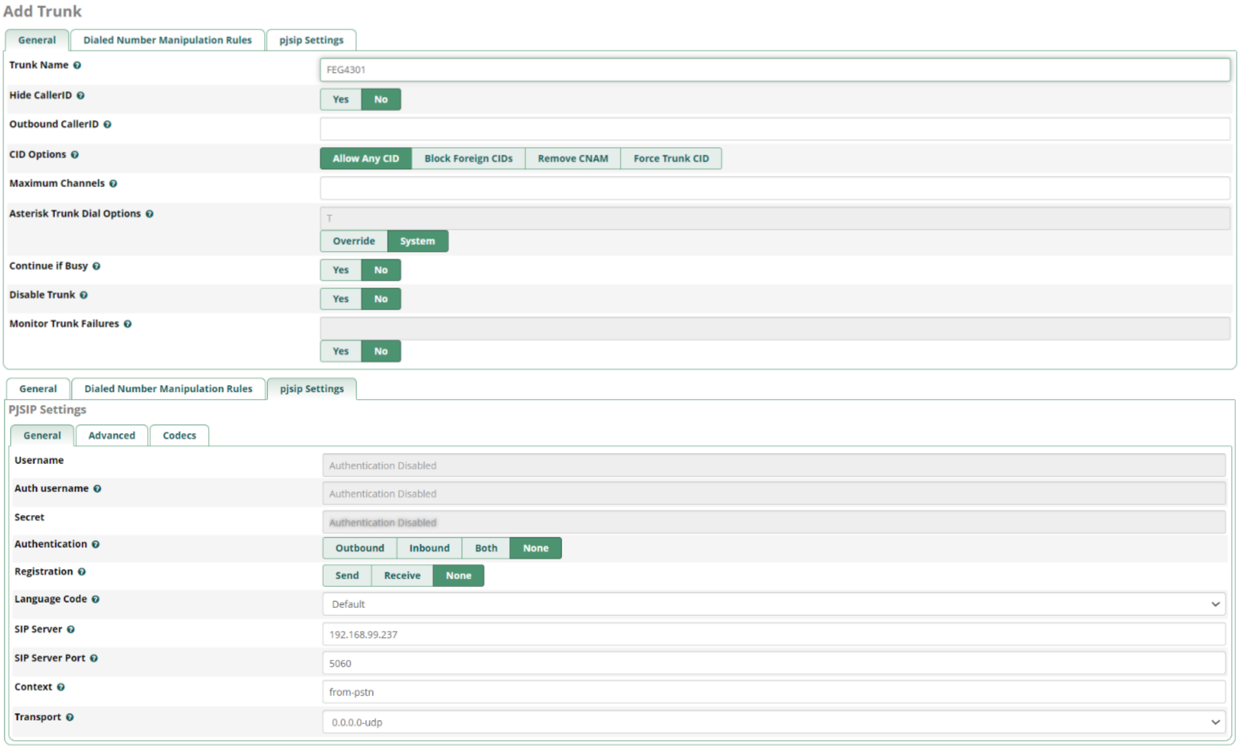

Figure 2: Create Peer SIP Trunk on the FreePBX

Configure Outbound Rule on FreePBX

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

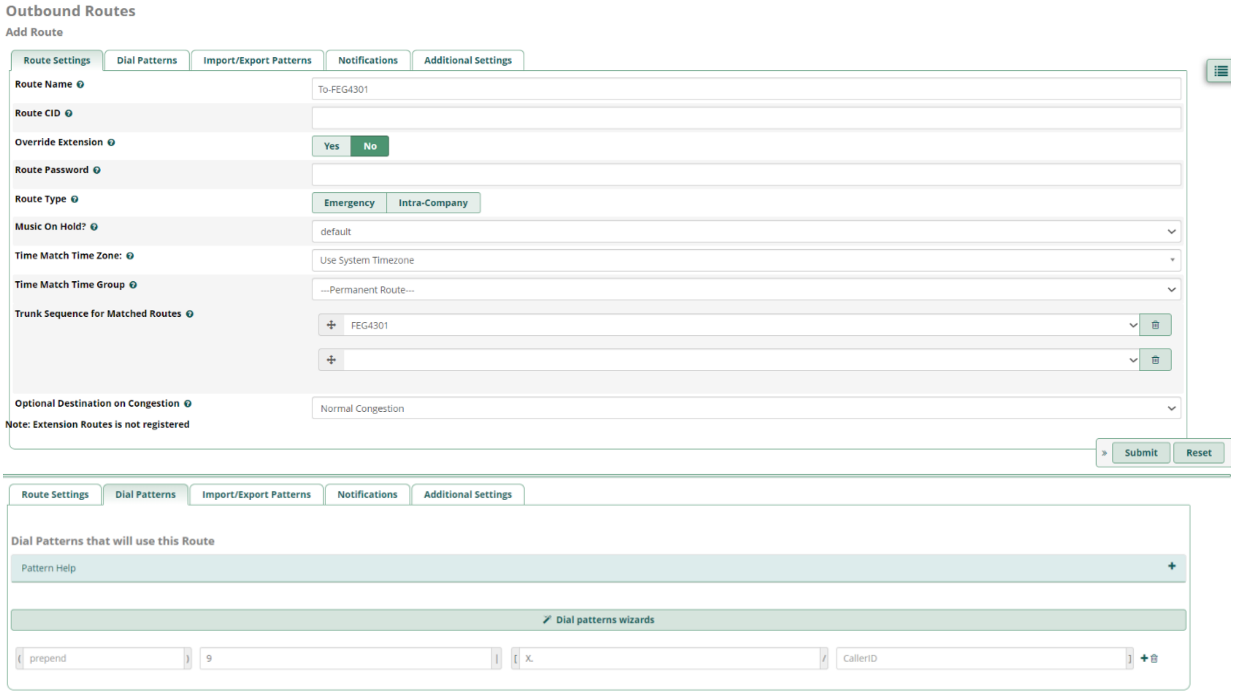

Figure 3: Configure Outbound Rule on the FreePBX

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

Configure Inbound Rule on FreePBX

On the FreePBX web GUI, go to **Connectivity ->Inbound Routes ->Add Inbound Route** 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 FreePBX

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

Connect FEG4301 with FreePBX

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 FreePBX PBX that you are peering with in Remote Address. In the following example, FreePBX has IP address 192.168.99.57.

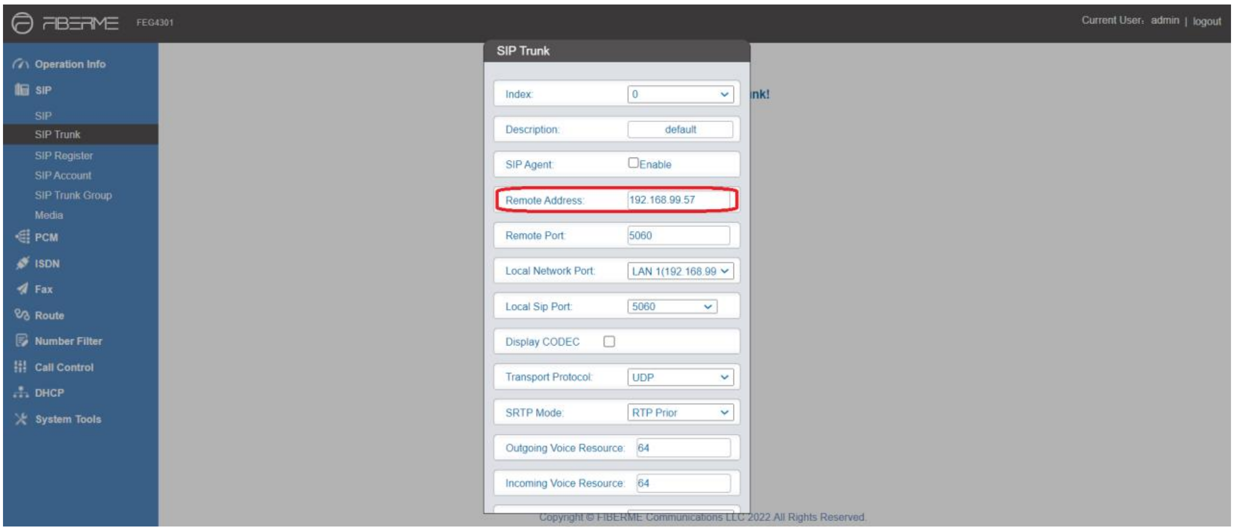

Figure 5: Connect FEG4301 with FreePBX: Remote Address

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

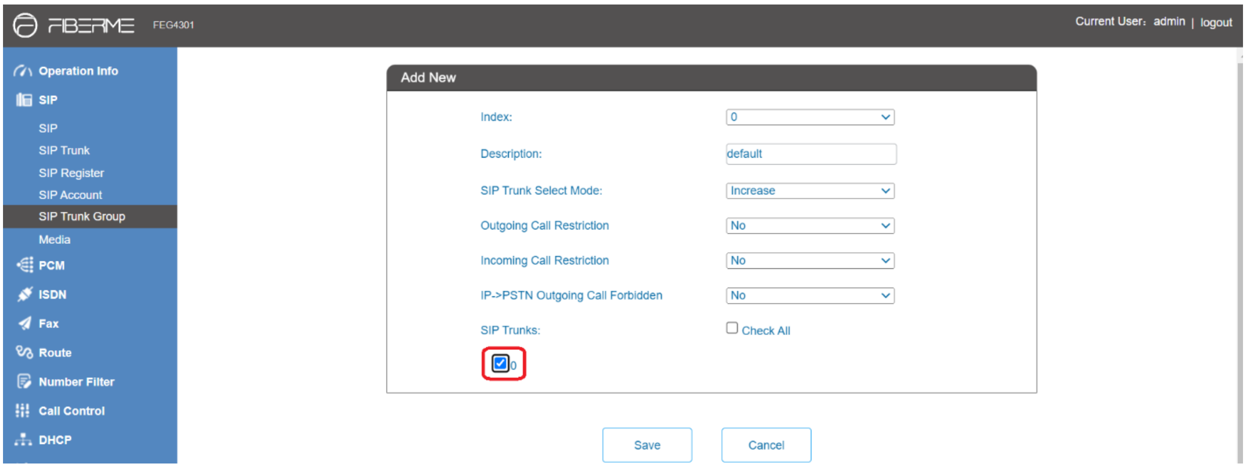

Figure 6: Connect FEG4301 with FreePBX: SIP Trunk Group

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.

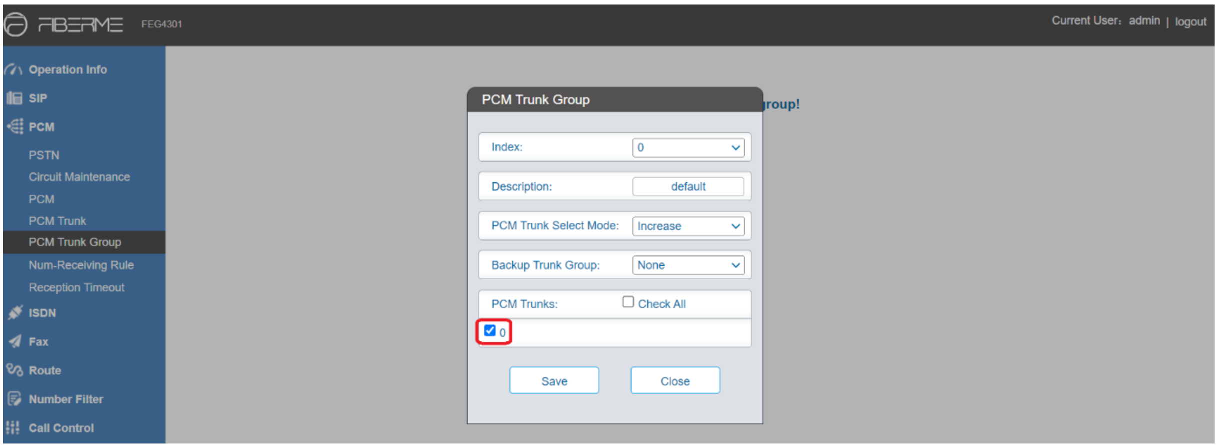

Figure 7: Create PCM Trunk Group on FEG4301

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".

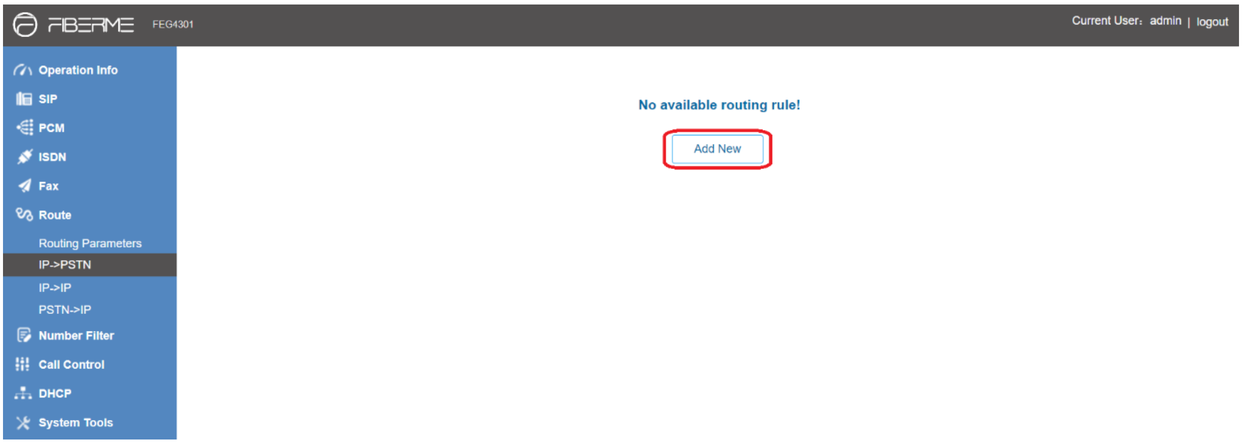

Figure 8: FEG4301 – IP to PSTN

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

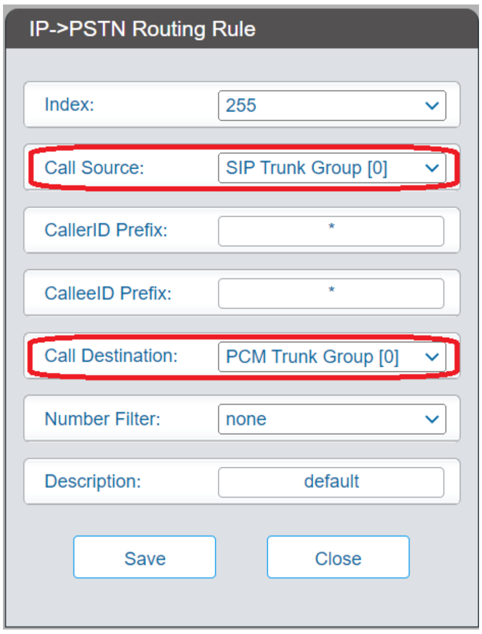

Figure 9: IP to PSTN Settings

Configure PSTN to IP on FEG4301

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

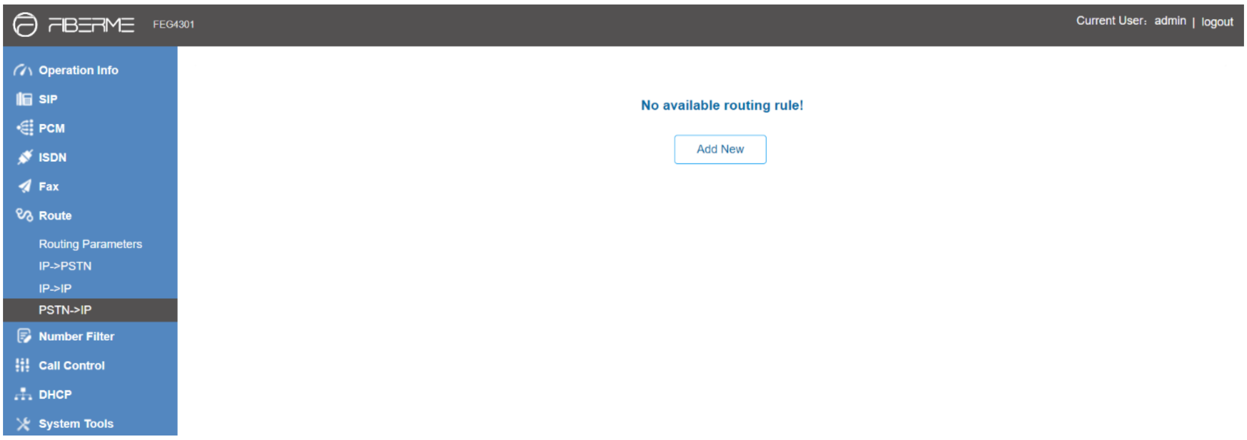

Figure 10: FEG4301 – PSTN to IP

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

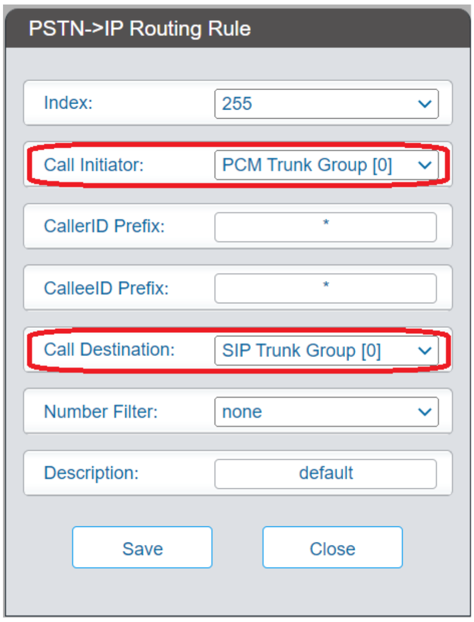

Figure 11: PSTN to IP Settings