FortiVoice Enterprise setup process for connecting a FortiVoice 20E for analog line usage and line appearance

In this example a FortiVoice 100E and a FortiVoice 20E2, both with firmware version 5.3, build288,160722 (5.3.1 GA).will be used.

The first step is to go to Trunks > Office Peers> and creating an office peer between both phone systems.

100E Peer Setup

| FortiVoice 100E | | | | |
|-----------------|----------------------------------------------------------------------------------------------------|--|--|--|
| Status | Office Peers | | | |
| System | Office Peer | | | |
| Phone System | Name: 20E | | | |
| Extensions | Enabled: Display name: 20E | | | |
| Trunks | Type: SIP | | | |
| 🕗 VolP | Remote server: 192.168.13.200 | | | |
| Office Peers | Remote port: 5095 | | | |
| Call Routing | SIP setting office_peer New Edit | | | |
| Call Features | Max channel: 2 | | | |
| Log & Report | Fetch directory Fetch now | | | |
| | Authentication Settings Incoming authentication Outgoing authentication OK | | | |

The FortiVoice 20E has an IP address of 192.168.13.200 and uses the SIP port 5095.

20E Peer Setup

| FortiVoice 20E2 | | | | |
|-----------------|------------------------------------------------------------------------------|--|--|--|
| Status | Office Peers | | | |
| System | Office Peer | | | |
| Phone System | Name: 100E | | | |
| Extensions | Enabled: | | | |
| Teuple | Display name: 100E | | | |
| Trunks | Type: SIP | | | |
| VolP | Remote server: 192.168.13.100 | | | |
| Analog | Remote port: 5080 | | | |
| Office Peers | SIP setting office_peer V New Edit | | | |
| Call Routing | Max channel: 2 | | | |
| Call Features | Fetch directory Fetch now | | | |
| Log & Report | Authentication Settings | | | |
| | Incoming authentication Outgoing authentication | | | |
| | OK Cancel | | | |
| | | | | |

The FortiVoice 100E has an IP address of 192.168.13.100 and uses the SIP port 5080.

Two SIP trunks have to be created on the FortiVoice 100E. In the setup enter the analog line 1 phone number in the 'Main number:' field, 1 trunk will be created for each line:

| FortiVoice 100 | E | | |
|----------------|-------------------------|-------------------------------|--|
| Status | SIP | | |
| System | SIP | | |
| Phone System | Name: 20E_Line | 1 | |
| Extensions | Enabled: | | |
| - | Display name: 20E_Line | •1 | |
| Trunks | Main number: 6137771111 | | |
| VolP | () | | |
| Ø Office Peers | SIP Setting | | |
| Call Routing | SIP server: | 192.168.13.200 | |
| Call Features | SIP port: | 5095 | |
| Log & Papart | Using SRV record: | | |
| Log & Report | User name: | | |
| | Password: | | |
| | Auth. user name: | | |
| 4 | Realm/domain: | | |
| | SIP setting | sip_setting_default Vew Edit | |
| | Max channel: | 1 Overflow check | |
| | Max outgoing channel: | 20 | |
| | User=Phone in SIP URI: | | |
| | Caller ID modification: | | |
| | Inband ringtone: | | |
| | * Registration | | |
| | Enable reg | gistration | |
| | ●Standard | ORegistrar ORegistration URI | |
| | Registration ir | terval: 10 (Minutes) | |
| | Outbound Proxy | | |
| | Enable pro | ху | |
| | Drave / Leat/ID |) - | |

Repeat the process for the second trunk but make sure to change the 'Main number:' field to match the phone number for the analog line 2 on the FortiVoice 20E.

Note that the process can be done for all lines if a 4 analog line FortiVoice 20E series is being used. These trunks are needed for the line appearance only.

| V | 20E_Line1 | 192.168.13.200 | 5095 | sip setting default | In service |
|----------|-----------|----------------|------|---------------------|------------|
| V | 20E_Line2 | 192.168.13.200 | 5095 | sip setting default | In service |

Once all the trunks have been created use the programmable keys on any extension and program for line appearance.

| - 📥 Set | Set Programmable Phone Key | | | | | | |
|---------|----------------------------------------------------|----------|---------------|----------|-------|--|--|
| Numbe | Number of FF-70e modules attached to this phone: 0 | | | | | | |
| Base | Module1 Module2 | | | | | | |
| Optio | on: Function | | Resource | | Label | | |
| 1 | Reserved | Reserved | | Reserved | | | |
| 2 | None | ~ | - | | | | |
| 3 | Line appearance | ~ | 20E_Line1 (1) | ~ | Line1 | | |
| 4 | Line appearance | ~ | 20E_Line2 (1) | ~ | Line2 | | |
| 5 | User Assigned | ~ | - | | | | |

The Inbound and Outbound rules on the FortiVoice 100E should now be set.

Go to Call Routing > Inbound and select 'New...' from the menu bar.

Create a routing rule as illustrated below:

| Status | Inbound DID Mapping |
|---------------|--------------------------------------------------------------------------------------|
| System | Name: Part I. d |
| Phone System | Enabled: |
| Extensions | |
| Trunks | From Trunk |
| Call Routing | Available : (10/11) Selected : (1/11) |
| Re Inbound | 20E_Line2 |
| Cutbound | FVC_D Forticall_Anbell |
| Call Features | Forticall_Mike Grandstream1 |
| Log & Report | Grandstream2_line1 Grandstream2_line2 Grandstream2_line3 Grandstream2_line4 |
| (| Search: |
| | Dialed Number Match |
| | 🖼 New 🏛 Delete |
| | Pattern String |
| | 013///1111 |
| | |
| | |
| | |
| | Caller ID Match |

In the bottom portion set the destination on the FortiVoice 20E for incoming calls from analog line 1.

| ſΓ | Caller ID Match | | |
|----|----------------------------|------------------|------------|
| 1 | 🖽 New 🔊 Edit | Telete | |
| | Caller ID pattern | _ | |
| | Caller ID Modification | | |
| | Apply modification profile | e:None | ► New Edit |
| | Call Handling | | |
| | Action type: | Endpoint action | * |
| | ™ New Selit | Nover 🛍 Delete | |
| | Schedule | Action | Target |
| | any_time | Dial extension | 7705 |
| | L | | |
| | OK Cancel | | |

Create a second Inbound rule for the other lines. Make sure to set the 'Dialed Number Match' to the line 2 phone number etc.

Next, go to Call Routing > Outbound and select 'New...' from the menu bar.

A unique pattern is required for each line as shown in the following example:

| V | 20E_Line1 | 14X.; | any_time : 20E |
|----------|-----------|-------|----------------|
| V | 20E_Line2 | 15X.; | any_time : 20E |

Create a routing rule as shown below:

| Status | Outbound |
|------------------------|--------------------------------------------------------------------------------------------------------------------------|
| System Phone System | Name: 20E_Line1 Enabled: |
| Extensions | Emergency call: |
| Trunks | Dialed Number Match |
| Call Routing | Image: New Image: Strip Prefix Postfix Match Pattern Strip Prefix Postfix 14X. 2 |
| Call Features | - Caller ID Match |
| | Call Handling |
| | Schedule Trunk Caller ID Manipul Warning Message Account Code any time 20E 20E - - |

The 'Trunk' being selected is the Office Peer trunk that was created earlier.

| Call Handling | | | | |
|-------------------------|-------------------|-------|-----|------|
| Schedule: | any_time | ~ | New | Edit |
| Action: | Allow | ~ | | |
| Outgoing trunk: | 20E (office-peer) | ~ | New | Edit |
| Caller ID modification: | 20E_Line1 | ~ | New | Edit |
| Warning message: | None | ~ | New | Edit |
| Delay: | 0 (Sec | onds) | | |

For the 'Caller ID modification:' select the 'New...' button to create a new profile.

Each line will require its own unique profile reflecting the phone number of the line.

| FortiVoice | | | | |
|----------------------|---------------|-----------|--|--|
| Caller ID Mo | dification — | | | |
| Name: | | 20E_Line1 | | |
| Match number | r: | х. | | |
| Vumber N | Iodification | | | |
| Strip: | 11 | | | |
| Truncate: | 0 | | | |
| Prefix: | 6137771111 | | | |
| Postfix: | | | | |
| Match caller I | D name: | * | | |
| Map to new ca | aller ID name | 8. | | |
| - 💌 Advanced Setting | | | | |
| | | | | |
| OK Cancel |] | | | |

FortiVoice 20E Inbound and Outbound Call Routing

Starting with the Outbound rules go to Call Routing > Routing.

| Call Routing | V | Out_100E | Х.; | any_time : 100E |
|--------------|--------------|------------|-----|------------------|
| Inbound | \checkmark | Out_Line_1 | Х.; | any_time : line1 |
| | V | Out_Line_2 | Х.; | any_time : line2 |
| | | | | |

Create a new rule for calls from the FortiVoice 20E to go to the FortiVoice 100E.

| Outbound |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name: Out_100E Enabled: Image: Comparison of the second s |
| Dialed Number Match |
| 🖼 New 🖾 Edit 🏛 Delete |
| Match Pattern Strip Prefix Postfix |
| X. 0 |
| Caller ID Match |
| 🖼 New 🔤 Edit 🏛 Delete |
| Caller ID pattern |
| Call Handling |
| E New S Edit ○ Move - Delete |
| Schedule Trunk Caller ID Manipul Warning Message Account Code any time 100E - - - |
| OK Cancel |

Select the FortiVoice 100E office peer trunk created earlier.

Next Outbound rule is for calls from the FortiVoice 100E to use the analog lines in the FortiVoice 20E.

| Outbound |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name: Out_Line_1 Enabled: Image: Compare the second secon |
| Dialed Number Match |
| 🖼 New 🖾 Edit 🏛 Delete |
| Match Pattern Strip Prefix Postfix X. 0 |
| Caller ID Match |
| 🖼 New 🖾 Edit 🏛 Delete |
| Caller ID pattern |
| Call Handling |
| 🖼 New 🖾 Edit ♀ Move - 🏛 Delete |
| Schedule Trunk Caller ID Manipul Warning Message Account Code any time line1 - - - - |
| OK Cancel |

Create an entry similar to the above example for each line (The example given is for line1). The Trunk is the analog line itself and not the peer or a VoIP.

Next setting up the Inbound rules on the FortiVoice 20E.

Go to Call Routing > Inbound and create three rules.

| V | To_100E | Call Routing | Outbound rule:Out_100E | line1;line2 | Х. | |
|----------|-----------------|--------------|--------------------------|-------------|----|------------|
| V | From_100E_Line1 | Call Routing | Outbound rule:Out_Line_1 | 100E | Х. | 6137771111 |
| V | From_100E_Line2 | Call Routing | Outbound rule:Out_Line_2 | 100E | Х. | 6137772222 |

The first rule is for Inbound calls to the FortiVoice 20E analog lines to route to the FortiVoice 100E.

Select the lines for the incoming call and also set the 'Dialed Number Match'.

| FortiVoice 20E2 | | | |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Status | Inbound DID Mapping | | |
| System Phone System Extensions Trunks Call Routing Call Routing Collbound Call Features Log & Report | Name: To_100E Enabled: ✓ Image: Available : (1/3) Selected : (2/3) 100E -> Image: Comparison of the second sec | | |
| | Search: | | |

In the lower section, select the 'Action Type' to 'Call Routing' and the office pair to the FortiVoice 100E.

| Trunke | | | | |
|---------------|------------------------------------------------|--|--|--|
| Truiks | Caller ID Match | | | |
| Call Routing | 🛱 Naw 🕅 Edit 🏢 Dalata | | | |
| Real Inbound | | | | |
| Cutbound | | | | |
| Call Features | Caller ID Modification | | | |
| Log & Report | Apply modification profile:None | | | |
| | Call Handling | | | |
| | Action type: Call Routing | | | |
| | Retain original caller id: | | | |
| | | | | |
| | Available member: (4/5) Selected member: (1/5) | | | |
| | Out_Line_1 Out_100E | | | |
| | emergency | | | |
| | outgoing_default | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | Search. | | | |
| | | | | |
| | | | | |
| | OK Cancel | | | |

Next rules are for the Inbound calls from the FortiVoice 100E to use the FortiVoice 20E analog lines out.

| FortiVoice 20E2 | | | | |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Status | Inbound DID Mapping | | | |
| System Phone System Extensions Trunks Call Routing Impound Call Features Log & Report | Name: From_100E_Line1 Enabled: ✓ ▲ From Trunk Selected : (1/3) Iine1 -> Iine2 -> <-> <- | | | |
| | Search: Dialed Number Match New Delete Pattern String X. | | | |

In the lower section, select 'Action Type' to 'Call Routing' and the Outbound rule for Line 1.

In addition, set the 'Caller ID Match'.

| Caller ID Match | | | | | |
|-----------------------------------|--------------|------------------------|--|--|--|
| | 1 | | | | |
| 🖼 New 🖾 Edit 🎟 Delete | | | | | |
| Caller ID pattern | _ | | | | |
| 6137771111 | | | | | |
| Caller ID Medification | | | | | |
| Caller 1D Modification | | | | | |
| Apply modification profile: Line1 | | Vew Edit | | | |
| Call Handling | | | | | |
| Action type: | Call Routing | ~ | | | |
| Retain original caller id: | | | | | |
| Call Routing | | | | | |
| | | | | | |
| Available member: (4/5) | | Selected member: (1/5) | | | |
| Out_100E | | Out_Line_1 | | | |
| Out_Line_2 | | | | | |
| outgoing default | <- | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Search: | | | | | |
| | | | | | |
| | | | | | |
| OK Cancel | | | | | |

The above step needs to be done for each line. The Call Routing is using the Outbound rule created earlier.

With the above steps completed, there will be line appearance for incoming calls to distinguish a call coming into the FortiVoice 20E via the analog lines.