



GRANDSTREAM NETWORKS, INC. GXE502X IPPBX WHITE PAPER

“Configuring multiple auto-attendants on the GXE502X using Call Routing”

I. Typical Scenarios:

There are many cases in which a user will want to run multiple auto-attendants on the same PBX. For example, a company may want to have 2 different published phone numbers, one for service in English and one for service in Spanish. This means that the auto-attendant that will pick up the call will be paired to the corresponding incoming phone number.

In other cases the user might have a situation where two, three or even four companies are all sharing the same PBX and are indeed related to each other but they want to appear as separate, independent companies. Even if the user is physically sharing the same PBX, their phone numbers can terminate to different auto-attendants or selected destinations.

II. How does the user set up multiple auto-attendants on the GXE502X IP PBX?

Let's assume that you have already run the express setup on the GXE. This means that some extensions have already been configured.

Administrators should understand the logic of the GXE call flow before configuring multiple auto attendants. As with any problem, it is easier if we break it down into pieces to understand how it is working as a whole. The GXE can receive incoming calls from connected PSTN lines or from SIP trunks. In either case the flow of calls to the desired auto-attendant is very similar.

Here is an example of a typical call flow on the GXE:

A call comes in on line 1 (FXO/Phone line port) → The GXE detects an incoming call → The GXE picks up the call → The call is then directed to the call routing profile selected under the line 1 port configuration page → The call is now in one of the incoming call routing profiles and will be pushed to a final destination according to the conditions within the incoming call routing profile.



III. The following step-by-step process must be used to configure the different auto-attendants:

You will need to have an incoming call routing profile for every auto-attendant that you want to set up. For example, if you want to configure 3 separate auto-attendants for different languages or companies, you will need 3 separate incoming call routing profiles.

First, configure the auto-attendants:

1. Click on the *auto-attendant* menu on the left hand side of the web UI and click on *voice menu*.
2. Click on the *Add* button to create a new auto-attendant. Give it a name, for example English, Spanish, French, company A, company B, etc.
3. Configure the digit selections according to your preferences.

→Add Voice Menu Language [Logout](#)

Advanced

| | | |
|--|--|--|
| Voice Menu Name | <input type="text" value="English"/> | |
| <input checked="" type="checkbox"/> Press 0 to trigger | Extension | <input type="text" value="700"/> |
| <input checked="" type="checkbox"/> Press 1 to trigger | Hunting/Ring Group | <input type="text" value="707"/> |
| <input type="checkbox"/> Press 2 to trigger | Hunting/Ring Group | <input type="text" value="None"/> |
| <input type="checkbox"/> Press 3 to trigger | Hunting/Ring Group | <input type="text" value="None"/> |
| <input type="checkbox"/> Press 4 to trigger | Hunting/Ring Group | <input type="text" value="None"/> |
| <input type="checkbox"/> Press 5 to trigger | Hunting/Ring Group | <input type="text" value="None"/> |
| <input type="checkbox"/> Press 6 to trigger | Hunting/Ring Group | <input type="text" value="None"/> |
| <input type="checkbox"/> Press 7 to trigger | Hunting/Ring Group | <input type="text" value="None"/> |
| <input type="checkbox"/> Press 8 to trigger | Hunting/Ring Group | <input type="text" value="None"/> |
| <input type="checkbox"/> Press 9 to trigger | Hunting/Ring Group | <input type="text" value="None"/> |
| No entry timeout | <input type="text" value="30"/> (second), play warning and repeat voice menu for up to | <input type="text" value="3"/> time(s) |
| No entry forward to | Hunting/Ring Group | <input type="text" value="None"/> |
| Fax To | <input type="text" value="None"/> | |
| Upload/Record greeting | | |
| <input checked="" type="radio"/> Upload Greeting | <input type="text"/> <input type="button" value="Browse..."/> | |
| <input type="radio"/> Record Greeting | <input type="text" value="None"/> | |
| <input type="button" value="Submit"/> | | |

IV. Repeat this process for each auto-attendant that you want to create. The next step is creating the Call Routing Profiles:

1. Click on the *Call Routing Profile* submenu to open the list of available profiles. By default there should be 3 call routing profiles: internal call, general inbound and general outbound.
2. Click on the *Add* button to create a new call routing profile. Give the profile a name that corresponds to the language, company or a name that will help you identify it. Next, click on the *Submit* button.
3. You should now be able to see your new profile in the call routing profile list. Click on the new profile followed by the *Add* button on the next page to load the Call Routing Profile configuration page.
4. Give it a dot (.) as the *Digit Map*. The dot is a wildcard Digit Map that will let any digits go through the configured trunk. This is exactly what we want in an inbound call routing profile.
5. Skip the *Condition* and the *Digit Manipulation* fields.
6. Click on the drop down menu in the *Option* column and select the *VoiceMenu* option.
7. You will see the auto-attendants that you just created in the *Value* column. Select the one that corresponds to this incoming call routing profile and click on the *Submit* button.

| | | | |
|---------------------------------------|--------------------------------|--|--|
| Digit Mapping | <input type="text" value="."/> | <input type="button" value="Add Condition"/> | Active : <input checked="" type="radio"/> Yes <input type="radio"/> No |
| Condition | <input type="text"/> | <input type="button" value="Delete"/> | |
| CallPath | Digit Manipulation | Option | Value |
| CallPath1 | <input type="text"/> | VoiceMenu | English |
| | | <input type="button" value="Add"/> | <input type="button" value="Delete"/> |
| <input type="button" value="Submit"/> | | | |

The next step is configuring the line ports and SIP trunks so that incoming calls will be routed to the corresponding incoming call routing profiles. The Call Routing profiles will route incoming calls to the corresponding auto-attendants. This is how the puzzle comes together.

1. Go to the *Trunk/Phone Lines* menu and then click on the *Internal PSTN Trunk* submenu.
2. Click on the *Add* button to add a Line Call Control configuration to your PSTN trunks. This allows you to configure the line ports on the back of the GXE in groups or separately. For example, you can group multiple ports that are from the same service provider.
3. Next, give the trunk group a name. Enter a single line, multiple lines, or a range of lines to configure a group. For Example: 1,3-5,8
4. Assign a prefix to your PSTN line(s) call control configuration. This prefix will be added to the outbound call routing profile and it is not related to the inbound call routing profiles that you created earlier. You can eliminate this outbound prefix later by going to the outbound call routing profile.

5. In the call routing section you will see the inbound call routing profiles that we just created under the available list, select the profile that you want to associate with this particular PSTN line/group.

| Trunk Name | English Trunk | | | | | | | | | | | | | | | |
|---------------------------------------|---|-----------------|--|---------------|---------------|---|-----------------|-----------------|--|--|---------------|---|--|------------------|--|--|
| Line | 1 | | | | | | | | | | | | | | | |
| Call Routing Profile | <table border="1"><thead><tr><th>Available List</th><th></th><th>Selected List</th></tr></thead><tbody><tr><td>Internal Call</td><td>→</td><td>Inbound English</td></tr><tr><td>General Inbound</td><td></td><td></td></tr><tr><td>PlayVoiceMenu</td><td>←</td><td></td></tr><tr><td>General outbound</td><td></td><td></td></tr></tbody></table> | Available List | | Selected List | Internal Call | → | Inbound English | General Inbound | | | PlayVoiceMenu | ← | | General outbound | | |
| Available List | | Selected List | | | | | | | | | | | | | | |
| Internal Call | → | Inbound English | | | | | | | | | | | | | | |
| General Inbound | | | | | | | | | | | | | | | | |
| PlayVoiceMenu | ← | | | | | | | | | | | | | | | |
| General outbound | | | | | | | | | | | | | | | | |
| <input type="button" value="Submit"/> | | | | | | | | | | | | | | | | |

Note: For practical use it is recommended that the phone line group, inbound call routing profile and the auto-attendant use similar naming conventions so that it is easy to identify them as you add additional advanced configurations to your GXE.

V. Finishing up:

1. Click on the *Voice Menu* of each auto-attendant that you created.
2. Next, click on the advanced button on the top right corner of the web UI. Make sure that you have at least the internal call routing profile in the *selected list* box so that you calls can be routed internally to the different extensions, hunt groups, mailboxes and voice menus on the GXE.

Congratulations! You now have multiple auto-attendants on your GXE!!!