



## Grandstream Networks

### “Direct Mapping of DIDs to Extensions within the GXE”

#### Typical Scenario:

In many installations we will find the need to assign direct phone numbers to some user's extensions. For example an employee may want to put his direct phone line on his personal business card so that he can give it to important customers so that they can reach him directly without holding or pressing digits or being transferred by someone else. To achieve this functionality we will use DIDs. Direct Inward Dialing numbers are usually provided by the SIP service provided and often grouped together under the same SIP trunk account. The GXE-502X provides us with the option to add multiple SIP trunks with multiple DIDs associated with them, up to 50, and the possibility to match each DID to a particular destination within the GXE-502X.

#### How to map each DID to an extension?

This functionality is achieved in 2 steps. First we will have to add the SIP trunk according to the instructions provided by the SIP service provider. Now click on the advanced button on the top right corner to open the advanced section. You can leave the call routing profile as the General Inbound or you can create one for this trunk in particular. The important part here is that you activate the DID switch by clicking on YES and then on the add button, keep clicking on the Add button to add as many DIDs you were assigned, up to 50. You should see this:

Call Routing Profile	<b>Available List</b>	<b>Selected List</b>	
	Internal Call PlayVoiceMenu General outbound	<input type="button" value="→"/> <input type="button" value="←"/>	General Inbound
DID Switch	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input type="button" value="Add"/>	
	DID Number <input type="text"/>	<input type="button" value="Delete"/>	
	DID Number <input type="text"/>	<input type="button" value="Delete"/>	
	DID Number <input type="text"/>	<input type="button" value="Delete"/>	
	DID Number <input type="text"/>	<input type="button" value="Delete"/>	
	DID Number <input type="text"/>	<input type="button" value="Delete"/>	
	DID Number <input type="text"/>	<input type="button" value="Delete"/>	

Insert the DID numbers in the fields, please verify if your service provider requires you to input the numbers in E.164 format, this means that they usually have a + and the country code in front of them. Once you are done typing them in click on submit. Lets head over to the Call Routing menu and click on the call routing profile submenu. Now click on the General Inbound call routing profile or whatever inbound profile you selected to pick up the calls coming into that SIP trunk. By default the digit map is the dot (.) which is exactly what we want in a general inbound profile, now here is how to map the DIDs:

1. Under the condition field type in this: SIPDID==type in telephone number. This means that if one of your DIDs is 555-666-7777 then you should type SIPDID==555666777. If you provider uses E.164 then you might have to add a +1 at the beginning of the DID number.
2. Don't enter anything in the digit manipulation field
3. Under the option column select extension from the drop down menu.
4. Under the value column select the extension number where this DID will terminate.
5. Keep adding conditions to add more DIDs and extensions, groups, voicemails, etc to be directly mapped to.
6. You can add up to 5 conditions per digitmap, if you need to add more DIDs then go back to the General Inbound call routing profile menu and add another digitmap with the dot (.) as its value, keep repeating steps 1-5 as necessary.

7. Once you are done typing in the last DID go ahead and add another condition but this time leave the Condition field as blank and terminate it on whatever value you wish. The blank condition will cover any other cases where the incoming calls in the SIP trunk do not match any of the DIDs entered; otherwise the call will get rejected.
8. In the end you should end up with your General Inbound call routing profile with a few dot (.) digitmaps all full of SIPDID==XXXXXXXXXX conditions.