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This writeup will show you how to set up an IAX2 Trunk provided by HHUS. It will include how to manually set a DID on the trunk which will enable you to create a single inbound route based on DID and route that to an IVR, extension, etc. It should work with other HamShack Hotline networks, overseas, etc, so long as you replace the hostname with the appropriate one you were assigned.

Router Ports

Depending on your specific configuration, you may need to login to tour router and port forward UDP port 4569 to the LAN IP address of your PBX box.

SSH Edits

First, access your asterisk based PBX via ssh, and run the following command:

nano /etc/asterisk/extensions_custom.conf

The file should open blank, and have no data in it (unless you have previously modified it) Enter something similar to the following in the file (copy and paste is easiest)

[custom-hhus-iax2]
exten => _.,1,Noop(Fixing DID to 5570)
exten => _.,n,Goto(from-trunk,5570,1)

Replace 5570 with YOUR TRUNK DID (5570 is mine). This should be all that you have to enter in this file.

You can save and exit by holding the Control key and pressing X, and then press Y, and then enter. When you have finished with that, you can type exit to log out.

Trunks

Now, Log into your FreePBX, and go to the 'Connectivity' and then 'Trunks' menu. Click the 'Add Trunk' button and choose the IAX2 Trunk.

Under the 'General' tab, Set the 'Trunk Name' (used for internal reference only on the system) and your 'Outbound CallerID' - this is your HHUS Extension #.

Click on the 'iax Settings' tab. Under 'Outgoing' set the 'Trunk Name' (also used internal only).

Under 'PEER Details' you want to enter the following:

username=extension
secret=password
type=friend
host=hhus.hamshackhotline.com
disallow=all
allow=ulaw&alaw
encryption=no
insecure=port,invite
requirecalltoken=no
qualify=yes
context=custom-hhus-iax2

Be sure to change the username to your HHUS Extension number, and obviously change the secret to the password that was provided to you. If you were provided a host other than hhus.hamshackhotline.com, replace the host with what you were provided.

Click on the 'Incoming' tab. Delete everything that is prefilled for you. The USER Context should be empty, as well as the USER Details. In the Register String box, put the following, replacing extension with your extension number, and password with your password:

extension:password@hhus.hamshackhotline.com

If you were provided a host (appears after @) other than hhus.hamshackhotline.com, replace the host with what you were provided.

Click submit to set the trunk settings.

Inbound Route

Now click on 'Connectivity' followed by 'Inbound Routes', and click 'Add Inbound Route'

We only need to place settings in the 'General' tab. Set the 'Description' to name the route (internal use only) and your DID Number is your HHUS Extension number.

Alert Info can provide distinctive ring patterns (may not work on all phones). Options are as follows:

<Bellcore-BusyVerify>
<Bellcore-Stutter>
<Bellcore-MsgWaiting>

<Bellcore-dr1>
<Bellcore-dr2>
<Bellcore-dr3>
<Bellcore-dr4>
<Bellcore-dr5>

The Alert Info entries must be exactly as typed. Try each one and choose your preference. It should provide you with a distinctive pattern for use with HHUS Calls. (this is only needed if you are passing the calls to an existing line on your phone)

Finally set your 'Set Destination' to your desired destination. This is obviously not a "one size fits all" option. It depends on your system setup, and your preferences. Hopefully if you have an existing system, you have an idea on this.

Click Submit to save your changes.

Outbound Route

NOTE: This outbound route setup is for a basic setup. It will make it so in order to call a HHUS number, you will have to dial an 8 first. There are many ways to do the Outbound Route, but this will provide a basic working setup.

Click 'Connectivity' and 'Outbound Routes', then 'Add Outbound route'.

Under the 'Route Settings' Tab, enter a 'Route Name' (again, internal use only), and 'Route CID' is your HHUS Extension. Under 'Trunk Sequence' Locate the trunk you created earlier (however you named it) and set it here.

Next click the 'Dial Patterns' tab. Set the prefix for each entry to 8, and use the following dial patterns (one row created for each)

*XX
1NXXNXXXXXX
NXXNXXXXXX
XXX
XXXX
XXXXX
XXXXXXXXX

Click Submit and and finally Apply Changes

At this point, you should be set up and operational.

I hope this works for you and makes it an easy setup!