

How to use iaxrpt with Allstar on the BeagleBone Black

iaxrpt is a Windows based client that allows a full duplex voice connection to Allstar. It allows vopice communications with your node and any node it is connected to as well as the ability to send comands.

You can download the program at:

<http://www.xelatec.com/xipar/iaxrpt>

The BBB example configs already include the required settings to enable iaxrpt. If you are using your own configs and you would like to set it up the required code is shown below. If you are using the example code then all you need to do is put a password in the [iaxrpt] stanza in the /etc/asterisk/iax.conf file. It is defined as 'secret=' followed by your password. The password is defined by you and would then also appear in your Windows iaxrpt account setup. In either case you would need to setup an account in the iaxrpt client.

The following would be included in /etc/asterisk/iax.conf

```
[iaxrpt]
user=iaxrpt
type=user
context=radio-iaxrpt
auth=md5
secret=xxxxxxx ; *** Important! Change this!!!
host=dynamic
disallow=all
allow=ulaw
allow=gsm
transfer=no
```

And this code in /etc/asterisk/extensions.conf

```
[radio-iaxrpt]
exten=40638,1,Rpt,40638|X
```

Change 40638 to your node number in BOTH places!

Also you can add additional lines here for additional nodes on this server. This would allow you to connect to each defined node.

That completes the changes in the Allstar configs. Now you need to setup an account in iaxrpt.

Open iaxrpt and click on Options, Accounts, Add then enter the following:

Account name <the node number> - same as in extensions.conf above

Description – Optional, anything you want to describe this account

Host - the local IP address of your BBB or domain name if outside of your local network

Username - iaxrpt

Password - same as secret in iax.conf

Type – duplex

Save your settings and exit back to the opening window. In the account pull-down to the right of Call: select the node you want to connect to and then click Connect. If all is well you should get and OK in the status line at the top.

Some notes about iaxrpt

Be careful when using iaxrpt. You can easily leave the node in Transmit (PTT). There is a safety feature that if you click off of the iaxrpt window it will go out of transmit.

Only one iaxrpt instance can be opened at a time under Windows.

Commands to your node are entered at the DTMF keyboard and are executed a few seconds after input stops.

You must set your audio input and output device and levels under Options, Devices

iaxrpt is a nice way to monitor your nodes and allows transmit when you don't have a radio handy but it is much preferred to use a radio when available.

If you have your BBB on a iax port other than the default 4569 add the port number after the IP address or domain in the host entry block under accounts. If your IP address was 192.168.1.20 and your port was 4568 you would enter:

192.168.1.20:4568 or my.domain.com:4568

While this tech note is written for the BBB this procedure would work on any Allstar installation.