

Two Nodes on One Server

wiki.allstarlink.org

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1 Two Nodes on One Server

Legacy Version - This page is about a legacy version of AllStarLink. See ¹

This how-to describes how to go from a 1 node system to a 2 node system.

Changing a system from one node to two nodes requires that 4 text files be modified:

extensions.conf

iax.conf

rpt.conf

usbradio.conf

1.0.1 USB Device Enumeration

Because of the way USB bus device identification works, new USB fobs must be added one at a time. In other words, you must have a working single node system before you can make it a two node system. This is because the USB channel driver remembers where all the previously defined nodes are located, and when it finds new hardware, it will find the next unassigned stanza in usbradio.conf and assign the new hardware to that node. It is very important the order that the USB fobs connected to the computer are not disturbed or plugged in to different USB sockets, as this will confuse the USB channel driver and require that usbradio.conf have all the interfaces removed or commented out and added back in one at a time.

1.0.2 A Word About USB Hubs

The use of USB hubs should be avoided if at all possible as we have found that some hubs corrupt the audio streams coming form and going to the USB fobs. If you must use a USB hub, use only multi-TT types, but be forewarned that you may have to test several models until you find one which works acceptably, if at all.

1.0.3 Procedure

The procedure to configure a Multi-node system consisting of fictional nodes 1234 and 5678 is as follows:

¹ <https://allstarlink.github.io/adv-topics/conftmpl/>

1. Make backup copies of rpt.conf, extensions.conf, iax.conf, and usbradio.conf.
2. Edit the usbradio.conf file. Make a copy of the [usb] stanza in usbradio.conf.
3. Paste the copy just below the original stanza.
4. Rename the stanza name of the copy to [usb1]
5. Change the configuration settings of [usb1] to suit the new radio.
6. Save the new usbradio.conf file.
7. Edit the rpt.conf file. Make a copy of your Node stanza in rpt.conf
8. Paste the copy just below the original node stanza 1234
9. Change the node stanza of the copy to the new node number 5678. and change rxchannel to point to the name of the device in usbradio.conf

[1234]

```
rxchannel=SimpleUSB/usb
```

```
.  
.   
.
```

[5678]

```
rxchannel=SimpleUSB/usb1
```

```
.  
.   
.
```

1. Change any configuration settings in the new node stanza to suit the new radio
2. Add a second local entry for node 5678 to the nodes stanza to allow local connections to be made:

[nodes]

```
1234 = radio@127.0.0.1/1234,NONE
```

```
5678 = radio@127.0.0.1/5678,NONE
```

1. Save the new rpt.conf file
2. Edit the iax.conf file
3. Add an additional register statement for the second node, 5678 just below the first statement.

```
register=1234:12345678@register.allstarlink.org ; First Node
```

```
register=5678:12345678@register.allstarlink.org ; Second Node
```

1. Save the new iax.conf file.
2. Edit the extensions.conf file
3. Add the 5678 extension in the radio-secure context to call the rpt application using the new node number:

```
[radio-secure]
```

```
exten => 1234,1,rpt,1234
```

```
exten => 5678,1,rpt,5678
```

1. Save extensions.conf and exit the text editor.
2. Stop and restart asterisk
3. Adjust the signal levels on the new interface using the usbradio audio setup procedure documented in the previous HOWTO. Issue the command `radio active usb1` from the Asterisk CLI to switch to the new USB interface (usb1) before starting the audio adjustment process.

1.1 Contributors

- N8EI²
- This page was last edited on 29 June 2024, at 23:12.

² <https://wiki.allstarlink.org/index.php?title=User:N8EI&action=edit&redlink=1>

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¹ Chapter 3 on page 13

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Version 3, 29 June 2007

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