Mesh Chat

Using Mesh Chat is easy: simply click on a Mesh Chat service and enter you're callsign.

At the moment, we have four Mesh Chat instances that sync to each other:

- VE7TOM-HAP
- VE7TOM-HAP-1
- VE7AX-2
- VA7FI-Linux

Hosting a Mesh Chat Instance

Mesh Chat can be installed directly on the hAP, but it's not recommended because it uses resources and it offers very little storage for files:

In contrast, a server install (coming up next) frees up resources and offers more space:

To synchronize Mesh Chat instances together, simply change the name to MIMeshChat

More information can be found here.

Mesh Chat on a Linux Server

Fresh LinuxMint Install

- Install LinuxMint Xfce on a cheap laptop.

- Change Hostname to VA7FI-Linux because that's what will show on Mesh Chat:

      sudo hostnamectl set-hostname VA7FI-Linux

Installing Mesh Chat

Following the instructions on Trevorsbench:

- Install dependencies:

```
sudo aptitude install curl apache2
```

- Download and install Mesh Chat:

```
wget https://s3.amazonaws.com/aredn/meshchat_1.02_all.deb
sudo dpkg -i meshchat_1.02_all.deb
```

- Edit configuration file:

```
sudo pico /usr/lib/cgi-bin/meshchatconfig.pm
```

and edit the last two lines so that the zone matches the other Mesh Chat Instances, and the node is the name of your AREDN node. In my case:

```
our $pi_zone                = 'MIMeshChat';
our $local_meshchat_node    = 'VA7FI-HAP-1';
```

On LinuxMint there was an issue that needs to be fixed before continuing. Essentially, the current setup uses files in the /tmp folder, which the Apache server is not allowed to edit. So the solution was to create that folder somewhere else and set the permissions properly.[1]

- Create these folders:

```
sudo mkdir /var/www/html/meshchat/tmp/
sudo mkdir /var/www/html/meshchat/tmp/meshchat/
```

- And change the ownership and permissions:

```
sudo chown www-data:www-data -R /var/www/html/meshchat/tmp/
sudo chmod 770 -R /var/www/html/meshchat/tmp/
```

- Edit the config file:

```
sudo pico /usr/lib/cgi-bin/meshchatconfig.pm
```

- And replace every instance of /tmp/ by /var/www/html/meshchat/tmp/ (line 2, and 18)

- Restart services:

```
sudo systemctl daemon-reload
sudo /etc/init.d/apache2 restart
sudo /etc/init.d/meshchatsync restart
```

Tests

At this point, you should be able to run Mesh Chat from the computer where it's installed, but it won't talk to any other nodes yet: http://localhost/meshchat/

AREDN Configuration

Install the meshchat-api package:

- Download it from here
- Click on Upload Package Browse... from the Adminstration page to install it.

From the Port Forwarding, DHCP, ans Services page:

1)
The /tmp issue is discussed here: https://www.arednmesh.org/content/pi-meshchat-error-sending-message