

Table of Contents

Mesh Chat	1
<i>Hosting a Mesh Chat Instance</i>	2
<i>Mesh Chat on a Linux Server</i>	2

Mesh Chat

Using Mesh Chat is easy: simply click on a Mesh Chat service and enter your callsign.

Your Call Sign

VA7FI|

LOGIN

CHAT FILES STATUS
LOGOUT

Instances with the same Zone sync together
Currently logged into the va7fi-linux instance

Mesh Chat v1.02

Zone: MIMeshChat
 Call Sign: VA7FI

Node: va7fi-linux
 Updated: 6 seconds ago

Send a Message

New Message

Enter message here

Channel: Everything ▾
SEND

Message will be posted in the general channel

Mesh Chat Users 2

Call Sign	Node	Last Seen
VA7FI Users in different instances see each other	va7fi-linux	11/9/21 8:06 PM
VE7LSE	ve7tom-hap	11/9/21 8:05 PM

Viewing all messages

Messages
Search:
Channel: Everything ▾

Time	Message	Call Sign	Channel	Node
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At the moment, we have five Mesh Chat instances that sync to each other:

- [VA7FI-Linux](#)
- [VA7LMP-1](#)
- [VE7AX-2](#)
- [VE7TOM-HAP](#)

And if you're running [Linux Mint](#), you can create a super convinient [Web App](#) to load it quickly without the clutter of a regular browser.

Hosting a Mesh Chat Instance

If you want to host a Mesh Chat instance, you install it directly on the hAP, but it's not recommended because it uses resources and it offers very little storage for files:

Mesh Chat on a hAP	Mesh Chat on a Linux Laptop
<div style="background-color: #0056b3; color: white; padding: 5px;">File System</div> <p>Total Storage: 512.0 KB Free Storage: 512.0 KB</p> <div style="background-color: #0056b3; color: white; text-align: center; padding: 5px; margin-top: 10px;">DOWNLOAD MESSAGES</div>	<div style="background-color: #0056b3; color: white; padding: 5px;">File System</div> <p>Total Storage: 25.3 GB Free Storage: 17.0 GB</p> <div style="background-color: #0056b3; color: white; text-align: center; padding: 5px; margin-top: 10px;">DOWNLOAD MESSAGES</div>

Mesh Chat on a Linux Server

Before we get started with the details, let's have a look at the big picture. There are 3 different “names” that we'll have to keep track of:

- The AREDN Node name configured in the Basic Setup page. Mine in is VA7FI-HAP-1. Yours will be different.
- The Hostname of the linux computer running the service. Mine is VA7FI-Linux. Yours will be different.
- The Service name. Here we use MIMeshChat. Use the same if you want your instance to sync with that one. This is also called the Mesh Chat “Zone”.

Here's where that information shows up on the Node Status page once it's all done and ready:

Local Hosts	Services
VA7FI-HAP-1 ● VA7FI-Linux	MIMeshChat

And in the Mesh Chat app:

Mesh Chat v1.02

Zone: MIMeshChat **Node: va7fi-linux**

In what follows, it'll be important to keep track of where to enter this information so it's configured properly.

Server Install

- Follow the steps in the Prerequisites section of the [Linux Server page](#).

Mesh Chat Install

Following the instructions on [Trevorsbench](#):

- 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 the 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's 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):

```
our $lock_fh;  
our $meshchat_path = "/var/www/html/meshchat/tmp/meshchat";  
...  
our $tmp_upload_dir = '/var/www/html/meshchat/tmp/web/upload';  
...
```

- For reference, the permissions for the files in /usr/lib/cgi-bin/ are:

```
-rwxr-xr-x 1 www-data www-data meshchat  
-rw-r--r-- 1 root      root      meshchatconfig.bac  
-rw-r--r-- 1 www-data www-data meshchatconfig.pm  
-rw-r--r-- 1 www-data www-data meshchatconfig-stretch.pm  
-rw-r--r-- 1 www-data www-data meshchatlib.pm
```

- Restart the services:

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

At this point, you should be able to run Mesh Chat from the computer where it's installed using this address: <http://localhost/meshchat/>

But it won't be able to talk to your AREDN node yet.

AREDN Configuration



If you had previously installed MeshChat 1.02 on a Raspberry PI or Linux machine and later upgraded your node to 3.22.6.0, you may notice that MeshChat stopped synching. The following instructions have been updated to help fix that.²⁾

Install the meshchat - api package:

- For AREDN prior to v3.22.6.0, download [meshchat-api 1.02](#)
- For AREDN v3.22.6.0 or later, download [meshchat-api_2.x_all.ipk](#)
- From the Administration page, click on Upload Package to install it.

From the Port Forwarding, DHCP, and Services page:

1. Setup a DHCP Address Reservation for the Linux computer
2. Advertise the service
3. Forward WAN port 8080 to LAN port 80

4. Don't forget to Save Changes

The screenshot shows the configuration interface for MeshChat. At the top, there are navigation tabs: Node Status, Basic Setup, Port Forwarding, DHCP, and Services (highlighted), Tunnel Server, Tunnel Client, Administration, and Advanced Configuration. Below the tabs are buttons for Help, Save Changes, Reset Values, and Refresh.

DHCP Address Reservations

Hostname	IP Address	MAC Address	Do Not Propagate	Del
VA7FI-Linux	10.153.73.109	7c: :c9	<input type="checkbox"/>	Del

Advertised Services

Name	Link	URL	Del
MIMeshChat	<input checked="" type="checkbox"/>	http://VA7FI-Linux:80/meshchat	Del

Current DHCP Leases
there are no active leases

Port Forwarding

Interface	Type	Outside Port	LAN IP	LAN Port	Del
WAN	TCP	8080	VA7FI-Linux	80	Del

DNS Aliases

Alias Name	IP Address	Add
	- IP Address -	Add

1)

The /tmp issue is discussed here:

<https://www.arednmesh.org/content/pi-meshchat-error-sending-message>

2)

See [kn6plv/meshchat](#) (for AREDN in Lua) on Github, and this [discussion](#) on arednmesh.

From:

<https://wcaredn.ca/> - **West Coast**

AREDN

Permanent link:

<https://wcaredn.ca/services/meshchat/home>

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