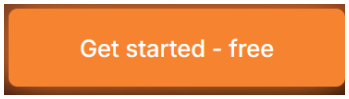
OpenWRT Netbird
version 2

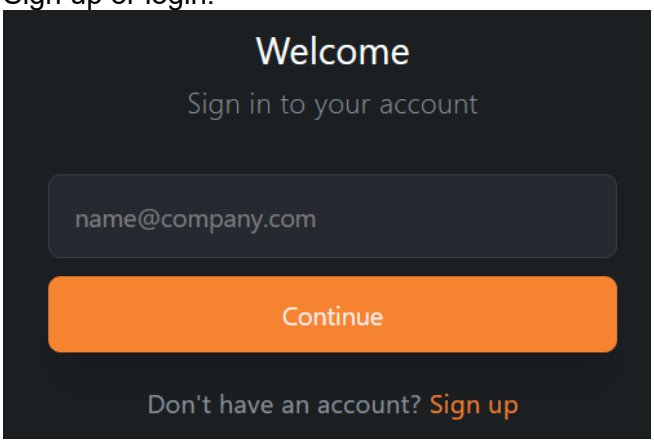
This is a WIP and just some poorly redacted personal notes, I am working to make a real install guide

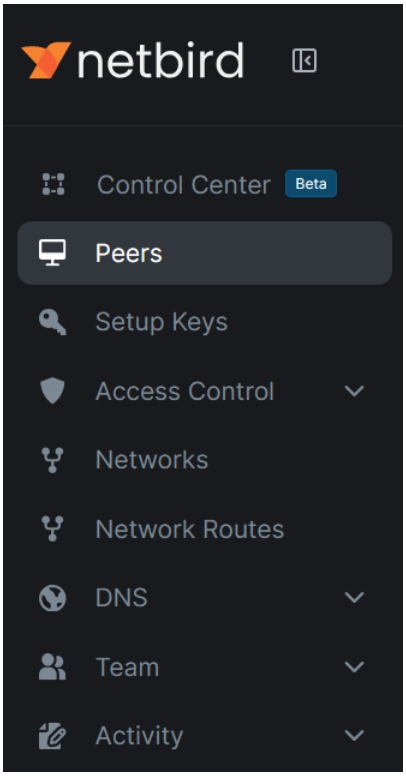
Start with viewing: https://docs.netbird.io/how-to/getting-started
All the docs can be found at: https://docs.netbird.io/

Make a free account on Netbird

go to: http://netbird.io

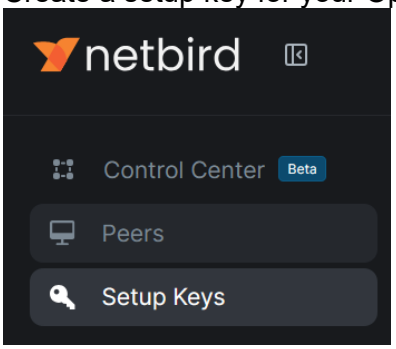
Click: 

Sign up or login:


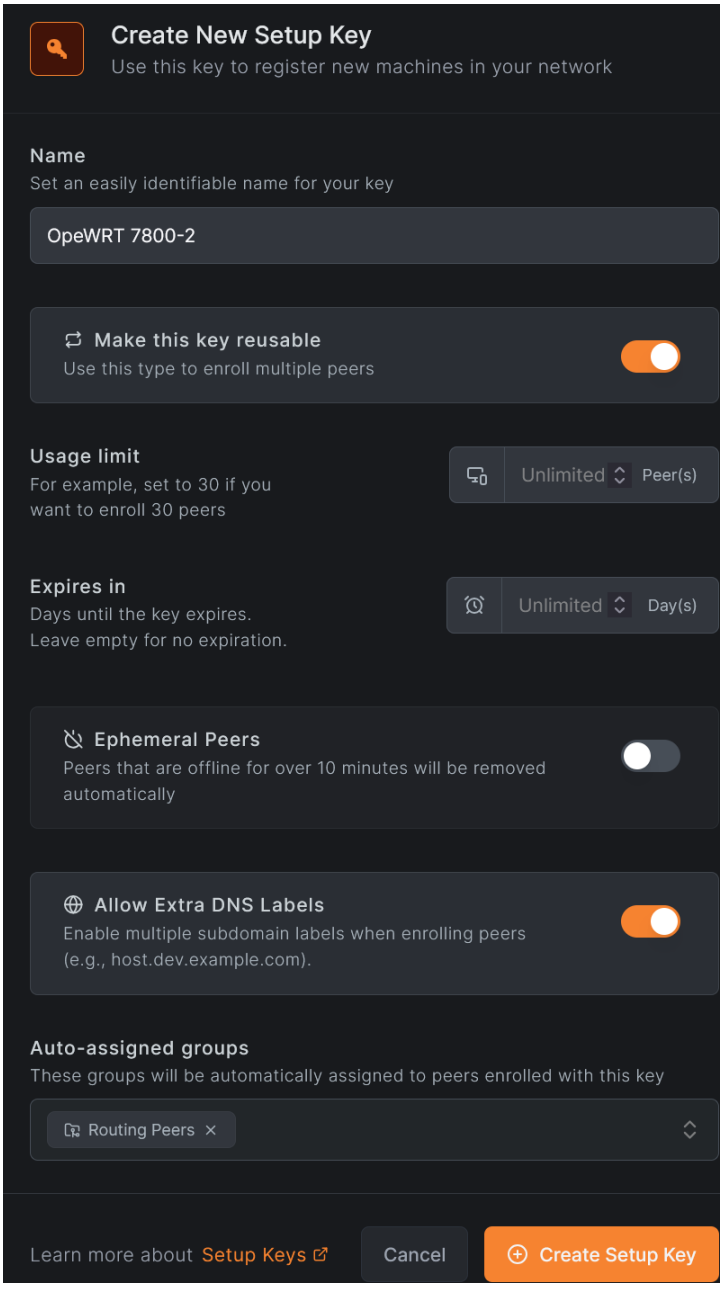
Now you are connected to your Netbird Dashboard the central administration:


Next step is to create a setup key for your OpenWRT router

Create a setup key for your OpenWRT router, in your Netbird Dashboard click *Setup Keys*:



Fill in the name of your router and change the other items below are my settings, when done Click *Create Setup Key.*



Copy and store the setup key

Install Netbird on OpenWRT router

For opkg:
opkg update
opkg install netbird

or for apk:
apk update
apk add netbird

Netbird is a rather large package around 20 MB written in Go so make sure your storage is sufficient

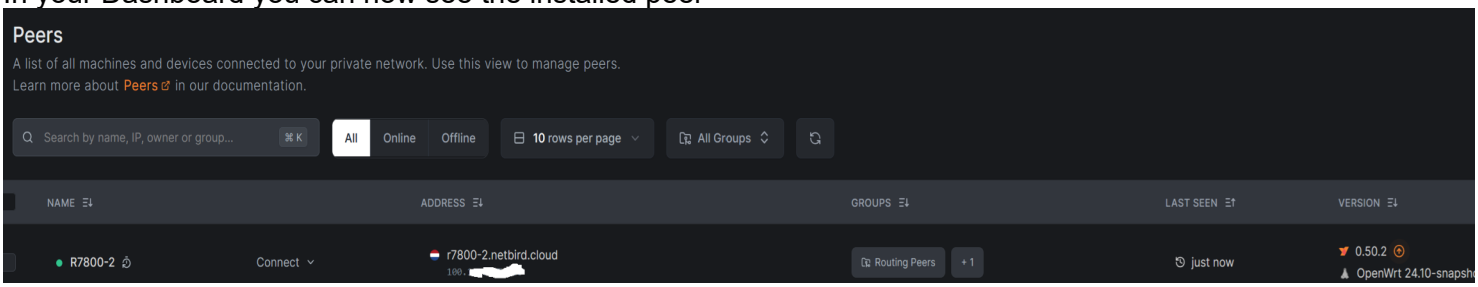
The netbird executable is stored in /usr/share/netbird.
The service is called from /etc/init.d/netbird

When installed you can setup with:
netbird up --setup-key <key from previous step>

After some time you will see:
root@R7800-2:~# netbird up --setup-key E20033F4-0C99-470E-A27A-5F066D8590EA
Connected
root@R7800-2:~#

You can use netbird help to see the available commands e,g,:
netbird up/down/status etc
but using e.g.:
service netbird status/stop/start etc. will also work (for complete list: service netbird)

In your Dashboard you can now see the installed peer



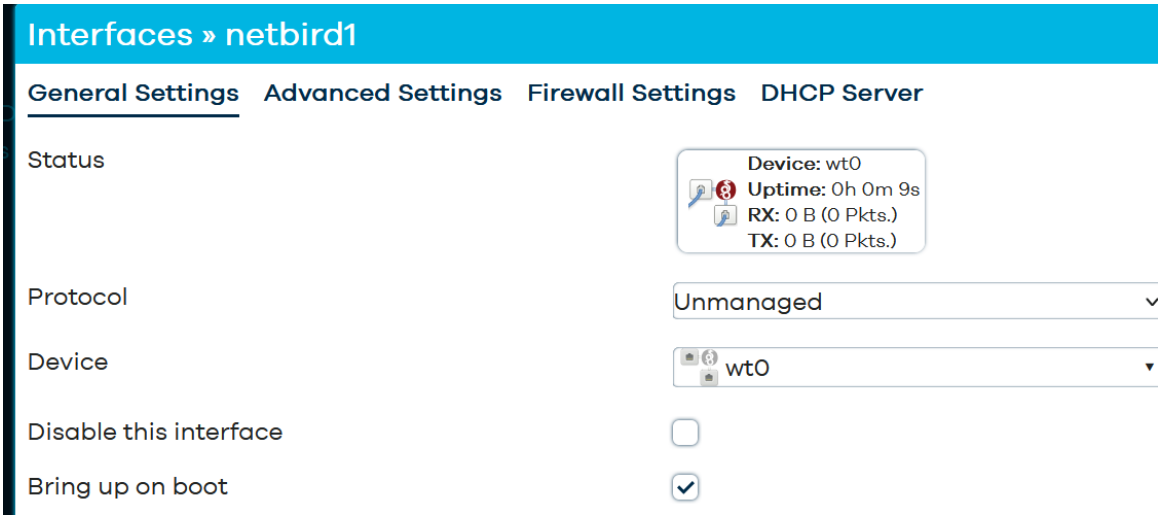
with ifconfig or ip address show you should see the new interface (device) wt0
If not reboot the router and check netbird status: netbird status

Netbird log:

Showing netbird log:
cat /tmp/log/netbird/client.log

Next Firewall setup:

Luci > Network > scroll down and Add new interface:
Name e.g.: netbird1
Protocol: Unmanaged
Device: scroll down and choose wt0



/etc/config/network:

```
config interface 'netbird1'
        option proto 'none'
        option device 'wt0'
```

Head over to Firewall settings and add to LAN zone:

/etc/config/firewall:

```
config zone
        option name 'lan'
        option input 'ACCEPT'
        option output 'ACCEPT'
        option forward 'ACCEPT'
        list network 'lan'
        list network 'netbird1'
```

In the end reboot the router or do service network restart, service firewall restart and service netbird restart.

Check with ifconfig (ip a) and ip route that the interface (wt0) and route ar present:

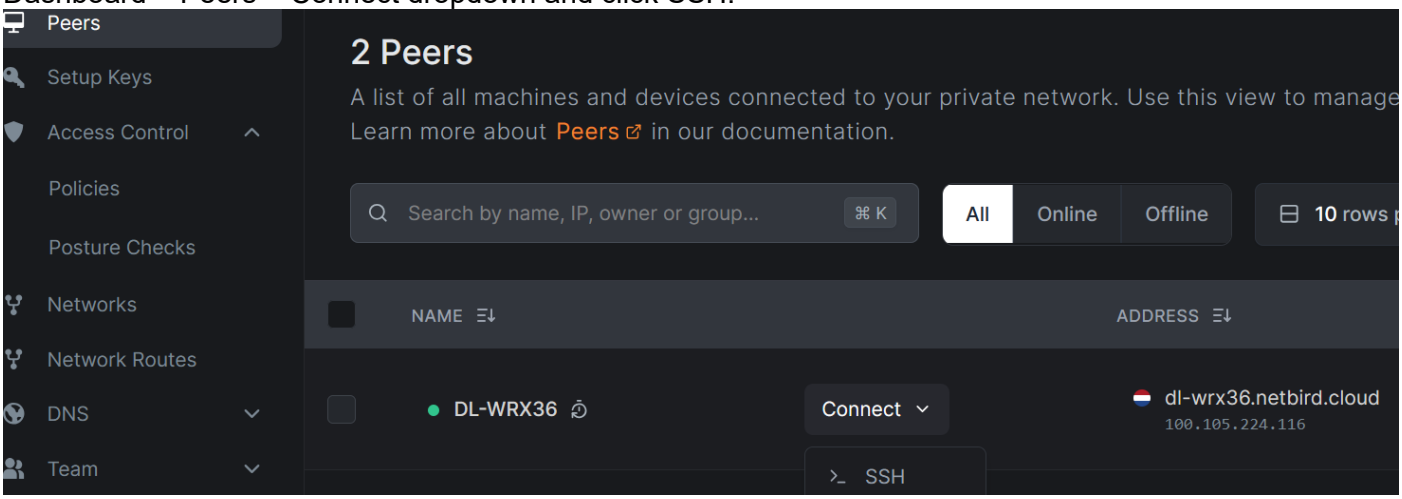
```
root@DL-WRX36:~# ip address show wt0
31: wt0: <POINTOPOINT,NOARP,UP,LOWER_UP> mtu 1280 qdisc noqueue state UNKNOWN group
default qlen 1000
    link/none
    inet 100.105.224.116/16 brd 100.105.255.255 scope global wt0
       valid_lft forever preferred_lft forever

root@DL-WRX36:~# ip route
default via 192.168.0.1 dev wan proto static src 192.168.0.9
100.105.0.0/16 dev wt0 proto kernel scope link src 100.105.224.116
```

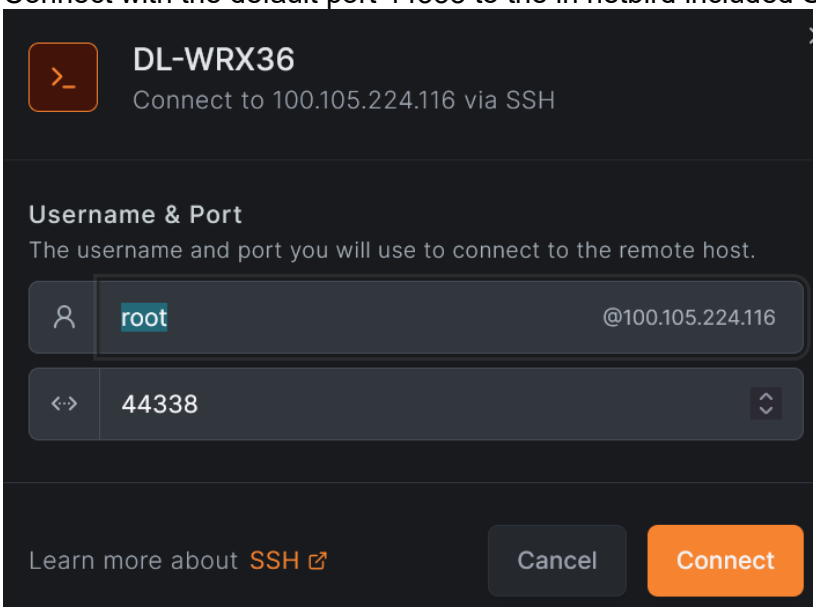
Allow SSH access from Dashboard

Make sure SSH is allowed on the peer (https://github.com/netbirdio/netbird/issues/2632):
netbird down
netbird up --allow-server-ssh

Dashboard > Peers > Connect dropdown and click SSH:



Connect with the default port 44338 to the in netbird included SSH server:



netbird up will register the OpenWRT router as peer on the netbird dashboard as the router is using the same IP address as you it can register in your own dashboard