

MeshCentral2 Large Install



Recap

Ref: Previous talk [20201026-meshcentral2.pdf](#)

"MeshCentral, a full web based remote management web site you can launch on your own server"

What's new

- Windows 11 support
- Android (view only) support
- Better security
- Reports
- Session recording
- Guest sharing
- jitsi integration
- CPU & Memory usage graphs

What is a large install?

- Standard install is not secure and doesn't allow over 100 users
- Large install uses MongoDB/Maria/MySQL and can handle 1000's of agents
- Better security
- Proxy through Nginx so we can run multiple things.

Install MeshCentral

Install node

```
sudo apt install -y nodejs npm
```

Install MeshCentral

```
npm install meshcentral
```

NOTE: Do not use sudo in front of this command

Setup port

You can either setup Meshcentral to (a) act on port 80,443 directly or (b) run on a different port which will be proxied through Nginx later.

1. Set port 80/443 permissions (optional)
Anything below 1025 for node has to be set

```
sudo setcap cap_net_bind_service=+ep /usr/bin/node
```

NOTE: If running Jinx proxy then use port 1025.

2. Setup for Proxy

Create certificate

```
node ./node_modules/meshcentral --cert <Domain name>
```

EG: Domain name for my setup is
support.mydomain.com.au

Start MeshCentral

```
node ./node_modules/meshcentral
```

Add to startup

```
sudo node ./node_modules/meshcentral --install
```

Install Nginx

If you are handling MeshCentral (TlsOffLoad) to Nginx then do the following.

Config Nginx

```
sudo certbot --nginx --nginx-ctl /opt/nginx/sbin/nginx --nginx-server-
```

Add the following to /home/myuser/meshcentral- data/config.json

```
{  
  "settings": {  
    "Cert": "support.mydomain.com.au",  
    "_redirPort": 80,  
  },  
  "letsencrypt": {  
    "email": "michael@mydomain.com.au",  
    "names": "support.mydomain.com.au",  
    "rsaKeySize": 3072,  
    "production": false  
  },  
}
```

NOTE: Make sure you remove the **underscore** from the start of letsencrypt. The **underscore**

means to ignore the line.

Restart meshserver

```
sudo systemctl restart nginx  
sudo systemctl restart meshcentral.service
```

NOTE: If you added agents and they are not showing you will have to re-add those agents.

Install MongoDB

MeshCentral comes with a NeDB database which is good for 100, but if you plan on any more then use MongoDB instead.

Install GPG

GPG

```
sudo apt update  
sudo apt-get install gnupg2
```

Add MongoDB Repo

Install key

```
wget -q0 - https://www.mongodb.org/static/pgp/server-5.0.asc | sudo apt
```

Install MongoDB Repo

```
echo "deb http://repo.mongodb.org/apt/debian buster/mongodb-org/5.0 ma
```

Install MongoDB

Update & install

```
sudo apt update  
sudo apt-get install -y mongodb-org mongodb-org-database mongodb-org-se
```

Start and Enable

```
sudo systemctl start mongod.service  
sudo systemctl enable mongod.service
```

NOTE: mongo database & logs are kept in /var/lib/mongo and /var/log/mongodb respectively.

Stop Meshcentral

```
sudo systemctl stop mongod.service
```

Import old NeDB (Optional)

1. Export NeDB

```
node ./node_modules/meshcentral --dbexport
```

2. Import

```
sudo -u meshcentral node ./node_modules/meshcentral --mongodbc
```

Start MeshCentral with MongoDB

```
sudo -u meshcentral node ./node_modules/meshcentral --mongodb mongodb:
```

Add to config.json

```
{  
  "settings": {  
    "mongodb": "mongodb://127.0.0.1:27017/meshcentral",  
    "mongodbcol": "meshcentral"  
  }  
}
```


Start MeshCentral without need for mongodb switch

```
sudo -u meshcentral node ./node_modules/meshcentral
```

Nginx setup as proxy

MeshCentral - NGINX Reverse Proxy - YouTube

<https://meshcentral.com/info/docs/MeshCentral2Use>

To setup Nginx as a proxy then make sure MeshCentral is running on an unused port which is not 80,443. I suggest 1025 as it's just out of the banned range of NODE.

Change MeshCentral port

Edit ~/meshcentral-data/config.json remove the '_' from port and set to the following;

```
{
  "settings": {
    "Cert": "support.mydomain.com.au"
    "Port": 4430,
    "AliasPort": 443,
    "RedirPort": 800,
    "AgentPong": 300,
    "TlsOffload": "127.0.0.1"
  },
  "domains": {
    "": {
      "certUrl": "https://127.0.0.1"
    }
  }
}
```

Tlsoffload Nginx will handle TLS/HTTPS

certificates

certUrl

Get certificates from Nginx

Setup DNS

EG: I pointed support.mydomain.com.au A record to 149.28.188.162 which is the same as I use for pais.com.au

Add virtualhost for this service to nginx.conf

```
# HTTP server. In this example, we use a wildcard as server name.
server {
    listen 80;
    server_name support.mydomain.com.au;

    location / {
        proxy_pass http://127.0.0.1:8000/;
        proxy_http_version 1.1;

        # Inform MeshCentral about the real host, port and protocol
        proxy_set_header X-Forwarded-Host $host:$server_port;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_set_header X-Forwarded-Proto $scheme;
    }
}
```

Restart nginx

```
sudo systemctl restart nginx
```

Test

References

- <https://github.com/Ylianst/MeshCentral>
- <https://www.meshcommander.com/meshcentral>
- <https://www.npmjs.com/package/meshcentral>
- <http://info.meshcentral.com/downloads/MeshCe>

Questions

Email `myuser777@gmail.com`

Twitter `@myuser`

Github `github: myuser`
