

Running Multiple Nodes on the Same Server

It's possible to run multiple Secret Nodes on the same Secret-compatible server, and it is fairly easy to do so.

Important Notes

There are 2 important things that must be done for each node:

1. A unique system file is necessary for each node
2. A `uniquesgx_secrets`
3. `path` is necessary for each node
4. All Secret Nodes should have their own user to simplify
5. It's easiest to do this with `auto-register`
6. , but it's possible manual as well
7. Each node must be registered
- 8.

Setup

This process assumes you already have a full node running. If you do not, proceed by [Setting Up a Full Node](#), then returning.

- ## 1. Create a User

This isn't necessary, but will help with keeping nodes organized. From here on, the assumption is the username issecret , but it can be anything of your choosing.

...

Copy adduser secret usermod secret -aG sudo

...

- ## 1. Verify secretd Access

This will make it so you don't need to install `secret` multiple times, and therefore, can upgrade all nodes at the same time.

...

Copy secret status

...

- ## 1. Begin Setting up a Node

On the new user, execute steps 1 and 2 of [Setting Up a Full Node](#) . You should now have a `secret` directory on the new user, and the correct genesis file.

- ## 1. Register the Node

The variables `SCRT_ENCLAVE_DIR` and `SCRT_SGX_STORAGE` are going to need to be custom for each user/node. These variables are NOT the same as the ones in step 3 of setting up a full node.

...

```
Copy exportSCRT_ENCLAVE_DIR=~/.lib exportSCRT_SGX_STORAGE=~/.secret/.sgx secrets secretdauto-register
```

...

- ## 1. Change Ports

In order for these nodes to work in tandem, they cannot use the same ports. I recommend [this tool](#) to help automate changing them.

Example Ports Which will then create a command that looks like this:

”

```
Copy sed -i.bak -e "s%^proxy_app = \"tcp://127.0.0.1:26658\"%proxy_app = \"tcp://127.0.0.1:10658\"%; s%^laddr = \"tcp://127.0.0.1:26657\"%laddr = \"tcp://127.0.0.1:10657\"%; s%^pprof_laddr = \"localhost:6060\"%pprof_laddr =
```

```
\\"localhost:10060\\"%; s%^laddr = \\"tcp://0.0.0.0:26656\\"%laddr = \\"tcp://0.0.0.0:10656\\"%; s%^prometheus_listen_addr = \":26660\\"%prometheus_listen_addr = \":10660\\"%" HOME/.secret/secretd/config/config.toml && \ sed -i.bak -e "s%^address = \\"tcp://0.0.0.0:1317\\"%address = \\"tcp://0.0.0.0:10317\\"%; s%^address = \":8080\\"%address = \":10080\\"%; s%^address = \\"0.0.0.0:9090\\"%address = \\"0.0.0.0:10090\\"%; s%^address = \\"0.0.0.0:9091\\"%address = \\"0.0.0.0:10091\\"%" HOME/.secretd/config/app.toml
```

...

1. Create Service File

Note that this service file has two environment variables that are set, as well as a--home directory. These will be unique to your user.

...

```
Copy sudo tee /etc/systemd/system/secret.service > /dev/null << EOF [Unit] Description=Secret Node service After=network.target
```

```
[Service] Type=simple Environment=SCRT_ENCLAVE_DIR=/home/secret/lib Environment=SCRT_SGX_STORAGE=/home/secret/.secret/.sgx_secrets WorkingDirectory=/home/secret ExecStart=/usr/local/bin/secretd start --home /home/secret/.secretd User=secret Restart=on-failure StartLimitInterval=0 RestartSec=3 LimitNOFILE=65535 LimitMEMLOCK=209715200
```

```
[Install] WantedBy=multi-user.target EOF
```

...

1. Continue Setting Up a Full Node

At this point, all unique behavior for additional nodes is complete!

From here, you can return to [step 9](#) of setting up a full node. Note that the service file name is different. The following is what the system file commands would look like.

...

```
Copy sudo systemctl daemon-reload && sudo systemctl enable secretd && \ sudo systemctl restart secretd && sudo journalctl -u secretd -f -o cat
```

...

Last updated 1 month ago On this page [*Important Notes](#) * [Setup](#)

Was this helpful? [Edit on GitHub](#) [Export as PDF](#)