

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 is secret, 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 secretd multiple times, and therefore, can upgrade all nodes at the same time.

...

Copy secretd 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 export SCRT_ENCLAVE_DIR=~/.lib export SCRT_SGX_STORAGE=~/.secret/.sgx_secrets secretd auto-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/.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](#)

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