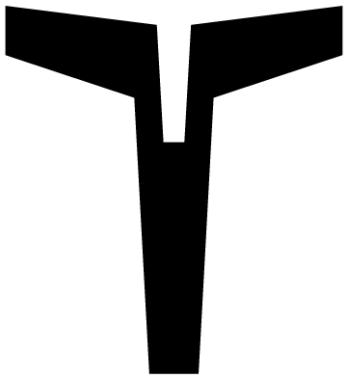
Title	Lethean – Exit Node Setup Guide
Document Type	Guide
Document Classification	Public
Version	0.1
Date	12th March 2022
Written by	darbs

LETHEAN



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Audience

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Document Summary

Quick reference on how to setup a Lethean Exit node.

Getting Started

To be added.

Easy Deploy

To be added.

Get the basics setup

```
mkdir -p Lethean/vpn
cd Lethean/vpn
mkdir etc
mkdir log

docker run -t -i \
--mount type=bind,source=$(pwd)/etc,target=/opt/lthn/etc \
--mount type=bind,source=$(pwd)/log,target=/dev/log \
lthn/vpn easy-deploy
```

IMPORTANT NOTE: The last 7 lines of output from the "easy-deploy" process must be captured and stored in a safe place. This contains the wallet and your (local certificate authority) ca passwords which can not be retrieved later on if not saved now.

Update dispatcher.ini and sdp.json with node specific configurations

dispatcher.ini

```
cd ~/Lethean/vpn
nano dispatcher.ini
```

At a minimum, update the following values:

`;provider-type=commercial ;` (Optional) This is a default value and assumes residential. This value does not need to be change. Remove the leading ";", if using in a commercial environment.

`provider-name=Provider ;` Friendly name for your provider, make it unique!

`provider-terms=Some Terms ;` Your usage terms. This can be text or even point to a URL if wanting to provide a more detailed requirement for node usage.

OR

`;provider-terms=@from_file.txt ;` Use if not wishing to use "provider-terms".

`[service-1A]`

`name=Proxy ;` A chosen name for your proxy, currently "Proxy". Do the same for any other services you have on the same exit node docker container instance.

sdp.json

Dispatcher.ini configuration must match the sdp.json configuration, therefore ensure provider names, terms and service names are the same.

We now require the setup of the **SDP.JSON** file with matching configuration. The dispatcher binary lives within the lethean docker image `lthn/vpn` hence we'll be opening a shell to start an interative sdp configuration step inside the docker container.

The resulting sdp.json configuration file will be updated in/outside the container on the host path `~/Lethean/vpn/etc/sdp.json` upon completion of configuration.

 # Start a new container with the lthn/vpn:latest image, in attached mode while having an interactive session and being presented with a shell.

```
cd ~/Lethean/vpn

docker run -ti \
   --mount type=bind,source=$(pwd)/etc,target=/opt/lthn/etc \
   --mount type=bind,source=$(pwd)/log,target=/dev/log \
   lthn/vpn sh
```

 # Generate a new update SDP file with your desired exit node configuration. You can repeat this step if required later. Ensuring to follow-up with a "upload-sdp" as per section Publish via SDP*.*

```
/opt/lthn/bin/lvmgmt --generate-sdp \

--wallet-address
iz4j6c5efixFKjNPhudjCeV4VGXZGbW1YUxp9Ya9shyv372HSUUt4ucGZxWfKujp5d74akTSWszPq93u
JR3eGqx91PPVVhz6j \

--sdp-provider-name "Lethernet Reborn" \

--sdp-provider-type residential \

--sdp-service-id 1a \

--sdp-service-name "DE Proxy 1" \

--sdp-service-type proxy \

--sdp-service-endpoint de01.proxy.lt.hn \
```

```
--sdp-service-port 8088 \
--sdp-service-dlspeed 10 \
--sdp-service-ulspeed 10 \
--sdp-service-cost 0.10 \
--sdp-service-prepaid-mins 60 \
--sdp-service-verifications 0
Initialising SDP file /opt/lthn/etc/sdp.json
SDP configuration saved to /opt/lthn/etc/sdp.json
```

Type "**exit**" once the above process completes to exit the container. It's no longer required.

IMPORTANT NOTE:

Currently the sdp generation process does not automatically transfer the dispatcher.ini "provider-terms" to sdp.json. This must be added manually to the sdp.json file.

The following syntax currently does not work during the sdp file generation process and needs to be added to the **sdp.json** file manually, the following section gives examples on how to update this configuration.

--sdp-provider-terms TEXT (no service specific "terms" command exists, which also needs adding manually)

--sdp-service-endpoint FQDN

--sdp-service-proto PROTOCOL

sdp.json manual updates (presently required)

From the host edit the sdp.json file updated by the last step:

```
cd ~/Lethean/vpn/etc
nano sdp.json
```

Example of required updates and syntax:

```
    "terms": "https://node-terms.lt.hn",
```

Proxy section will already exist, including the defined port.

Add endpoints and update port protocol if required, along with terms for the specific service.

```
"proxy": [
            {
               "endpoints": [ "de01.proxy.lt.hn" ],
               "port": "8088/TCP"
            }
         ],
         "terms": "https://node-terms.lt.hn",
```

Save all changes and exit nano.

Run & Test

To be added.

Run Dispatcher

Check that squid, RPC wallet and dispatcher do come up successfully. The session will not come to a console prompt when the dispatcher is running.

Best to run docker in de-attached mode in this section as the processes running inside the container are non-interactive for added security and won't respond to keystrokes while running it. You won't be able to use typical escape methods such as "Ctrl+P+Q" even if starting the container using the "-ti" options to detach from the container back to the host if needed.

Check logs to confirm everything started OK.

```
cd ~/Lethean/vpn

docker run -d --name lthn-vpn -p 8088:8088 \

-e WALLET_PASSWORD=********** \

-e WALLET_RPC_PASSWORD=********** \

--mount type=bind,source=$(pwd)/etc,target=/opt/lthn/etc \

--mount type=bind,source=$(pwd)/log,target=/dev/log \

lthn/vpn


docker logs -f lthn-vpn
```

(Notes to be added for knowing if all OK)

Publish via SDP

```
cd ~/Lethean/vpn

docker run --mount type=bind,source=$(pwd)/etc,target=/opt/lthn/etc \
   --mount type=bind,source=$(pwd)/log,target=/dev/log \
   lthn/vpn upload-sdp
```