Install in Bare Metal / Virtual Machine

https://campus.barracuda.com/doc/93201593/

Before You Begin

Minimum OS supported versions:

- CentOS 7
- RHEL 8
- Any modern Debian-based OS (Ubuntu)

Requires a valid CloudGen Access Proxy enrollment link

Choose **Install Script** or **Manual Steps** to proceed.

Install Script

The steps below will execute a script obtained externally. It is recommended that you inspect the content before execution.

The script will install and enable a chrony service for time synchronization. This is required to ensure tokens are validated properly.

- Download and execute installation script

```
sudo bash -c "$(curl -fsSL https://url.fyde.me/proxy-linux)"
```

- This script can also be used for unattended installations.

```
curl -fsSLo install-proxy-linux.sh https://url.fyde.me/proxy-linux
chmod +x install-proxy-linux.sh
./install-proxy-linux.sh -h
```

- Install CloudGen Access Proxy script
  Available parameters:
  - `-h - Show this help`
  - `-l string - Loglevel (debug, info, warning, error, critical), defaults to info.`
  - `-n - Don't start services after install`
  - `-p int - Specify public port (1-65535), required for unattended`

    instalation
  - -r string - Specify Redis host to use for token cache <only required for HA architecture>
  - -s int - Specify Redis port <optional>
  - -t token - Specify CloudGen Access Proxy token
  - -u - Unattended install, skip requesting input <optional>

Example for unattended installation with CloudGen Access Proxy token:

- Specify the CloudGen Access Proxy token inside quotes
  - `./install-fyde-proxy-linux.sh -p 443 -t "https://xxxxxxxxxxxx" -u`

Example for unattended installation with CloudGen Access Proxy token with Redis endpoint:

- Specify the CloudGen Access Proxy token inside quotes
  - `./install-fyde-proxy-linux.sh -p 443 -t "https://xxxxxxxxxxxx" -u -r localhost -s 6379`

Example for unattended installation, skipping services start, without CloudGen Access Proxy token:

- The token can also be obtained automatically via AWS SSM/Secrets Manager
- For more information, see Access Proxy Parameters.
  - `./install-fyde-proxy-linux.sh -n -p 443 -u`

CentOS/RHEL - Manual Steps

1. Install prerequisites.

```
sudo yum -y install yum-utils chrony
```

2. Ensure chrony daemon is enabled on system boot and started.

```
sudo systemctl enable chronyd
sudo systemctl start chronyd
```

3. Ensure time synchronization is enabled.

```
sudo timedatectl set-ntp on
```

4. Add CloudGen Access repository.

```
sudo yum-config-manager -y --add-repo
https://downloads.fyde.com/fyde.repo
```

5. Install Envoy Proxy.

```
sudo yum -y install envoy
```

```
sudo systemctl enable envoy
```

6. Add CAP_NET_BIND_SERVICE to Envoy using a service unit override.
   If you choose to configure your proxy to run in a port below 1024, you will need to add the CAP_NET_BIND_SERVICE capability to Envoy.

```
sudo mkdir -p /etc/systemd/system/envoy.service.d
sudo bash -c "cat > /etc/systemd/system/envoy.service.d/10-add-cap-net-
bind.conf <<EOF
[Service]
Capabilities=CAP_NET_BIND_SERVICE+ep
CapabilityBoundingSet=CAP_NET_BIND_SERVICE
AmbientCapabilities=CAP_NET_BIND_SERVICE
SecureBits=keep-caps
EOF"
sudo chmod 600 /etc/systemd/system/envoy.service.d/10-add-cap-net-
bind.conf
```

7. Reload and start Envoy Proxy.

```
sudo systemctl --system daemon-reload
sudo systemctl start envoy
```

8. Install CloudGen Access Proxy Orchestrator and authz system

```
sudo yum -y install fydeproxy
sudo systemctl enable fydeproxy
```

9. Configure environment using a service unit override.

```
sudo mkdir -p /etc/systemd/system/fydeproxy.service.d
sudo bash -c "cat > /etc/systemd/system/fydeproxy.service.d/10-
environment.conf <<EOF
[Service]
Environment='FYDE_ENROLLMENT_TOKEN=<paste here your CloudGen Access
Proxy enrollment link>'
Environment='FYDE_ENVOY_LISTENER_PORT=<replace with the corresponding
CloudGen Access Proxy port, as configured in CloudGen Access Enterprise
Console>'
Environment='FYDE_LOGLEVEL=info'
EOF"
sudo chmod 600 /etc/systemd/system/fydeproxy.service.d/10-
environment.conf
```

   For highly available installations, access to a redis server is required for communication between CloudGen Access Orchestrators.

```
sudo bash -c "cat >> /etc/systemd/system/fydeproxy.service.d/10-
environment.conf <<EOF
```

```
Environment='FYDE_REDIS_HOST=<specify redis host ip or dns>'
Environment='FYDE_REDIS_PORT=<specify redis port, defaults for 6379 if
not included>'
EOF"
```

10. Reload and start CloudGen Access Proxy Orchestrator daemon.

```
sudo systemctl --system daemon-reload
sudo systemctl start fydeproxy
```

11. Configure the firewall (if enabled).

```
sudo firewall-cmd --zone=public --add-port="<replace with the
corresponding CloudGen Access Proxy port, as configured in CloudGen
Access Enterprise Console>/tcp" --permanent
sudo firewall-cmd --reload
```

Debian / Ubuntu - Manual Steps

1. Ensure time synchronization is enabled.

```
sudo timedatectl set-ntp on
```

2. Add CloudGen Access repository.

```
REPO_URL="downloads.fyde.com"
wget -q -O - "https://$REPO_URL/fyde-public-key.asc" | sudo apt-key add
-
sudo bash -c "cat > /etc/apt/sources.list.d/fyde.list <<EOF
deb https://$REPO_URL/apt stable main
EOF"
sudo apt update
```

3. Install Envoy Proxy.

```
sudo apt -y install envoy
sudo systemctl enable envoy
```

4. Add CAP_NET_BIND_SERVICE to Envoy using a service unit override.
If you choose to configure your proxy to run in a port below 1024, you will need to add the CAP_NET_BIND_SERVICE capability to Envoy.

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sudo chmod 600 /etc/systemd/system/envoy.service.d/10-add-cap-net-
bind.conf
```

5. Reload and start Envoy Proxy.

```
sudo systemctl --system daemon-reload
sudo systemctl start envoy
```

6. Install CloudGen Access Proxy Orchestrator and authz system

```
sudo apt -y install fydeproxy
sudo systemctl enable fydeproxy
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   For highly available installations, access to a redis server is required for communication between CloudGen Access Orchestrators.

```
sudo bash -c "cat >> /etc/systemd/system/fydeproxy.service.d/10-
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8. Reload and start CloudGen Access Proxy Orchestrator daemon.

```
sudo systemctl --system daemon-reload
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9. Configure the firewall (if enabled).

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sudo firewall-cmd --zone=public --add-port="<replace with the
corresponding CloudGen Access Proxy port, as configured in CloudGen
Access Enterprise Console>/tcp" --permanent
sudo firewall-cmd --reload
```

Upgrading CloudGen Access Proxy

To upgrade your CloudGen Access Proxy to the latest version, execute the following command:

```
sudo yum upgrade fydeproxy envoy
```

Troubleshoot

For troubleshooting, see Troubleshooting.