

Managing WireGuard Logs with Systemd and Logrotate

When managing a VPN like WireGuard, logging is crucial for monitoring activity, debugging issues, and ensuring security. But if left unchecked, logs can grow rapidly and become unmanageable.

In this guide, we'll set up Systemd to capture WireGuard logs dynamically and use Logrotate to keep them under control automatically.

Setup a Systemd file to store logs

Step 1: Create a Systemd Service to Store Logs

First, we need to create a Systemd service that continuously logs WireGuard activity.

- **Open a new Systemd service file:**

```
nano /etc/systemd/system/wireguard-log.service
```

- **Add the following configuration:**

```
[Unit]
Description=WireGuard Dynamic Debug Logging
After=network.target

[Service]
ExecStart=/bin/bash -c 'dmesg -wT | grep wireguard >> /var/log/wireguard-dyndbg.log'
Restart=always
RestartSec=5
StandardOutput=null
StandardError=null

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

- **Reload and restart Systemd to apply changes:**

```
sudo systemctl daemon-reload
sudo systemctl restart wireguard-log.service
```

```
sudo systemctl enable wireguard-log.service
```

or if you are ROOT then run without SUDO:

```
systemctl daemon-reload
systemctl restart wireguard-log.service
systemctl enable wireguard-log.service
```

- **Verify that the service is running:**

```
sudo systemctl status wireguard-log.service
```

or if you are ROOT then run without SUDO:

```
systemctl status wireguard-log.service
```

Set Up Logrotate for Automatic Log Management

Now, let's ensure our logs don't grow indefinitely by setting up Logrotate.

- **Install Logrotate (if not already installed):**

```
sudo apt update && sudo apt install logrotate -y
```

or if you are ROOT then run without SUDO:

```
apt update && apt install logrotate -y
```

- **Create a Logrotate configuration file:**

```
nano /etc/logrotate.d/wireguard
```

- **Add the following configuration to manage log rotation:**

```
/var/log/wireguard-dyndbg.log {
    daily
    rotate 7
    compress
    delaycompress
    missingok
    notifempty
    create 0640 root root
    postrotate
```

```
systemctl restart wireguard-log.service > /dev/null 2>&1 || true
endscript
}
```

Test Your Log Rotation Setup

```
sudo logrotate -v /etc/logrotate.d/wireguard
```

or if you are ROOT then run without SUDO:

```
logrotate -v /etc/logrotate.d/wireguard
```

To **force** log rotation manually:

```
sudo rm -f /var/lib/logrotate/status
sudo logrotate -f /etc/logrotate.d/wireguard
```

or if you are ROOT then run without SUDO:

```
rm -f /var/lib/logrotate/status
logrotate -f /etc/logrotate.d/wireguard
```

Check your logs

```
ls -lh /var/log/wireguard-dyndbg.log*
```

Your DONE.

InsOmniA

Revision #4

Created 2025-05-02 11:53:13 EEST by Green

Updated 2025-09-10 19:46:58 EEST by Green