

## Install Raven Core Node on HiveOS (or Debian<sup>1</sup> variants) as a System Service

Reference:

<https://github.com/RavenProject/Ravencoin/blob/master/doc/init.md>

Steps:

- 1) Create a system user and group named raven
  - a. `adduser raven --system --group`
- 2) Create `/usr/bin/raven.d` then download, place the files & make symbolic links
  - a. `mkdir -p /usr/bin/raven.d`
  - b. `cd /tmp`
  - c. `wget https://github.com/RavenProject/Ravencoin/releases/download/v4.6.1/raven-4.6.1-7864c39c2-x86_64-linux-gnu.tar.gz`  
(The above command must be one contiguous line)
  - d. `tar -xf raven-4.6.1-7864c39c2-x86_64-linux-gnu.tar.gz`
  - e. `cd raven-4.6.1-7864c39c2`
  - f. `cp -r . /usr/bin/raven.d`
  - g. `cd ..`
  - h. `ln -s /usr/bin/raven.d/bin/raven-cli /usr/bin/raven-cli`
  - i. `ln -s /usr/bin/raven.d/bin/ravend /usr/bin/ravend`
- 3) Create a base `raven.conf` file with a random rpc password to support command line interaction
  - a. `echo -n 'rpcpassword=' > raven.conf`
  - b. `openssl rand -base64 41 >> raven.conf`
  - c. This file needs to be placed in `/root` and `/home/user`
    - i. `mkdir -p /root/.raven`
    - ii. `cp raven.conf /root/.raven`
    - iii. `mkdir -p /home/user/.raven`
    - iv. `cp raven.conf /home/user/.raven`
    - v. `chown -R user:root /home/user/.raven`
  - d. An additional parameter for `/etc/raven/raven.conf` is needed
    - i. `mkdir /etc/raven`
    - ii. `echo 'maxconnections=75' >> raven.conf`  
(reduced from the 125 default to help control resource constraints)
    - iii. `cp raven.conf /etc/raven/raven.conf`
    - iv. `chown raven:raven /etc/raven/raven.conf`
- 4) Install the man pages
  - a. Make the necessary directory
    - i. `mkdir -p /usr/local/share/man/man1`
  - b. Link the `.1` man files in the new directory
    - i. `ln -s /usr/bin/raven.d/share/man/man1/raven-cli.1 /usr/local/share/man/man1/raven-cli.1`
    - ii. `ln -s /usr/bin/raven.d/share/man/man1/ravend.1 /usr/local/share/man/man1/ravend.1`
- 5) Create the pid structure
  - a. `mkdir -p /var/lib/ravend`
  - b. `touch /var/lib/ravend/ravend.pid`

- c. `chown -R raven:raven /var/lib/ravend`
- 6) Prepare the service file
  - a. `cd /etc/systemd/system`
  - b. `wget https://raw.githubusercontent.com/RavenProject/Ravencoin/master/contrib/init/ravend.service`  
(The above command must be one contiguous line)
  - c. `systemctl daemon-reload`
  - d. `systemctl enable ravend.service`
  - e. `systemctl status ravend.service`
  - f. `systemctl stop ravend.service`
  - g. `systemctl start ravend.service`
  - h. Use **top** to see it running in the list. [Note: <ctrl> c or press q to exit top]
  - i. Validate the listening port:
    - i. `netstat -tulpa | grep 8767`
    - ii. Notice it is bound to 0.0.0.0:8767
  - j. Additional tests once the service is running
    - i. `raven-cli getblockchaininfo | grep "headers"`
      - 1. It will take a little time but will show the current in-sync header
    - ii. `raven-cli getblockchaininfo | grep "blocks"`
      - 1. In general blocks will not begin downloading until all headers are in-sync.
    - iii. `raven-cli getpeerinfo | grep "inbound"`
      - 1. Until the daemon is in complete sync with the network, the results will be false.
      - 2. Once everything is in-sync a value of true should appear.
- 7) To Do:
  - a. Firewall publish TCP Port 8767 to allow inbound connections.