

Installation Process for pi-hole:

```
sudo apt update
sudo apt upgrade
sudo apt install curl # if not already installed
curl -sSL https://install.pi-hole.net | bash
ok (too all options/REMAIN DEFAULT)
- Pi-hole installation complete -
```

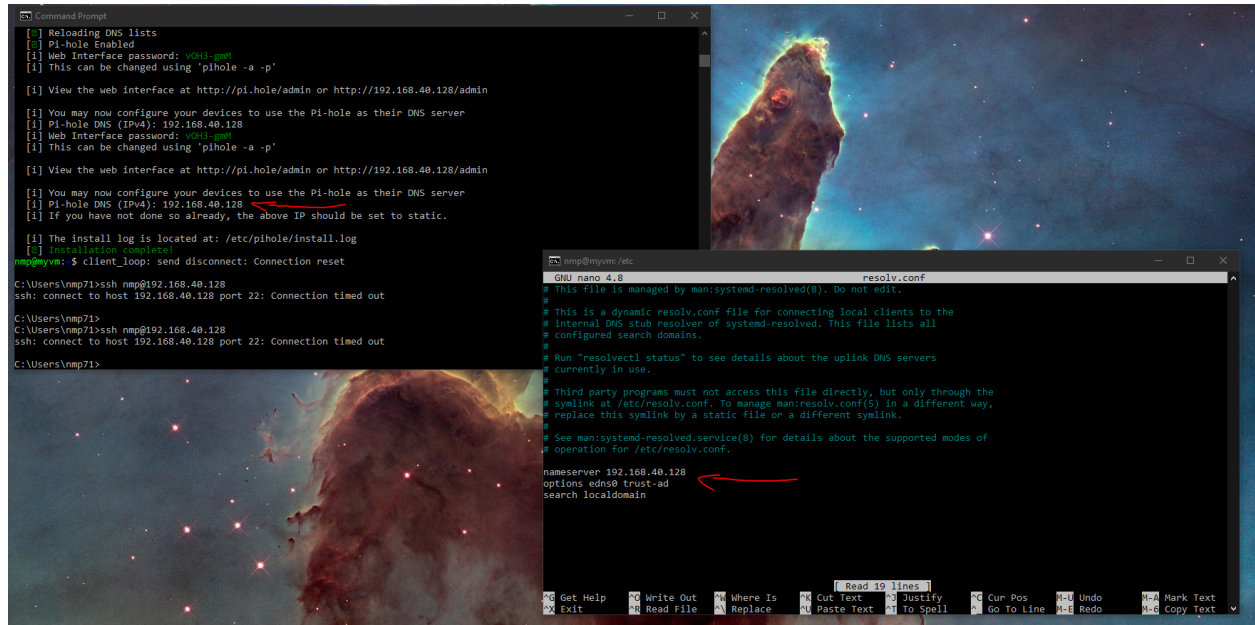
Installation Process for NGINX:

```
sudo apt update
sudo apt install nginx
Adjust firewall for nginx service
sudo apt upgrade
sudo apt install curl # if not already installed
curl -sSL https://install.pi-hole.net | bash
ok (to all options/REMAIN DEFAULT)
```

Helpful guide:

<https://raspberrytips.com/install-pi-hole-on-ubuntu/>

After above guide, edited resolv.conf file with sudo nano, and set name server ip to 192.168.40.128



The image shows a terminal window with a space-themed background. The terminal output displays the steps for installing and configuring Pi-hole. It includes instructions to reload DNS lists, enable Pi-hole, set a web interface password, and view the web interface at `http://192.168.40.128/admin`. It also shows the IP address `192.168.40.128` being set for the Pi-hole DNS. The installation is marked as complete, and a client loop is initiated. Below this, several SSH connection attempts from a Windows machine to the Pi-hole IP are shown, all resulting in 'Connection timed out'.

Overlaid on the terminal is a nano editor window editing the `/etc/resolv.conf` file. The file content is as follows:

```
resolv.conf
# This file is managed by man:systemd-resolved(8). Do not edit.
#
# This is a dynamic resolv.conf file for connecting local clients to the
# internal DNS stub resolver of systemd-resolved. This file lists all
# configured search domains.
#
# Run "resolvectl status" to see details about the uplink DNS servers
# currently in use.
#
# Third party programs must not access this file directly, but only through the
# symlink at /etc/resolv.conf. To manage man:resolv.conf(5) in a different way,
# replace this symlink by a static file or a different symlink.
#
# See man:systemd-resolved.service(8) for details about the supported modes of
# operation for /etc/resolv.conf.
nameserver 192.168.40.128
options edns0 trust-ad
search localdomain
```

A red arrow points to the `nameserver 192.168.40.128` line in the `resolv.conf` file.

I also changed the resolv.conf file of kali to be the same.