

1.1 Linux Basics

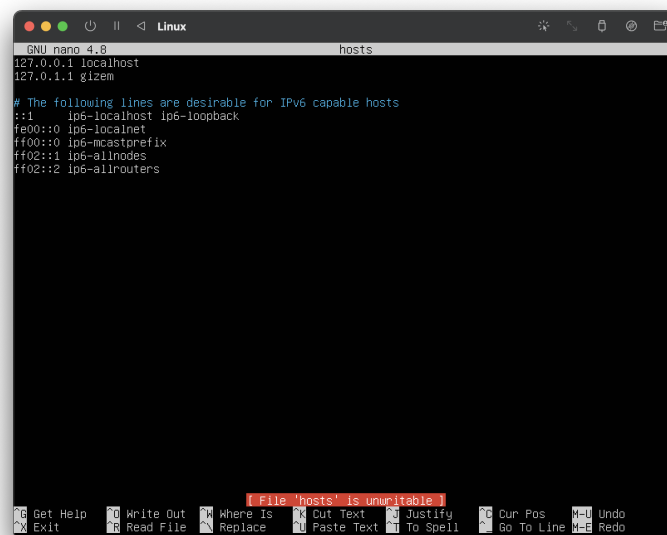
Thursday 3rd March, 2022

Contents

1	/etc/hosts	1
2	/etc/resolv.conf	2
3	/etc/nsswitch.conf	2

1 /etc/hosts

As your machine gets started, it will need to know the mapping of some hostnames to IP addresses before DNS can be referenced. This mapping is kept in the `/etc/hosts` file. In the absence of a name server, any network program on your system consults this file to determine the IP address that corresponds to a host name.



```
GNU nano 4.8 hosts
127.0.0.1 localhost
127.0.1.1 gizm

# The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters

File 'hosts' is unwriteable
```

Figure 1

2 /etc/resolv.conf

The /etc/resolv.conf file defines how the system uses DNS to resolve host names and IP addresses. This file usually contains a line specifying the search domains and up to three lines that specify the IP addresses of DNS server. The following entries from /etc/resolv.conf configure two search domains and three DNS servers:

Listing 1: resolv.conf example

```
search us.mydomain.com mydomain.com
nameserver 192.168.154.3
nameserver 192.168.154.4
nameserver 10.216.106.3
```

3 /etc/nsswitch.conf

The /etc/nsswitch.conf file is used to configure which services are to be used to determine information such as hostnames, password files, and group files. The last two ones, password files, and group files in our case are not used, since we don't use NIS services on our server. Thus, we will focus on the hosts line in this file.

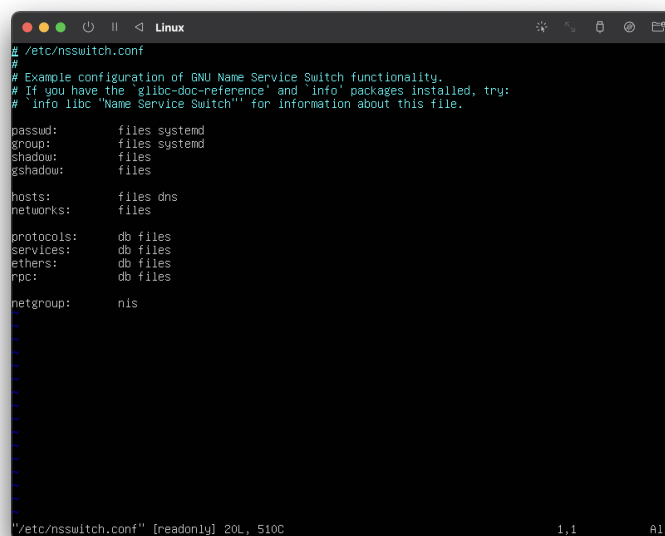
A screenshot of a Linux terminal window with a dark background. The window title is "Linux". The terminal shows the contents of the /etc/nsswitch.conf file. The file starts with a comment line "# Example configuration of GNU Name Service Switch functionality." followed by another comment line "# If you have the 'glibc-doc-reference' and 'info' packages installed, try: # 'info libc "Name Service Switch"' for information about this file." Below the comments, there are several lines of configuration: "passwd: files systemd", "group: files systemd", "shadow: files", "gshadow: files", "hosts: files dns", "networks: files", "protocols: db files", "services: db files", "ethers: db files", "rpc: db files", and "netgroup: nis". At the bottom of the terminal, there is a status bar that reads "/etc/nsswitch.conf" [readonly] 20L, 510C, 1,1 All.

Figure 2