



Service Configuration Guide

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Abstract: A quick guide to installing common services on OpenBSD.

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I. Introduction

I.1 Purpose

To provide a quick OpenBSD installation guide.

I.2 Scope

This document applies to OpenBSD installations.

II. Common Unix Commands on OpenBSD

Command	Description	Flags
ls	List directory contents.	-la = list files, list in long format, include directories whose names begin with a dot ('.')
cd	Change working directory.	cd /var/www/htdocs/
mkdir	Make directories.	-p = Create intermediate directories as required.
grep	File pattern searcher.	grep "string" file
tail	Print the contents of a file.	-f = Do not stop when end-of-file is reached, but rather to wait for additional data to be appended to the input.
ps	Print the running process list	-aux = display all user's processes, display extended information, display information about a process without a controlling terminal.
kill	Terminate a running process.	kill -signal_name #process_id signals: 1 - (Hang up) 9 - (non-ignorable kill)

III. DNS Configuration (BIND)

III.1 Edit the `/var/named/etc/named.conf` file:

Add the following lines:

```
// Master zones
zone "demo.kanren.net" {
    type master;
    file "master/demo.kanren.net";
};
```

Save and close the file.

Create a new file in `/var/named/master` called `demo.kanren.net`

Add the following lines:

```
;;
;; demo.kanren.net
;;
$TTL          86400
$ORIGIN demo.kanren.net.
demo          SOA      bob.demo.kanren.net. root.kanren.net. (
                2006040300 ; serial - YYYYMMDDXX
                21600      ; refresh - 6 hours
                1200       ; retry - 20 minutes
                3600000     ; expire - long time
                86400)     ; minimum TTL - 24 hours

                IN      NS      bob.demo.kanren.net.
                IN      NS      nic.kanren.net.
                IN      MX      10 bob.demo.kanren.net.

$ORIGIN demo.kanren.net.
bob           IN      A        164.113.130.67
www          IN      CNAME     bob
mail         IN      CNAME     bob
roberta     IN      A        192.168.1.1
junior      IN      A        192.168.1.2
```

Save and close the file.

Start DNS by running `named` at the command line.

Verify `named` is running by typing `ps aux | grep named` at the console.

Watch the `named` logs to check for errors during startup by running

```
tail -f /var/log/daemon | grep named
```

at the console.

IV. DHCP Configuration

IV.1 Open the file `/etc/dhcpd.conf`

Add the following lines:

```
shared-network LOCAL-NET {
    option domain-name "demo.kanren.net";
    option domain-name-servers 164.113.130.67, 164.113.92.251;

    subnet 192.168.1.0 netmask 255.255.255.0 {
        option routers 192.168.1.254;

        range 192.168.1.30 192.168.1.253;
    }
}

host roberta {
    hardware ethernet 00:10:83:5c:00:a1;
    fixed-address roberta.demo.kanren.net;
}

host junior {
    hardware ethernet 00:01:E6:7E:1F:66;
    fixed-address junior.demo.kanren.net;
}
```

Save and close the file.

Start DHCP server by running `dhcpd <iface>`

Verify DHCP is running by typing `ps aux | grep dhcpd` at the console.

Watch the logs to check for errors during startup by running

```
tail -f /var/log/daemon | grep dhcpd
```

at the console.

V. Apache/FTP Configuration

V.1 Edit the file `/var/www/conf/httpd.conf`

Modify the following lines:

```
Listen *:80
BindAddress *
ServerAdmin webmaster@demo.kanren.net
ServerName bob.demo.kanren.net
DocumentRoot "/var/www/docs"
<Directory "/var/www/docs">
NameVirtualHost *:80
```

Add the following lines:

```
# Sample VirtHost:
<VirtualHost *>
    DocumentRoot "/var/www/docs/www.demo.kanren.net"
    ServerName www.demo.kanren.net
    ErrorLog /var/www/logs/www.demo.kanren.net_error_log
    CustomLog /var/www/logs/www.demo.kanren.net_access_log common
</VirtualHost>
```

Save and close the file.

Create a directory to hold your web content by typing `mkdir -p /var/www/docs/www.demo.kanren.net`

Verify the configuration by running `apachectl configtest` at the console.

Start the apache service by running `apachectl start` at the console.

Check for Errors during startup by typing `tail -f /var/www/logs/error_log` at the console.

VI. Postfix/POP3 Configuration

V.1 Install Postfix:

Install the postfix package by running `pkg_add`

```
ftp://mirror.kanren.net/OpenBSD/3.7/packages/i386/postfix-2.2.0.tgz
```

To replace sendmail with postfix you have to install a new mailer.conf using the following command:

```
/usr/local/sbin/postfix-enable
```

Edit `/etc/rc.conf`, and add `sendmail_flags="-bd -q30m"` to startup postfix correctly.

Remove the `sendmail clientmqueue runner` from root's crontab.

Run the following commands to do so:

```
crontab -eu root
```

Edit the file `/etc/postfix/main.cf`

Add the following lines:

```
soft_bounce = no
myhostname = bob.demo.kanren.net
mydestination = $myhostname, localhost.$mydomain, localhost, $mydomain
local_recipient_maps = proxy:unix:passwd.byname $alias_maps
mynetworks = 127.0.0.0/8
alias_maps = hash:/etc/postfix/aliases
alias_database = hash:/etc/postfix/aliases
mail_spool_directory = /var/mail
smtpd_banner = $myhostname ESMTP $mail_name
default_process_limit = 20
```

Save and close the file.

Edit the file `/etc/postfix/aliases`

Change root's alias to a real email address:

```
root: sysadm-auto@kanren.net
```

Update the Postfix aliases file by running the `newaliases` command.

Kill sendmail running on the system:

```
ps aux | grep sendmail
kill <sendmail's PID>
```

Start Postfix on the system:

```
postfix start
```

Verify postfix is running:

```
tail -f /var/log/maillog
```

Send a test message:

```
mail -s "Subject Name" user@domain.com
Type Message Content
Ctrl-D to send message
```

Reply to message, check maillog to verify message received.

Bonus Items:

Startup Scripts: `/etc/rc.conf`

Enable FTPD in `/etc/inetd.conf`

Enable POP3 in `/etc/inetd.conf`