

# RHCE BOOT CAMP

Email Services



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**E N G I N E E R**



# SENDMAIL

- What is Sendmail?
- Sendmail is an extremely popular mail transfer agent (MTA) used by default on many UN\*X distributions to handle the receipt and delivery of emails.
- Sendmail has been around a very long time, and still carries some configuration thorns from previous decades
- Namely, using m4 for a configuration “language”



# SENDMAIL

- MUA versus MTA
  - A mail user agent (MUA) is a program that users run to read, reply to, compose, and dispose of email (such as Outlook, Mozilla Mail, Eudora, etc). You can have many different MUA's installed and running on one machine.
  - A mail transfer agent (MTA) is a program that delivers mail and transports it between machines. Usually, there is only one MTA running on a machine at any particular time.
- LDA (Local Delivery Agent)
  - Once the MTA receives a message, it determines if the message is intended for a local or remote recipient. If the message is intended for a remote location, the message is then passed off to the appropriate MTA. If the message is local, it will be passed to the LDA. **The LDA on RedHat is procmail.**



# SENDMAIL CONFIGURATION

- **`/etc/mail/sendmail.cf`**
  - Main configuration file. This file is parsed at each successful start-up.
- **`/etc/mail/sendmail.mc`**
  - Configuration changes should always be written here.
- **`/etc/mail/local-host-names`**
  - This file contains a list of domain names that the server will handle mail for.
- **`/etc/aliases`**
  - This file specifies redirects for one user to another address or group of addresses.



# ALTERNATIVES!

- Alternatives can be used when many packages provide the same service.
- The executable that the Sendmail init script invokes is really just a symbolic link to another symlink in the `/etc/alternatives` directory.
- For example take a look at `/usr/sbin/sendmail`.
- In order to choose between Sendmail and postfix, we just change the symlink.
- This can be done with the following commands:
  - `alternatives --display mta`
  - `alternatives --config mta`
  - `alternatives --set mta`



# POSTFIX

- Postfix was designed from the ground up to be a replacement for Sendmail.
- The Postfix group has the following goals for their product:
  - It should be more efficient than Sendmail.
  - It should be more secure than Sendmail.
  - It should be easier to administer than Sendmail.
  - It should be 100% Sendmail compatible.
- To accomplish these goals, Postfix is made up of many individual programs which each handle a particular aspect of mail transfer. These programs are managed by a supervisory master daemon.



# CONFIGURING POSTFIX

- Postfix's configuration file is `/etc/postfix/main.cf`
- The directives in this file can be changed manually, or `postconf -e` can be run to apply them from the command line. For example, the following are the most common of the changes that can be made:
  - `postconf -e "myorigin = redhat.com"`
  - `postconf -e "mydestination = redhat.com mail.redhat.com"`
  - `postconf -e "my networks = 192.168.0.0/24, 127.0.0.1"`
  - `postconf -e "inet_interfaces = all"`
- `postconf -n` can then be called to check your configuration for errors



# DOVECOT

- `dovecot` is the default POP/IMAP server for RHEL 5.
- The configuration file is `/etc/dovecot.conf`
- Usually, the only changes that need to be made are the enabling of the desired protocols.



# MUTT

- `mutt` is a full-featured MUA for your terminal. You can use it to test pop3s and imaps:
  - `mutt -f protocol://server`



# LAB

1. Configure Postfix to receive mail for `stationX.example.com`, and store user mailboxes in Maildir format.
2. When mail is received for `ru@stationX.example.com`, that mail should be forwarded to the users `richard` and `linus`.
3. Configure `dovecot` to serve user Maildirs on both `imap` and `pop3`.
4. Generate a new key and self signed certificate for use with `ssl` encrypted `imaps` and `pop3s` and then enable those protocols.
5. Test your secure mail server with `mutt`.



```
slideshow.end();
```