When the MTA decides that the email it received is to be delivered to a local account it hands off the email to the MDA. The MDA can then deliver the email to a local account’s email box, which is usually a file in /var/spool/mail. Before delivery, the MDA first checks to see whether there are additional instructions on how to handle the email, which is called an alias.

Mail aliases are systemwide and stored in a file called **/etc/aliases**. They are systemwide because an alias does not belong to a user. The email comes in, the MDA sees there is an alias for that name, and the MDA delivers the email to the user specified in the alias.

The format of **/etc/aliases** is simple:

alias: recipient

An alias can have multiple recipients, in which case they are separated by a comma:

[**Click here to view code image**](ch17_images.html#p489pro01a)

alias: recipient1,recipient2

An alias name may or may not exist as a local user account. For example, it is common to send root’s email to a named user:

root: sean

Comments are allowed with the hash mark:

# Send root's mail to sean  
root: sean

Even though the root account exists, any mail that was to be delivered to root goes to sean instead.

**Committing Changes**

Your changes to **/etc/aliases** do not go into effect immediately. Your MDA actually reads a database file called **/etc/aliases.db**, which is optimized for reading. Making your email software read the file every time would put a damper on performance, so you need to compile the text file into something that can perform lookups quickly.

The **newaliases** command updates the **aliases.db** file for you so that your changes to **aliases** take effect. This command must be run as root because the permissions of the files should not allow users to modify it.

If there are no problems, the **newaliases** command returns nothing. If there is a formatting problem you get an error:

[**Click here to view code image**](ch17_images.html#p490pro01a)

# **newaliases**  
postalias: warning: /etc/aliases, line 96: need name:value pair

The server usually lets you know if you forgot to run **newaliases** with a message in the mail log, usually **/var/log/messages**.

[**Click here to view code image**](ch17_images.html#p490pro02a)

warning: database /etc/aliases.db is older than source file /etc/  
aliases

This indicates that you haven’t run the **newaliases** command since last changing **/etc/aliases**.

**Other Types of Aliases**

You have seen how to alias a single address to other local accounts, such as to give Rebecca all the emails going to the human resources alias. There are more things you can do to the email other than deliver it to a local account.

The aliases file also accepts fully qualified email addresses. If you were to have a line in your **aliases** file like:

isaac: i.smith@example.com

any email destined to the isaac account would be sent back to the MTA to be directed to i.smith@example.com.

The destination of the alias could also be a file:

[**Click here to view code image**](ch17_images.html#p490pro03a)

support: /var/log/support.please.ignore

would redirect all email to the support account to a file in **/var/log**. Imagine how much easier an administrator’s job would be if she didn’t have to deal with those pesky users!

The destination can also be a script if the name of the file is prefixed with the pipe (**|**) operator:

[**Click here to view code image**](ch17_images.html#p490pro04a)

support: | /usr/local/bin/new\_ticket.sh

In this case, the email would be passed to a script that would presumably ingest the email into a new support ticket.

Don’t forget, you need to run **newaliases** after making any changes!