**Touching Files**

The **touch** command seems odd at first, but it comes in handy often. You give it the name of one or more files, and it creates the files if they don’t exist or updates their timestamps if they do.

There are various reasons to use the **touch** command, such as creating a new blank log file or updating a file’s modification time to use as a reference such as to know the last time a job was run.

To create a new file, you can use the relative pathname for creating one in the current directory:

touch filename

Or, you can use absolute pathname to create the file, such as shown here:

touch /home/rossb/filename

Expect to see **touch** on the exams for log file creation, along with using a reference file to mark the last backup. In other words, if a log file is created from a successful backup, that file can be used as a date and time reference file because it occurred at a desirable time.

When you use **touch** on an existing file, the default action is to update all three of the file’s times:

**access—**The last time a file was written/read from

**change—**The last time the contents of the file were changed, or that the file’s metadata (owner, permission, inode number) was changed

**modify—**The last time the file’s contents were changed

A programmer preparing a new release of a software package would use the **touch** command to ensure that all files have the exact same date and times. Therefore, the release could be referred to by the file date, given multiple revisions.

Setting a file’s date is relatively easy; the following command sets **file1**’s date to a particular date and time:

touch -t 201501010830 file1

The time format used is represented by yyyymmddhhmm, or a four-digit year, two-digit month, two-digit day, two-digit hour, and two-digit minutes.

Reference files are useful, particularly when you just want to have a file or set of files updated to a particular date/time, not the current one. You could use

touch -r reffile file2update

The date and time of **reffile** is applied to the **file2update** file date and time.