

## 11.2.8 File Management Commands

The command window in Windows is accessed by using the Command Prompt shortcut on the Start menu or by typing **cmd** into the search field on the taskbar. Remember the following things when working with the command prompt:

- To view the list of commands you can execute, type **help**. This will display the entire list of available commands.
- To see detailed information about a specific command, type the command followed by **/?**.
- Adding **| more** after a command will cause the output to list one screen at a time.
  - Press the Enter key to scroll down a line.
  - Press the Spacebar to scroll down a screen at a time.
- You can repeat a command by pressing the Up arrow key at the command prompt. This will cause the most recent command to appear.

The following table lists common file management commands:

Command	Description
cd	<p>Use the <b>cd</b> command to work with the current directory. Common switches used with <b>cd</b> are:</p> <ul style="list-style-type: none"> <li>▪ <b>cd</b> by itself shows the current directory (the current directory is usually shown in the command prompt as well).</li> <li>▪ <b>cd [folder name]</b> changes the current directory to the one specified (if the directory is within the current directory).</li> <li>▪ <b>cd [full path]</b> changes to the directory specified by the path.</li> <li>▪ <b>cd ..</b> changes the current directory to the immediate parent directory (moves up one directory level).</li> <li>▪ <b>cd /D [file] [path]</b> changes the current drive in addition to changing the directory.</li> </ul>
dir	<p>Use the <b>dir</b> command to display a list of files and subdirectories in a directory. Common switches used with <b>dir</b> are:</p> <ul style="list-style-type: none"> <li>▪ <b>dir /p</b> pauses output at every page.</li> <li>▪ <b>dir /s</b> displays information in subdirectories.</li> <li>▪ <b>dir /a[xx]</b> displays files with the specified attributes:           <ul style="list-style-type: none"> <li>▪ Options may be combined, such as <b>/arh</b>, to show read-only, hidden files.</li> <li>▪ Use <b>-</b> to show files without an attribute. For example, <b>dir /a-r</b> shows files that are <i>not</i> read only.</li> </ul> </li> </ul>
md mkdir	<p>Use the <b>md</b> and <b>mkdir</b> commands to create (make) a directory. Common switches used with <b>md</b> are:</p> <ul style="list-style-type: none"> <li>▪ <b>md [directory]</b> creates a new directory in the current directory.</li> <li>▪ <b>md [path] [directory]</b> creates a new directory in the directory specified by the path.</li> </ul>
rd	<p>Use the <b>rd</b> command to delete (remove) a directory. Common switches used with <b>rd</b> are:</p> <ul style="list-style-type: none"> <li>▪ <b>rd [directory]</b> removes the specified directory within the current directory.</li> <li>▪ <b>rd [path] [directory]</b> removes the directory specified in the path.</li> <li>▪ <b>rd /s</b> removes subdirectories in addition to files in the current directory.</li> <li>▪ <b>rd /q</b> will not prompt you before each deletion.</li> </ul>
copy	<p>Use the <b>copy</b> command to copy files from one location to another. Common switches used with <b>copy</b> are:</p> <ul style="list-style-type: none"> <li>▪ <b>copy [source] [destination]</b> copies the specified file to the new location.</li> <li>▪ <b>copy [folder] [*.*] [path] [destination]</b> copies all files with extensions in a folder to the new location.</li> <li>▪ <b>copy /a</b> specifies that the file is an ASCII text file.</li> <li>▪ <b>copy /b</b> specifies that the file is a binary file.</li> <li>▪ <b>copy /n</b> copies files using short filenames.</li> <li>▪ <b>copy /y</b> will not prompt you before each overwrite operation.</li> <li>▪ <b>copy /v</b> verifies files after they are copied.</li> </ul> <p>Be aware of the following for how moving (copying) files between partitions affects the file attributes:</p> <ul style="list-style-type: none"> <li>▪ When copying files from a FAT32 partition to another partition, the file attributes are retained.</li> <li>▪ When copying files from an NTFS partition to a FAT32 partition, attributes such as encryption and permissions that are not available in FAT32 are removed.</li> </ul>
xcopy	<p>Use the <b>xcopy</b> command to copy files and directory trees. Common switches used with <b>xcopy</b> are:</p> <ul style="list-style-type: none"> <li>▪ <b>xcopy /a</b> copies files with the archive attribute set and doesn't change the attribute.</li> <li>▪ <b>xcopy /m</b> copies files with the archive attribute set and turns off the archive attribute.</li> <li>▪ <b>xcopy /d</b> copies files changed on or after the specified date. If no date is given, it copies only those files whose source time is newer than the destination time.</li> <li>▪ <b>xcopy /p</b> prompts you before creating each destination file.</li> <li>▪ <b>xcopy /s</b> copies directories and subdirectories (except empty ones).</li> <li>▪ <b>xcopy /e</b> copies directories and subdirectories, including empty ones.</li> <li>▪ <b>xcopy /h</b> copies hidden and system files also.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ <b>xcopy /r</b> overwrites read-only files.</li> <li>▪ <b>xcopy /k</b> copies attributes. Normal <b>xcopy</b> will reset read-only attributes.</li> <li>▪ <b>xcopy /y</b> overwrites existing files without prompting.</li> </ul>
robocopy	<p>The <b>robocopy</b> command (short for Robust File Copy) is used to copy entire folder structures between volumes or across a network. The benefit of using <b>robocopy</b> is that all NTFS file permissions and attributes are maintained and interrupted transfers can be resumed. Common switches used with <b>robocopy</b> uses the following are:</p> <ul style="list-style-type: none"> <li>▪ <b>robocopy [source_folder] [destination] [options] copies</b> entire folder structures to destination.</li> <li>▪ <b>robocopy /s</b> copies subdirectories, excluding empty directories</li> <li>▪ <b>robocopy /e</b> copies subdirectories, including empty directories</li> <li>▪ <b>robocopy /mov</b> moves all specified files and directories, and deletes them from the source when complete</li> <li>▪ <b>robocopy /copyall</b> copies all files attributes and information</li> </ul> <p>RoboCopy is a very powerful copy utility and should be used only if you fully understand how to use it.</p>
edit	<p>Use the <b>edit</b> command to view, create, or modify files. Common switches used with <b>edit</b> are:</p> <ul style="list-style-type: none"> <li>▪ <b>edit [file]</b> specifies initial file(s) to load. Wildcards and multiple file specs can be given.</li> <li>▪ <b>edit /r</b> load file(s) in read-only mode.</li> </ul>
attrib	<p>Use the <b>attrib</b> command to change or view the attributes of one or more files.</p> <ul style="list-style-type: none"> <li>▪ Use the <b>attrib</b> command by itself to display a list of all files in the current directory.</li> <li>▪ Attributes that can be set or removed are identified by the attribute letter: <ul style="list-style-type: none"> <li>▪ <b>R</b> = read-only</li> <li>▪ <b>A</b> = archive</li> <li>▪ <b>S</b> = system</li> <li>▪ <b>H</b> = hidden</li> <li>▪ <b>I</b> = not indexed</li> </ul> </li> </ul> <p>You cannot encrypt files using the <b>attrib</b> command. Instead, use the <b>cipher</b> command or edit the properties of the file.</p> <ul style="list-style-type: none"> <li>▪ Use <b>attrib +</b> to add an attribute to a file. For example, the following command sets the R attribute for the myfile.txt file: <b>attrib +r myfile.txt.</b></li> <li>▪ Use <b>attrib -</b> to remove an attribute from a file. For example, the following command removes the R attribute from a file: <b>attrib -r myfile.txt.</b></li> </ul> <p>Multiple attributes can be assigned or removed at a time. For example, the following command assigns both R and S attributes to the file: <b>attrib +r +s myfile.txt</b>. You can also change attributes by right-clicking a file and selecting <b>Properties</b> from the menu.</p>
del	<p>Use the <b>del</b> command to delete one or more files on the system. Common switches used with <b>del</b> are:</p> <ul style="list-style-type: none"> <li>▪ <b>del [file]</b> specifies the file to delete. Wildcards and multiple filenames can be given.</li> <li>▪ <b>del /p</b> prompts for confirmation before deleting the specified file(s).</li> </ul>