

Chapter 2

Script Files and Slide Shows

CHAPTER OBJECTIVES

After completing this chapter, you will be able to:

- *Write script files and use the Run Script option to run script files.*
- *Use the RSCRIPT and DELAY commands in script files.*
- *Run script files while loading AutoCAD.*
- *Create a slide show.*
- *Preload slides when running a slide show.*

KEY TERMS

- | | | | |
|-----------------------|---------------------------|---------------------|---------------------|
| • <i>Script Files</i> | • <i>Switches</i> | • <i>RSCRIPT</i> | • <i>Slide Show</i> |
| • <i>RESUME</i> | • <i>Preloading Slide</i> | • <i>Slides</i> | |
| • <i>Run Script</i> | • <i>Slide Library</i> | • <i>Delay Time</i> | |

WHAT ARE SCRIPT FILES?

AutoCAD has provided a facility called script files that allow you to combine different AutoCAD commands and execute them in a predetermined sequence. The commands can be written as a text file using any text editor like Notepad. These files, generally known as script files, have an extension *.scr* (example: *plot1.scr*). A script file is executed with the AutoCAD **SCRIPT** command.

Script files can be used to generate a slide show, do the initial drawing setup, or plot a drawing to a predefined specification. They can also be used to automate certain command sequences that are used frequently in generating, editing, or viewing drawings. Remember that the script files cannot access dialog boxes or menus. When commands that open dialog boxes are issued from a script file, AutoCAD runs the command line version of the command instead of opening the dialog box.

EXAMPLE 1

Initial Setup of Drawing

Write a script file that will perform the following initial setup for a drawing (file name *script1.scr*). It is assumed that the drawing will be plotted on 12x9 size paper (Scale factor for plotting = 4).

Ortho	On	Zoom	All
Grid	2.0	Text height	0.125
Snap	0.5	LTSCALE	4.0
Limits	0,0 48.0,36.0	DIMSCALE	4.0

Step 1: Understanding commands and prompt entries

Before writing a script file, you need to know the AutoCAD commands and the entries required in response to the Command prompts. To find out the sequence of the Command prompt entries, you can type the command and then respond to different Command prompts. The following is the list of AutoCAD commands and prompt entries for Example 1:

Command: **ORTHO**

Enter mode [ON/OFF] <OFF>: **ON**

Command: **GRID**

Specify grid spacing(X) or [ON/OFF/Snap/Major/adaptive/Limits/Follow/Aspect]
<0.5000>: **2.0**

Command: **SNAP**

Specify snap spacing or [ON/OFF/Aspect/legacy/Style/Type]<0.5000>: **0.5**

Command: **LIMITS**

Reset Model space limits:

Specify lower left corner or [ON/OFF] <0.0,0.0>: **0,0**

Specify upper right corner <12.0,9.0>: **48.0,36.0**

Command: **ZOOM**

Specify corner of window, enter a scale factor (nX or nXP), or
[All/Center/Dynamic/Extents/Previous/Scale/Window/Object] <real time>: **A**

Command: **TEXTSIZE**

Enter new value for TEXTSIZE <0.02>: **0.125**

Command: **LTSCALE**

Enter new linetype scale factor <1.0000>: **4.0**

Command: **DIMSCALE**

Enter new value for DIMSCALE <1.0000>: **4.0**

Step 2: Writing the script file

Once you know the commands and the required prompt entries, you can write a script file using any text editor such as the Notepad.

As you invoke the **NOTEPAD** command, AutoCAD prompts you to enter the file to be edited. Press ENTER in response to the prompt to display the **Notepad** editor. Write the script file in the **Notepad** editor. Given below is the listing of the script file for Example 1:

```
ORTHO
ON
GRID
2.0
SNAP
0.5
LIMITS
0,0
48.0,36.0
ZOOM
ALL
TEXTSIZE
0.125
LTSCALE
4.0
DIMSCALE 4.0
```

(Blank line for Return.)

Note that the commands and the prompt entries in this file are in the same sequence as mentioned earlier. You can also combine several statements in one line, as shown in the following list:

```
;This is my first script file, SCRIPT1.SCR
ORTHO ON
GRID 2.0
SNAP 0.5
LIMITS 0,0 48.0,36.0
ZOOM
ALL
TEXTSIZE 0.125
LTSCALE 4.0
DIMSCALE 4.0
```

(Blank line for Return.)

Save the script file as *SCRIPT1.scr* and exit the text editor. Remember that if you do not save the file in the *.scr* format, it will not work as a script file. Notice the space between the commands and the prompt entries. For example, between **ORTHO** command and **ON**, there is a space. Similarly, there is a space between **GRID** and **2.0**.



Note

In the script file, a space is used to terminate a command or a prompt entry. Therefore, spaces are very important in these files. Make sure there are no extra spaces, unless they are required to press ENTER more than once.

After you change the limits, it is a good practice to use the **ZOOM** command with the **All** option to increase the drawing display area.

Keyboard shortcuts are not allowed in the script files. Therefore, make sure not to use them in the script files.



Tip

AutoCAD ignores and does not process any lines that begin with a semicolon (;). This allows you to put comments in the related file or line.

RUNNING SCRIPT FILES

The **SCRIPT** command allows you to run a script file while you are at the drawing editor. Choose the **Run Script** tool from the **Applications** panel of the **Manage** tab; the **Select Script File** dialog box will be displayed, as shown in Figure 2-1. You can enter the name of the script file or you can accept the default file name. The default script file name is the same as the drawing name. If you want to enter a new file name, type the name of the script file without the file extension (**.SCR**). (The file extension is assumed and need not be included with the file name.)

Step 3: Running the script file

To run the script file of Example 1, invoke the **SCRIPT** command, select the file **SCRIPT1**, and then choose the **Open** button in the **Select Script File** dialog box (Figure 2-1). You will notice the changes taking place on the screen as the script file commands are executed.

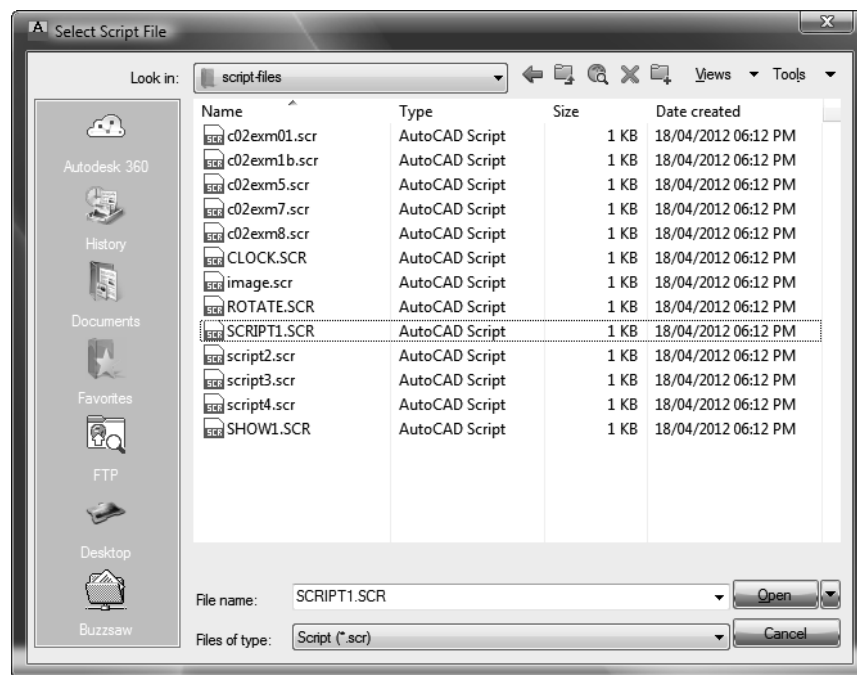


Figure 2-1 The **Select Script File** dialog box

You can also enter the name of the script file at the Command prompt by setting **FILEDIA=0**. The sequence for invoking the script using the Command line is given next.

Command: **FILEDIA**

Enter new value for FILEDIA <1>: **0**

Command: **SCRIPT**

Enter script file name <current>: *Specify the script file name.*

EXAMPLE 2**Layers**

Write a script file that will set up the following layers with the given colors and linetypes (file name *script2.scr*).

<u>Layer Names</u>	<u>Color</u>	<u>Linetype</u>	<u>Line Weight</u>
OBJECT	Red	Continuous	default
CENTER	Yellow	Center	default
HIDDEN	Blue	Hidden	default
DIMENSION	Green	Continuous	default
BORDER	Magenta	Continuous	default
HATCH	Cyan	Continuous	0.05

Step 1: Understanding commands and prompt entries

You need to know the AutoCAD commands and the required prompt entries before writing a script file. For Example 2, you need the following commands to create the layers with the given colors and linetypes.

Command: **-LAYER**

Enter an option

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/TRansparency/MATerial/Plot/Freeze/Thaw/LOck/Unlock/stAte/Description/rEconcile]: **N**

Enter name list for new layer(s): **OBJECT,CENTER,HIDDEN,DIMENSION,BORDER,HATCH**

Enter an option

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/TRansparency/MATerial/Plot/Freeze/Thaw/LOck/Unlock/stAte/Description/rEconcile]: **L**

Enter loaded linetype name or [?] <Continuous>: **CENTER**

Enter name list of layer(s) for linetype "CENTER" <0>: **CENTER**

Enter an option

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/TRansparency/MATerial/Plot/Freeze/Thaw/LOck/Unlock/stAte/Description/rEconcile]: **L**

Enter loaded linetype name or [?] <Continuous>: **HIDDEN**

Enter name list of layer(s) for linetype "HIDDEN" <0>: **HIDDEN**

Enter an option

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/TRansparency/MATerial/Plot/Freeze/Thaw/LOck/Unlock/stAte/Description/rEconcile]: **C**

New color [Truecolor/COLORbook]: **RED**

Enter name list of layer(s) for color 1 (red) <0>: **OBJECT**

Enter an option

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/TRansparency/MATerial/Plot/Freeze/Thaw/LOck/Unlock/stAte/Description/rEconcile]: **C**

New color [Truecolor/COLORbook]: **YELLOW**

Enter name list of layer(s) for color 2 (yellow) <0>: **CENTER**

Enter an option

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/TRansparency/MATerial/Plot/Freeze/Thaw/LOck/Unlock/stAte/Description/rEconcile]: **C**

New color [Truecolor/COLORbook]: **BLUE**

Enter name list of layer(s) for color 5 (blue) <0>: **HIDDEN**

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Enter an option

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/Transparency/Material/Plot/
Freeze/Thaw/Lock/Unlock/State/Description/Reconcile]: **C**

New color [Truecolor/Colorbook]: **GREEN**

Enter name list of layer(s) for color 3 (green)<0>: **DIMENSION**

Enter an option

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/Transparency/Material/Plot/
Freeze/Thaw/Lock/Unlock/State/Description/Reconcile]: **C**

New color [Truecolor/Colorbook]: **MAGENTA**

Enter name list of layer(s) for color 6 (magenta)<0>: **BORDER**

Enter an option

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/Transparency/Material/Plot/
Freeze/Thaw/Lock/Unlock/State/Description/Reconcile]: **C**

New color [Truecolor/Colorbook]: **CYAN**


Enter name list of layer(s) for color 4 (cyan)<0>: **HATCH**

Enter an option

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/Transparency/Material/Plot/
Freeze/Thaw/Lock/Unlock/State/Description/Reconcile]: **LW**

Enter linewidth (0.0mm - 2.11mm): **0.05**

Enter name list of layer(s) for linewidth 0.05mm <0>: **HATCH**

[?/Make/Set/New/Rename/ON/OFF/Color/Ltype/LWeight/Transparency/Material/Plot/
Freeze/Thaw/Lock/Unlock/State/Description/Reconcile]: 

Step 2: Writing the script file

The following file is a listing of the script file that creates different layers and assigns the given colors and linetypes to them:

```
;This script file will create new layers and
;assign different colors and linetypes to layers
-LAYER
N
OBJECT,CENTER,HIDDEN,DIMENSION,BORDER,HATCH
L
CENTER
CENTER
L
HIDDEN
HIDDEN
C
RED
OBJECT
C
YELLOW
CENTER
C
BLUE
HIDDEN
C
GREEN
DIMENSION
C
MAGENTA
```

```

BORDER
C
CYAN
HATCH
LW
0.05
HATCH

```

(This is a blank line to terminate the **LAYER** command. End of script file.)

Save the script file as *script2.scr*.

Step 3: Running the script file

To run the script file of Example 2, choose the **Run Script** tool from the **Applications** panel of the **Manage** tab or enter **SCRIPT** at the Command prompt to invoke the **Select Script File** dialog box. Select **script2.scr** and then choose **Open**. You can also enter the **SCRIPT** command and the name of the script file at the Command prompt by setting **FILEDIA=0**.

VIEWING THE SCRIPT

The **TEXTSCR** command allows the user to view all the commands and their sequence in the **AutoCAD Text Window** window that are used in the AutoCAD. To do so, choose the **Text Window** check box from the **User Interface** drop-down list of the **User Interface** panel in the **View** tab. Alternatively, choose the **F12** key to invoke the **AutoCAD Text Window - Drawing1.dwg** window, as shown in Figure 2-2. In this window, you can see all the commands that are used in the example-2 for creating the new layers, assigning colors, assigning linetypes to the layers, and assigning lineweight of the hatching.

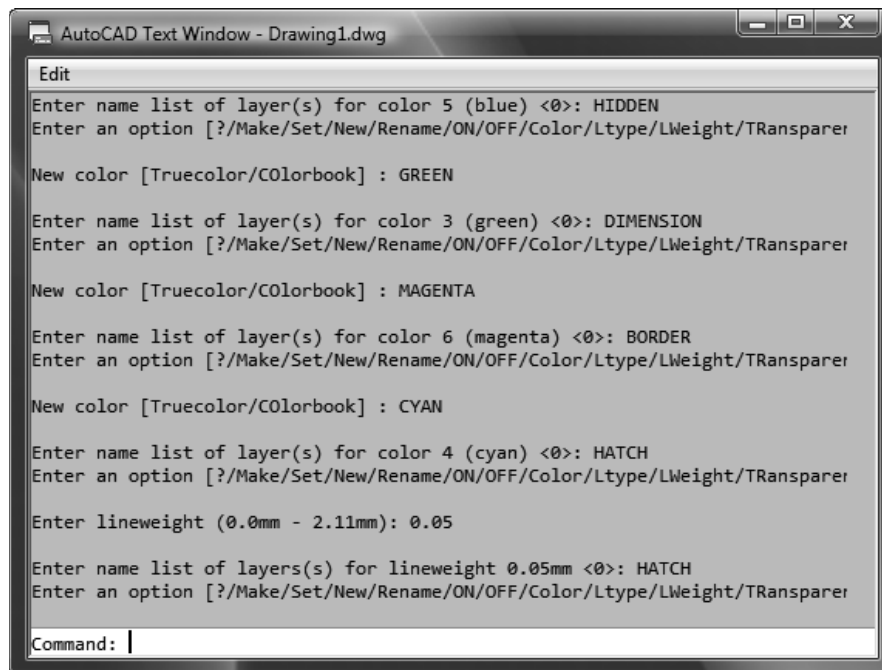


Figure 2-2 The AutoCAD Text Window

EXAMPLE 3

Rotating the Objects

Write a script file that will rotate the line and the circle, as shown in Figure 2-3, around the lower endpoint of the line through 45° increments. The script file should be able to produce a

continuous rotation of the given objects with a delay of two seconds after every 45° rotation (file name *script3.scr*). It is assumed that the line and circle are already drawn on the screen.

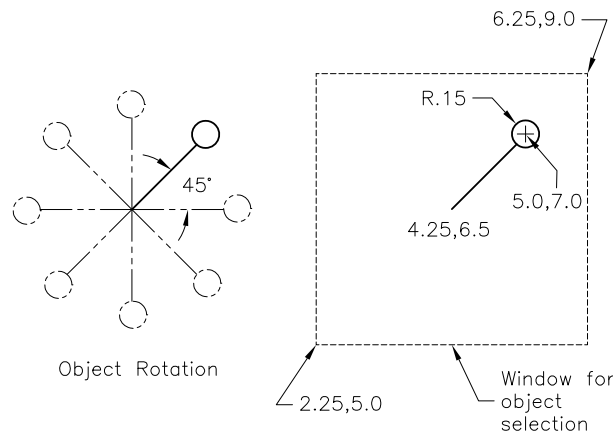


Figure 2-3 Line and circle rotated through 45° increments

Step 1: Understanding commands and prompt entries

Before writing the script file, enter the required commands and prompt entries. Write down the exact sequence of the entries in which they have been entered to perform the given operations. The following is the list of the AutoCAD command sequences needed to rotate the circle and the line around the lower endpoint of the line:

Command: **ROTATE**

Current positive angle in UCS: ANGDIR=counterclockwise ANGBASE=0

Select objects: **W**

(Window option to select object)

Specify first corner: **2.25, 5.0**

Specify opposite corner: **6.25, 9.0**

Select objects: **[Enter]**

Specify base point: **4.25, 6.5**

Specify rotation angle or [Reference]: **45**

Step 2: Writing the script file

Once the AutoCAD commands, command options, and their sequences are known, you can write a script file. You can use any text editor to write a script file. The following is a listing of the script file that will create the required rotation of the circle and line of Example 3. **The line numbers on the right and the text written as '(Blank line for Return)' are not a part of the file; they are shown here for reference only.**

ROTATE	1
W	2
2.25,5.0	3
6.25,9.0	4
(Blank line for Return.)	5
4.25,6.5	6
45	7

Line 1

ROTATE

In this line, **ROTATE** is an AutoCAD command that rotates the objects.

Line 2

W

In this line, **W** is the **Window** option for selecting the objects that need to be edited.

Line 3

2.25,5.0

In this line, 2.25 defines the *X* coordinate and 5.0 defines the *Y* coordinate of the lower left corner of the object selection window.

Line 4

6.25,9.0

In this line, 6.25 defines the *X* coordinate and 9.0 defines the *Y* coordinate of the upper right corner of the object selection window.

Line 5

Line 5 is a blank line that terminates the object selection process.

Line 6

4.25,6.5

In this line, 4.25 defines the *X* coordinate and 6.5 defines the *Y* coordinate of the base point for rotation.

Line 7

45

In this line, 45 is the incremental angle of rotation.



Note

*One of the limitations of the script file is that all the information has to be contained within the file. These files do not let you enter information. For instance, in Example 3, if you want to use the **Window** option to select the objects, the **Window** option (**W**) and the two points that define this window must be contained within the script file. The same is true for the base point and all other information that goes in a script file. There is no way that a script file can prompt you to enter a particular piece of information and then resume the script file, unless you embed AutoLISP commands to prompt for user input.*

Step 3: Saving the script file

Save the script file with the name *script3.scr*.

Step 4: Running the script file

Choose **Tools > Run Script** from the menu bar, or choose the **Run Script** tool from the **Applications** panel of the **Manage** tab, or enter **SCRIPT** at the Command prompt to invoke the **Select Script File** dialog box. Select **script3.scr** and then choose **Open**. You will notice that the line and circle that were drawn on the screen are rotated once through an angle of 45°. However, there will be no continuous rotation of the sketched entities. The next section (Repeating Script Files) explains how to continue the steps mentioned in the script file. You will also learn how to add a time delay between the continuous cycles in later sections of this chapter.

REPEATING SCRIPT FILES

The **RSCRIPT** command allows the user to execute the script file indefinitely until canceled. It is a very desirable feature when the user wants to run the same file continuously. For example, in the case of a slide show for a product demonstration, the **RSCRIPT** command can be used to run the script file repeatedly until it is terminated by pressing the ESC key. Similarly, in Example 3, the rotation command needs to be repeated indefinitely to create a continuous rotation of

the objects. This can be accomplished by adding **RSCRIPT** at the end of the file, as shown in the following listing of the script file:

```

ROTATE
W
2.25,5.0
6.25,9.0
      (Blank line for Return.)
4.25,6.5
45
RSCRIPT

```

The **RSCRIPT** command in line 8 will repeat the commands from line 1 to line 7, and thus set the script file in an indefinite loop. If you run the *script3.scr* file now, you will notice that there is a continuous rotation of the line and circle around the specified base point. However, the speed at which the entities rotate makes it difficult to view the objects. As a result, you need to add time delay between every repetition. The script file can be stopped by pressing the ESC or the BACKSPACE key.



Note

You cannot provide conditional statements in a script file to terminate the file when a particular condition is satisfied unless you use the AutoLISP functions in the script file.

INTRODUCING TIME DELAY IN SCRIPT FILES

As mentioned earlier, some of the operations in the script files happen very quickly and make it difficult to see the operations taking place on the screen. It might be necessary to intentionally introduce a pause between certain operations in a script file. For example, in a slide show for a product demonstration, there must be a time delay between different slides so that the audience have enough time to see each slide. This is accomplished by using the **DELAY** command, which introduces a delay before the next command is executed. The general format of the **DELAY** command is given next.

Command: **DELAY Time**

Where **Command** -----AutoCAD Command prompt
DELAY -----**DELAY** command
Time -----Time in milliseconds

The **DELAY** command is to be followed by the delay time in milliseconds. For example, a delay of 2,000 milliseconds means that AutoCAD will pause for approximately two seconds before executing the next command. It is approximately two seconds because computer processing speeds vary. The maximum time delay you can enter is 32,767 milliseconds (about 33 seconds). In Example 3, a two-second delay can be introduced by inserting a **DELAY** command line between line 7 and line 8, as in the following file listing:

```

ROTATE                                1
W                                    2
2.25,5.0                              3
6.25,9.0                              4
      (Blank line for Return.)        5
4.25,6.5                              6
45                                    7
DELAY 2000                          8
RSCRIPT                             9

```

The first seven lines of this file rotate the objects through a 45° angle. Before the **RSCRIPT** command on line 8 is executed, there is a delay of 2,000 milliseconds (about two seconds). The **RSCRIPT** command will repeat the script file that rotates the objects through another 45° angle. Thus, a slide show is created with a time delay of two seconds after every 45° increment.

RESUMING SCRIPT FILES

If you cancel a script file and then want to resume it, you can use the **RESUME** command.

Command: **RESUME**

The **RESUME** command can also be used if the script file has encountered an error that causes it to be suspended. The **RESUME** command will skip the command that caused the error and continue with the rest of the script file. If the error occurs when the command is in progress, use a leading apostrophe with the **RESUME** command (**'RESUME**) to invoke the **RESUME** command in the transparent mode.

Command: **'RESUME**

COMMAND LINE SWITCHES

The command line switches can be used as arguments to the *acad.exe* file that launches AutoCAD. You can also use the **Options** dialog box to set the environment or by adding a set of environment variables in the *autoexec.bat* file. The command line switches and environment variables override the values set in the **Options** dialog box for the current session only. These switches do not alter the system registry. The following is the list of the command line switches:

<u>Switch</u>	<u>Function</u>
/c	Controls where AutoCAD stores and searches for the hardware configuration file. The default file is <i>acad 2013.cfg</i>
/s	Specifies which directories to search for support files if they are not in the current directory
/b	Designates a script to run after AutoCAD starts
/t	Specifies a template to use when creating a new drawing
/nologo	Starts AutoCAD without first displaying the logo screen
/v	Designates a particular view of the drawing to be displayed on start-up of AutoCAD
/r	Reconfigures AutoCAD with the default device configuration settings
/p	Specifies the profile to use on start-up

RUNNING A SCRIPT FILE WHILE LOADING AutoCAD

The script files can also be run while loading AutoCAD, before it is actually started. The following is the format of the command for running a script file while loading AutoCAD.

"Drive\Program Files\Autodesk\AutoCAD 2013\acad.exe" [existing-drawing] [/t template] [/v view] /b Script-file

In the following example, AutoCAD will open the existing drawing (MYdwg1) and then run the script file (Setup) through the **Run** dialog box, as shown in Figure 2-4.

Example:

"C:\Program Files\Autodesk\AutoCAD 2013\acad.exe" MYdwg1 /b Setup

Where **AutoCAD 2013** -----AutoCAD 2013 subdirectory containing
-----AutoCAD system files

acad.exe -----ACAD command to start AutoCAD
MYDwg1 -----Existing drawing file name
Setup -----Name of the script file

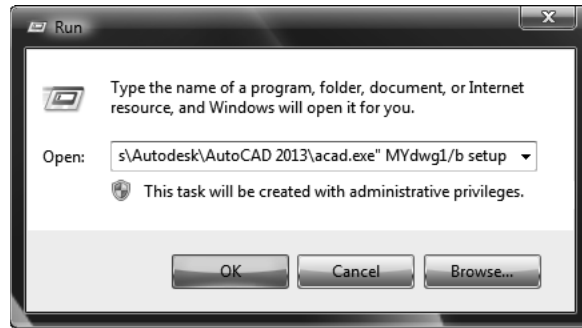


Figure 2-4 Invoking the script file while loading AutoCAD using the **Run** dialog box



Note

Make sure that the existing drawing file that you want to open is saved in the C drive of your system. Also, you must have the administrative privileges to save and open the drawing files from the C drive.

In the following example, AutoCAD will start a new drawing with the default name (Drawing), using the template file temp1, and then run the script file (Setup).

Example:

"C:\Program Files\Autodesk\AutoCAD 2013\acad.exe" /t temp1 /b Setup

Where **temp1** -----Existing template file name

Setup -----Name of the script file

or

"C:\ProgramFiles\Autodesk\AutoCAD 2013\acad.exe"/t temp1 "C:\MyFolder"/b Setup

Where C:\Program Files\AutoCAD 2013\acad.exe Path name for acad.exe

C:\MyFolder ---Path name for the Setup script file

In the following example, AutoCAD will start a new drawing with the default name (Drawing), and then run the script file (Setup).

Example:

"C:\Program Files\Autodesk\AutoCAD 2013\acad.exe" /b Setup

Where **Setup** -----Name of the script file

Here, it is assumed that the AutoCAD system files are loaded in the AutoCAD 2013 directory.



Note

To invoke a script file while loading AutoCAD, the drawing file or the template file specified in the command must exist in the search path. You cannot start a new drawing with a given name. You can also use any template drawing file that is found in the template directory to run a script file through the **Run** dialog box.



Tip

You should avoid abbreviations to prevent any confusion. For example, C can be used as a close option when you are drawing lines. It can also be used as a command alias for drawing a circle. If you use both of them in a script file, it might be confusing.

EXAMPLE 4 Running a Script File while Loading AutoCAD

Write a script file that can be invoked while loading AutoCAD and create a drawing with the following setup (filename *script4.scr*).

Grid	3.0	
Snap	0.5	
Limits	0,0	
	36.0,24.0	
Zoom	All	
Text height	0.25	
LTSCALE	3.0	
DIMSCALE	3.0	
Layers		
<u>Name</u>	<u>Color</u>	<u>Linetype</u>
OBJ	Red	Continuous
CEN	Yellow	Center
HID	Blue	Hidden
DIM	Green	Continuous

Step 1: Writing the script file

Write a script file and save the file under the name *script4.scr*. The following is the listing of the script file that performs the initial setup for a drawing:

```
GRID 3.0
SNAP 0.5
LIMITS 0,0 36.0,24.0 ZOOM ALL
TEXTSIZE 0.25
LTSCALE 3
DIMSCALE 3.0
LAYER NEW
OBJ,CEN,HID,DIM
L CENTER CEN
L HIDDEN HID
C RED OBJ
C YELLOW CEN
C BLUE HID
C GREEN DIM
```

(Blank line for ENTER.)

Step 2: Loading the script file through the Run dialog box

After you have written and saved the file, quit the text editor. To run the script file, *script4*, select **Start > Run** and then enter the following command line.

"C:\Program Files\Autodesk\AutoCAD 2013\acad.exe" /t EX4 /b script4

Where **acad.exe** -----ACAD to load AutoCAD
EX4 -----Template file name
SCRIPT4 -----Name of the script file

Here, it is assumed that the template file (EX4) and the script file (script4) is on C drive. When you enter this line, AutoCAD is loaded and the file *ex4.dwt* is opened. The script file, *script4*, is then automatically loaded and the commands defined in the file are executed.

In the following example, AutoCAD will start a new drawing with the default name (Drawing), and then run the script file (script4) (Figure 2-5).

Example:

"C:\Program Files\Autodesk\AutoCAD 2013\acad.exe" /b script4

Where **script4** -----Name of the script file

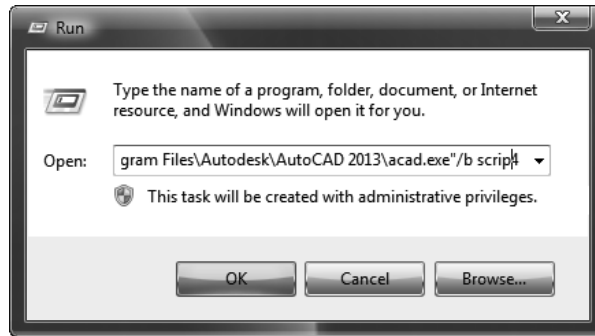


Figure 2-5 Invoking the script file while loading AutoCAD using the **Run** dialog box

Here, it is assumed that the AutoCAD system files are loaded in the AutoCAD 2013 directory.

EXAMPLE 5

Plotting a Drawing

Write a script file that will plot a 36" by 24" drawing to the maximum plot size on a 8.5" by 11" paper, using your system printer/plotter. Use the **Window** option to select the drawing to be plotted.

Step 1: Understanding commands and prompt entries

Before writing a script file to plot a drawing, find out the plotter specifications that must be entered in the script file to obtain the desired output. To determine the prompt entries and their sequence to set up the plotter specifications, enter the **-PLOT** command. Note the entries you make and their sequence (the entries for your printer or plotter will probably be different). If the entries of the printer or plotter are not specified by default, you can enter the name of the printer or plotter connected to your system in the command prompts. The following is a listing of the plotter specifications with the new entries:

Command: **-PLOT**

Detailed plot configuration? [Yes/No] <No>: **Y**

Enter a layout name or [?] <Model>: **Enter**

Enter an output device name or [?] <HP LaserJet 4000 Series PCL 6>: **Enter**

Enter paper size or [?] <Letter>: **Enter**

Enter paper units [Inches/Millimeters] <Inches>: **I**

Enter drawing orientation [Portrait/Landscape] <Landscape>: **L**

Plot upside down? [Yes/No] <No>: **N**

Enter plot area [Display/Extents/Limits/View/Window] <Display>: **W**

Enter lower left corner of window <0.000000,0.000000>: **0,0**

Enter upper right corner of window <0.000000,0.000000>: **36,24**

Enter plot scale (Plotted Inches=Drawing Units) or [Fit] <Fit>: **F**

Enter plot offset (x,y) or [Center] <0.00,0.00>: **0,0**

Plot with plot styles? [Yes/No] <Yes>: **Yes**

Enter plot style table name or [?] (enter . for none) <>: **.**

Plot with lineweights? [Yes/No] <Yes>: **Y**

Enter shade plot setting [As displayed/Legacy Wireframe/Legacy Hidden/Visual styles/Rendered] <As displayed>:
 Write the plot to a file [Yes/No] <N>: **N**
 Save changes to page setup [Yes/No]? <N>:
 Proceed with plot [Yes/No] <Y>: **Y**

Step 2: Writing the script file

Now you can write the script file by entering the responses of these prompts in the file. The following file is a listing of the script file that will plot a 36" by 24" drawing on 8.5" by 11" paper after making the necessary changes in the plot specifications. The comments on the right are not a part of the file.

```
-PLOT
Y
      (Blank line for ENTER, selects default layout.)
      (Blank line for ENTER, selects default printer.)
      (Blank line for ENTER, selects the default paper size.)

I
L
N
W
0,0
36,24
F
0,0
Y
.      (Enter . for none)
Y
      (Blank line for ENTER, plots as displayed.)

N
N
Y
```

Saving and running the script file for this example is the same as that described in the previous examples. You can use a blank line to accept the default value for a prompt. A blank line in the script file will cause a Return. However, you must not accept the default plot specifications because the file may have been altered by another user or by another script file. Therefore, always enter the actual values in the file so that when you run a script file, it does not take the default values.

EXAMPLE 6

Animating a Clock

Write a script file to animate a clock with continuous rotation of the second hand (longer needle) through 5° and the minutes hand (shorter needle) through 2° clockwise around the center of the clock, (Figure 2-6).

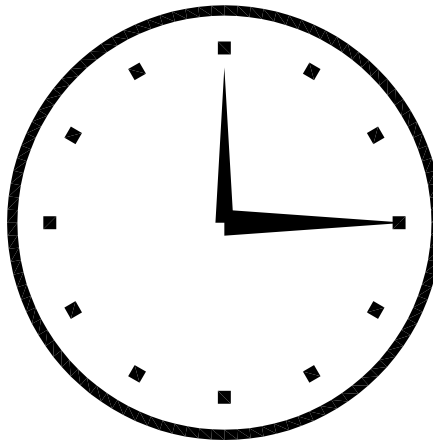


Figure 2-6 Drawing for Example 6

The specifications are given next.

Specifications for the rim made of donut.

Color of Donut	Blue
Inside diameter of Donut	8.0
Outside diameter of Donut	8.4
Center point of Donut	5,5

Specifications for the digit mark made of polyline.

Color of the digit mark	Green
Start point of Pline	5,8.5
Initial width of Pline	0.25
Final width of Pline	0.25
Height of Pline	0.25

Specifications for second hand (long needle) made of polyline.

Color of the second hand	Red
Start point of Pline	5,5
Initial width of Pline	0.5
Final width of Pline	0.0
Length of Pline	3.5
Rotation of the second hand	5 degree clockwise

Specifications for minute hand (shorter needle) made of polyline.

Color of the minute hand	Cyan
Start point of Pline	5,5
Initial width of Pline	0.35
Final width of Pline	0.0
Length of Pline	3.0
Rotation of the minute hand	2 degree clockwise

Step 1: Understanding the commands and prompt entries for creation of the clock

For this example, you can create two script files and then link them. The first script file will demonstrate the creation of the clock on the screen. The next script file will demonstrate the rotation of the needles of the clock.

First write a script file to create the clock as follows and save the file under the name *clock.scr*. The following is the listing of this file:

```

Command: -COLOR
Enter default object color [Truecolor/Colorbook] <BYLAYER>: Blue
Command: DONUT
Specify inside diameter of donut<0.5>: 8.0
Specify outside diameter of donut<0.5>: 8.4
Specify center of donut or <exit>: 5,5
Specify center of donut or <exit>: 
Command: -COLOR
Enter default object color [Truecolor/Colorbook] <BYLAYER>: Green
Command: PLINE
Specify start point: 5,8.5
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: Width
Specify starting width<0.00>: 0.25
Specify ending width<0.25>: 0.25
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @0.25<270
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: 
Command: -ARRAY
Select objects: Last
Select objects: 
Enter the type of array[Rectangular/Polar]<R>: Polar
Specify center point of array or [Base]: 5,5
Enter the number of items in the array: 12
Specify the angle to fill(+= ccw, -=cw)<360>: 360
Rotate arrayed objects ? [Yes/No]<Y>: Y
Command: -COLOR
Enter default object color [Truecolor/Colorbook] <3 (green)>: RED
Command: PLINE
Specify start point: 5,5
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: Width
Specify starting width<.25>: 0.5
Specify ending width<0.5>: 0
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @3.5<0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 
Command: -COLOR
Enter default object color [Truecolor/Colorbook] <4 (red)>: Cyan
Command: PLINE
Specify start point: 5,5
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: Width
Specify starting width<0.0000>: 0.35
Specify ending width<0.35>: 0
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @3<90
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 
Command: SCRIPT
ROTATE.SCR

```

Now you will write the script file by entering the responses to these prompts in the file *clock.scr*.

Next, you will write the script to rotate the clock hands and save the file with the name *ROTATE.scr*. Remember that while entering the commands in the script files, you do not need to add a hyphen (-) as a prefix to the command name to execute them from the command line. When a

command is entered using the script file, the dialog box is not displayed and it is executed using the command line. For example, in this script file, the **COLOR** and the **ARRAY** command will be executed using the command line. Listing of the script file is given next.

```
-Color
Blue
Donut
8.0
8.4
5,5
                                     (Blank line for ENTER.)
-Color
Green
Pline
5,8.5
W
0.25
0.25
@0.25<270
                                     (Blank line for ENTER.)
Array
L
                                     (Blank line for ENTER.)
PO
5,5
12
360
Y
-Color
Red
Pline
5,5
W
0.5
0
@3.5<0
                                     (Blank line for ENTER.)
-Color
Cyan
Pline
5,5
w
0.35
0
@3<90
                                     (Blank line for ENTER.)
Script
ROTATE.scr      (Name of the script file that will cause rotation)
                                     (Blank line for ENTER.)
```

Save this file as *clock.scr* in a directory that is specified in the AutoCAD support file search path. It is recommended that the *ROTATE.scr* file should also be saved in the same directory. Remember that if the files are not saved in the directory that is specified in the AutoCAD support file search path using the **Options** dialog box, the linked script file (*ROTATE.scr*) may not run.

Step 2: Understanding the commands and sequences for rotation of the needles

The last line in the above script file is *ROTATE.scr*. This is the name of the script file that will rotate the clock hands. Before writing the script file, enter the **ROTATE** command and respond to the command prompts that will cause the desired rotation. The following is the listing of the AutoCAD command sequences needed to rotate the objects:

```

Command: ROTATE
Select objects: L
Select objects: 
Specify base point: 5,5
Specify rotation angle or [Copy/Reference] <0>: -2
Command: ROTATE
Select objects: C
Specify first corner: 3,3
Specify other corner: 7,7
Select objects: Remove
Remove objects: L
Remove objects: 
Specify base point: 5,5
Specify rotation angle or [Copy/Reference]: -5

```

Now, you can write the script file by entering the responses to these prompts in the file *ROTATE.scr*. The following is the listing of the script file that will rotate the clock hands:

```

Rotate
L
                                     (Blank line for ENTER.)
5,5
-2
Rotate
c
3,3
7,7
R
L
                                     (Blank line for ENTER.)
5,5
-5
Rscript
                                     (Blank line for ENTER.)

```

Save the above script file as *ROTATE.scr*. Now, run the script file *clock.scr*. Since this file is linked with *ROTATE.scr*, it will automatically run *ROTATE.scr* after running *clock.scr*. Note that if the linked file is not saved in a directory specified in the AutoCAD support file search path, the last line of the *clock.scr* must include a fully-resolved path to *ROTATE.scr*, or AutoCAD would not be able to locate the file.

EXERCISE 1**Plotting a Drawing**

Write a script file that will plot a 288' by 192' drawing on a 36" x 24" sheet of paper. The drawing scale is $1/8" = 1'$. (The filename is *script9.scr*. In this exercise, assume that AutoCAD is configured for the HPGL plotter and the plotter description is HPGL-Plotter.)

WHAT IS A SLIDE SHOW?

AutoCAD provides a facility of using script files to combine the slides in a text file and display them in a predetermined sequence. In this way, you can generate a slide show for a slide presentation. You can also introduce a time delay in the display so that the viewer has enough time to view each slide.

A drawing or parts of a drawing can also be displayed using the AutoCAD display commands. For example, you can use **ZOOM**, **PAN**, or other commands to display the details you want to show. If the drawing is very complicated, it takes quite some time to display the desired information and it may not be possible to get the desired views in the right sequence. However, with slide shows you can arrange the slides in any order and present them in a definite sequence. In addition to saving time, this also helps to minimize the distraction that might be caused by constantly changing the drawing display. Also, some drawings are confidential in nature and you may not want to display some portions or views of them. You can send a slide show to a client without losing control of the drawings and the information that is contained in them.

WHAT ARE SLIDES?

A slide is the snapshot of a screen display; it is like taking a picture of a display with a camera. The slides do not contain any vector information like AutoCAD drawings, which means that the entities do not have any information associated with them. For example, the slides do not retain any information about the layers, colors, linetypes, start point, or endpoint of a line or viewpoint. Therefore, slides cannot be edited like drawings. If you want to make any changes in the slide, you need to edit the drawing and then make a new slide from the edited drawing.

CREATING SLIDES

In AutoCAD, slides are created using the **MSLIDE** command. If **FILEDIA** is set to 1, the **MSLIDE** command displays the **Create Slide File** dialog box (Figure 2-7) on the screen. You can enter the slide file name in this dialog box. If **FILEDIA** is set to 0, the command will prompt you to enter the slide file name.

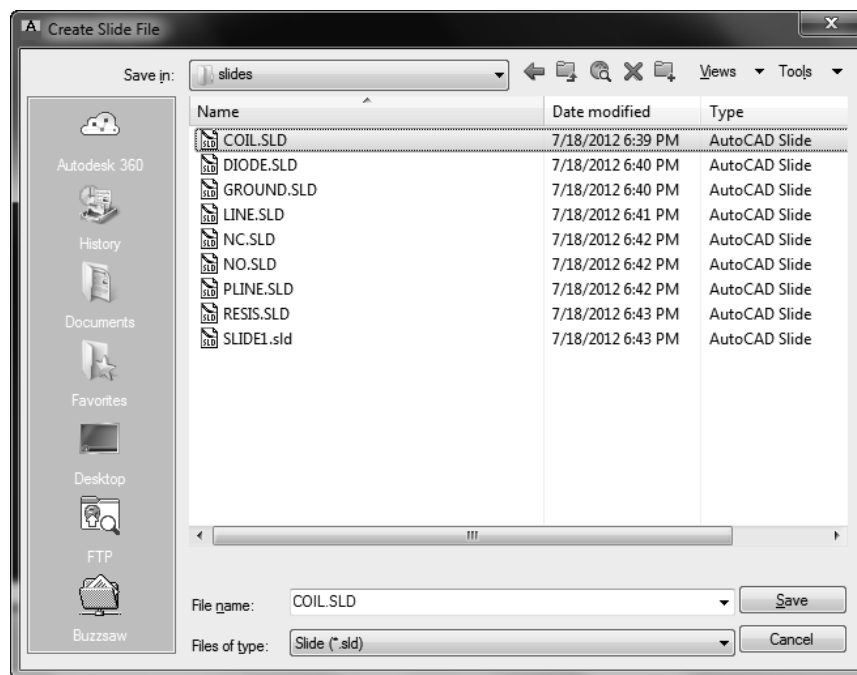


Figure 2-7 The **Create Slide File** dialog box

Command: **MSLIDE**

Enter name of slide file to create <Default>: *Slide file name.*

Example:

Command: **MSLIDE**

Slide File: <Drawing1> **SLIDE1**

Where **Drawing1** -----Default slide file name

SLIDE1 -----Slide file name

In this example, AutoCAD will save the slide file as *slide1.sld*.



Note

*In model space, you can use the **MSLIDE** command to make a slide of the existing display in the current viewport. If you are in the paper space viewport, you can make a slide of the display in the paper space that includes all floating viewports created in it.*

*When the viewports are not active, the **MSLIDE** command will make a slide of the current screen display.*

VIEWING SLIDES

To view a slide, use the **VSLIDE** command at the Command prompt; the **Select Slide File** dialog box will be displayed, as shown in the Figure 2-8. Choose the file that you want to view and then choose **OK**. The corresponding slide will be displayed on the screen. If **FILEDIA** is 0, the slide that you want to view can be directly entered at the Command prompt.

Command: **VSLIDE**

Enter name of slide file to view<Default>: *Name.*

Example:

Command: **VSLIDE**

Slide file <Drawing1>: **SLIDE1**

Where **Drawing1** -----Default slide file name

SLIDE1 -----Name of slide file



Note

*After viewing a slide, you can use the **REDRAW** command, roll the wheel, or pan with a mouse to remove the slide display and return to the existing drawing on the screen.*

*Any command that is automatically followed by a **REDRAW** command will also display the existing drawing. For example, AutoCAD **GRID**, **ZOOM ALL**, and **REGEN** commands will automatically return to the existing drawing on the screen.*

You can view the slides on a high-resolution or a low-resolution monitor. Depending on the resolution of the monitor, AutoCAD automatically adjusts the image. However, if you are using a high-resolution monitor, it is better to make the slides using the same monitor to take full advantage of that monitor.

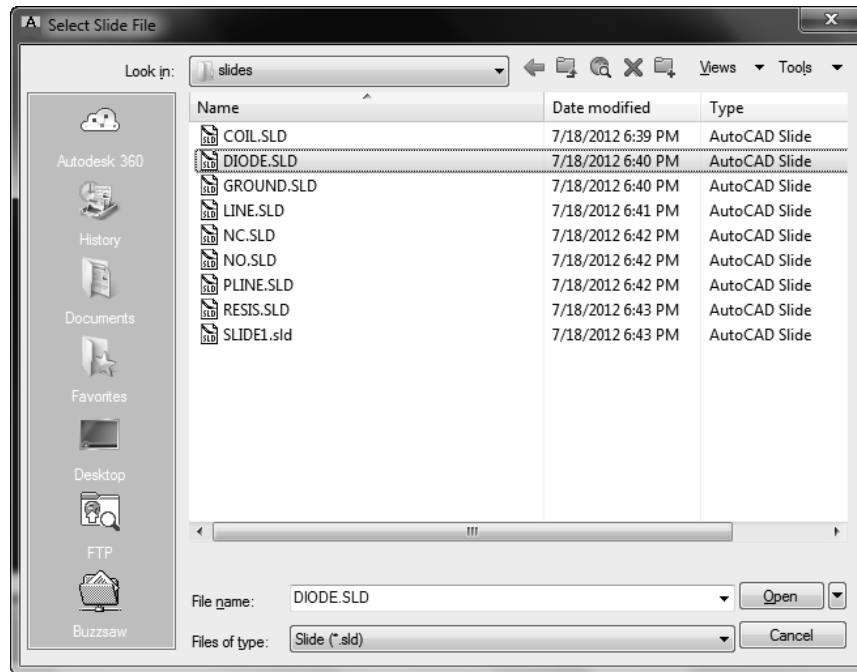


Figure 2-8 The Select Slide File dialog box

EXAMPLE 7

Slide Show

Write a script file that will create a slide show of the following slide files, with a time delay of 15 seconds after every slide (Figure 2-9).

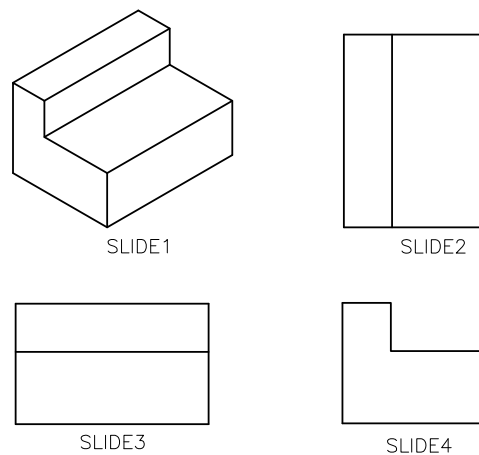


Figure 2-9 Slides for slide show

Step 1: Creating the slides

The first step in a slide show is to create the slides using the **MSLIDE** command. The **MSLIDE** command will invoke the **Create Slide File** dialog box. Enter the name of the slide as **SLIDE1** and choose the **Save** button to exit the dialog box. Similarly, other slides can be created and saved. Figure 2-9 shows the drawings that have been saved as slide files **SLIDE1**, **SLIDE2**, **SLIDE3**, and **SLIDE4**. The slides must be saved to a directory in AutoCAD's search path, otherwise the script would not find the slides.

Step 2: Writing the script file

The second step is to find out the sequence, in which you want these slides to be displayed, with the necessary time delay, if any, between slides. Then you can use any text editor or the AutoCAD **EDIT** command (provided the *acad.pgp* file is present and **EDIT** is defined in the file) to write the script file with the extension *.scr*.

The following is the listing of the script file that will create a slide show of the slides in Figure 2-9. The name of the script file is **SLDSHOW1.scr**.

```
VSLIDE SLIDE1
DELAY 15000
VSLIDE SLIDE2
DELAY 15000
VSLIDE SLIDE3
DELAY 15000
VSLIDE SLIDE4
DELAY 15000
```

Step 3: Running the script file

To run this script file, choose the **Run Script** tool from **Manage > Applications** or enter **SCRIPT** at the Command prompt to invoke the **Select Script File** dialog box. Next, choose **SLDSHOW1** and then choose the **Open** button from the **Select Script File** dialog box. You can see the changes taking place on the screen.

PRELOADING SLIDES

In the script file of Example 7, **VSLIDE SLIDE1** in line 1 loads the slide file, **SLIDE1**, and displays it on the screen. After a pause of 15,000 milliseconds, it starts loading the second slide file, **SLIDE2**. Depending on the computer and the disk access time, you will notice that it takes some time to load the second slide file. The same is true for the other slides. To avoid the delay in loading the slide files, AutoCAD has provided a facility to preload a slide while viewing the previous slide. This is accomplished by placing an asterisk (*) in front of the slide file name.

```
VSLIDE SLIDE1           (View slide, SLIDE1.)
VSLIDE *SLIDE2          (Preload slide, SLIDE2.)
DELAY 15000             (Delay of 15 seconds.)
VSLIDE                  (Display slide, SLIDE2.)
VSLIDE *SLIDE3          (Preload slide, SLIDE3.)
DELAY 15000             (Delay of 15 seconds.)
VSLIDE                  (Display slide, SLIDE3.)
VSLIDE *SLIDE4
DELAY 15000
VSLIDE
DELAY 15000
RSCRIPT                (Restart the script file.)
```

EXAMPLE 8**Preloading Slides**

Write a script file to generate a continuous slide show of the following slide files, with a time delay of two seconds between slides **SLD1**, **SLD2**, and **SLD3**.

The slide files are located in different subdirectories, as shown in Figure 2-10.

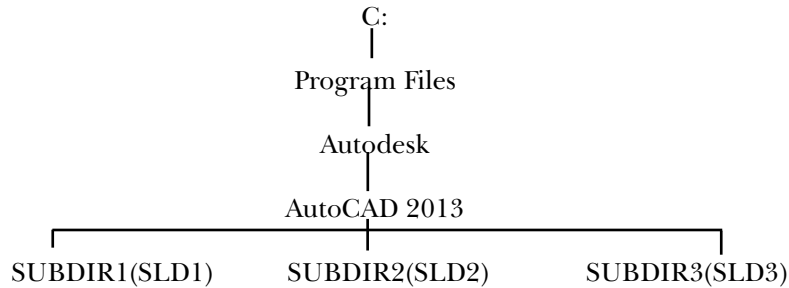


Figure 2-10 Subdirectories of the C drive

Where

- C:** -----Root directory.
- Program Files** -----Root directory.
- Autodesk** -----Root directory.
- AutoCAD 2013** ----- Subdirectory where the AutoCAD files are loaded.
- SUBDIR1**----- Drawing subdirectory.
- SUBDIR2** ----- Drawing subdirectory.
- SUBDIR3** ----- Drawing subdirectory.
- SLD1** -----Slide file in SUBDIR1 subdirectory.
- SLD2** -----Slide file in SUBDIR2 subdirectory.
- SLD3** -----Slide file in SUBDIR3 subdirectory.

The following is the listing of the script files that will generate a slide show for the slides in Example 8:

```

VSLIDE "C:/Program Files/Autodesk/AutoCAD 2013/SUBDIR1/SLD1.SLD" 1
DELAY 2000 2
VSLIDE "C:/Program Files/Autodesk/AutoCAD 2013/SUBDIR2/SLD2.SLD" 3
DELAY 2000 4
VSLIDE "C:/Program Files/Autodesk/AutoCAD 2013/SUBDIR3/SLD3.SLD" 5
DELAY 2000 6
RSCRIPT 7

```

Line 1

VSLIDE "C:/Program Files/Autodesk/AutoCAD 2013/SUBDIR1/SLD1.SLD"

In this line, the AutoCAD command **VSLIDE** loads the slide file **SLD1**. The path name is mentioned along with the command **VSLIDE**. If the path name directory contains spaces, then the path name must be enclosed in quotes.

Line 2

DELAY 2000

This line uses the AutoCAD **DELAY** command to create a pause of approximately two seconds before the next slide is loaded.

Line 3

VSLIDE "C:/Program Files/Autodesk/AutoCAD 2013/SUBDIR2/SLD2.SLD"

In this line, the AutoCAD command **VSLIDE** loads the slide file **SLD2**, located in the subdirectory **SUBDIR2**. If the slide file is located in a different subdirectory, you need to define the path with the slide file.

Line 5

VSLIDE "C:/Program Files/Autodesk/AutoCAD 2013/SUBDIR3/SLD3.SLD"

In this line, the **VSLIDE** command loads the slide file **SLD3**, located in the subdirectory **SUBDIR3**.

Line 7

RSCRIPT

In this line, the **RSCRIPT** command executes the script file again and displays the slides on the screen. This process continues indefinitely until the script file is canceled by pressing the ESC key or the BACKSPACE key.

SLIDE LIBRARIES

AutoCAD provides a utility, SLIDELIB, which constructs a library of the slide files. The format of the **SLIDELIB** utility command is as follows:

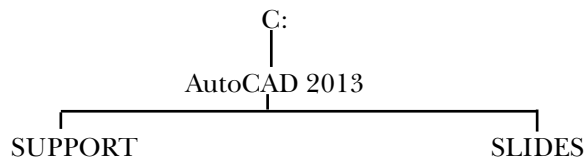
SLIDELIB (Library filename) <(Slide list filename)

Example:

SLIDELIB SLDLIB <SLDLIST

Where **SLIDELIB** -----AutoCAD's SLIDELIB utility
SLDLIB -----Slide library filename
SLDLIST -----List of slide filenames

The **SLIDELIB** utility is supplied with the AutoCAD software package. You can find this utility (SLIDELIB.EXE) in the *C:\Program Files\Autodesk\AutoCAD 2013* subdirectory. The slide file list is a list of the slide file names that you want in a slide show. It is a text file that can be written by using any text editor like Notepad. The slide files in the slide file list should not contain any file extension (.sld). However, if you want to add a file extension, it should be .sld.



The slide file list can also be created by using the following command, if you have a DOS version 5.0 or above. You can use the make directory (md) or change directory (cd) commands in the DOS mode while making or changing directories.

C:\AutoCAD 2013\SLIDES>DIR *.SLD/B>SLDLIST

In this example, assume that the name of the slide file list is **SLDLIST** and all slide files are in the SLIDES subdirectory. To use this command to create a slide file list, all slide files must be in the same directory.

When you use the SLIDELIB utility, it reads the slide file names from the file that is specified in the slide list and the file is then written to the file specified by the library. In Example 9, the SLIDELIB utility reads the slide filenames from the file SLDLIST and writes them to the library file SLDSHOW1:

C:\>SLIDELIB SLDSHOW1 <SLDLIST



Note

You cannot edit a slide library file. If you want to change anything, you have to create a new list of the slide files and then use the SLIDELIB utility to create a new slide library.

If you edit a slide while it is being displayed on the screen, the slide will not be edited. Instead, the current drawing that is behind the slide gets edited. Therefore, do not use any editing

commands while you are viewing a slide. Use the **VSLIDE** and **DELAY** commands only while viewing a slide.

The path name is not saved in the slide library. This is the reason if you have more than one slide with the same name, even though they are in different subdirectories, only one slide will be saved in the slide library.

EXAMPLE 9

Slide Library

Use AutoCAD's SLIDELIB utility to generate a continuous slide show of the following slide files with a time delay of 2.5 seconds between the slides. (The filenames are: SLDLIST for slide list file, SLDSHOW1 for slide library, SHOW1 for script file.)

front, top, rside, 3dview, isoview

The slide files are located in different subdirectories, as shown in Figure 2-11.

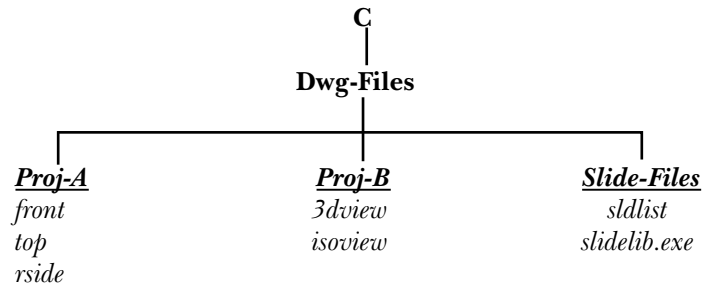


Figure 2-11 Subdirectories to be created in C drive

Where C ----- (C drive.)
 Dwg-Files ---- (Subdirectory where drawing files are located)
 Proj-A ----- (Subdirectory where the slide files are located)
 Proj-B ----- (Subdirectory where the slide files are located)
 Slide-Files --- (Directory where Slidelib.exe and sldlist are copied)

Step 1: Creating a list of the slide file names

The first step is to create a list of the slide file names with the drive and the directory information. Assume that you are in the **Slide-Files** subdirectory. You can use a text editor like Notepad to create a list of the slide files that you want to include in the slide show. After creating the list, save the text file and then remove its file extension. The following file is a listing of the file SLDLIST for Example 9:

```

c:\Dwg-Files\Proj-A\front
c:\Dwg-Files\Proj-A\top
c:\Dwg-Files\Proj-A\rside
c:\Dwg-Files\Proj-B\3dview
c:\Dwg-Files\Proj-B\isoview
  
```

Step 2: Copying the SLIDELIB utility

The **SLIDELIB** utility is supplied with the AutoCAD software package. You can find this utility (SLIDELIB.EXE) in the C:\Program Files\Autodesk\AutoCAD 2013 subdirectory. Copy it to the **Slide-Files** folder.


**Note**

All related directories should be added in the AutoCAD's support files search path.

Step 3: Running the SLIDELIB utility

The third step is to use AutoCAD's SLIDELIB utility program to create the slide library. The name of the slide library is assumed to be **sldshow1** for this example. Before creating the slide library, copy the slide list file (SLDLIST) and the SLIDELIB utility from the support directory to the Slide-Files directory. This ensures that all the required files are in one directory. Enter **SHELL** command at AutoCAD Command prompt and then press the ENTER key at the OS Command prompt. The **AutoCAD Shell Active** Command window will be displayed on the screen, see Figure 2-12. You can also use Windows DOS box instead of **AutoCAD Shell Active** Command window by choosing **All Programs > Accessories > Command Prompt**. Make sure that the drawing file is saved before using the **SHELL** command.

Command: **SHELL**

OS Command: 

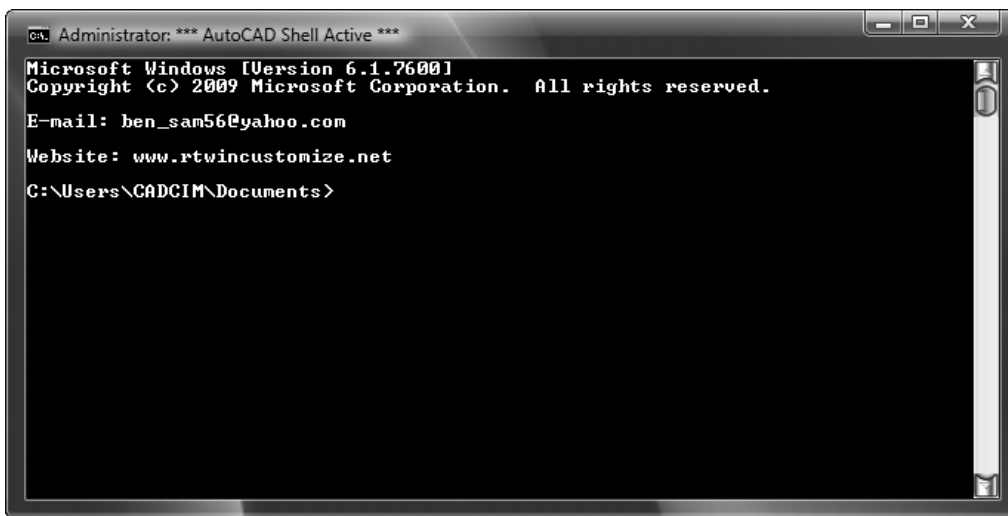


Figure 2-12 The AutoCAD Shell Active Command window

Now, enter the following command in the Command window to run the SLIDELIB utility and create the slide library. Here it is assumed that **Slide-Files** directory is the current directory. Use the **cd** command in the Command window to change the directory.

C:\Dwg-Files\Slide-Files>SLIDELIB sldshow1 <sldlist

Where **SLIDELIB** -----AutoCAD's SLIDELIB utility
sldshow1 -----Slide library
sldlist -----Slide file list

Step 4: Writing the script file

Now, you can write a script file for the slide show that will use the slides in the slide library. The name of the script file for this example is assumed to be **SHOW1**.

```
VSLIDE sldshow1(front)
DELAY 2500
VSLIDE sldshow1(top)
DELAY 2500
```

```
VSLIDE sldshow1(rside)
DELAY 2500
VSLIDE sldshow1(3dview)
DELAY 2500
VSLIDE sldshow1(isoview)
DELAY 2500
RSCRIPT
```

Step 5: Running the script file

Invoke the **Select Script File** dialog box, as shown in Figure 2-13, by choosing the **Run Script** tool from **Manage > Applications** or enter the **SCRIPT** command at the Command prompt. You can also enter the **SCRIPT** command at the Command prompt after setting the system variable FILEDIA to 0.

Command: **SCRIPT**
Enter script file name<default>: **SHOW1**

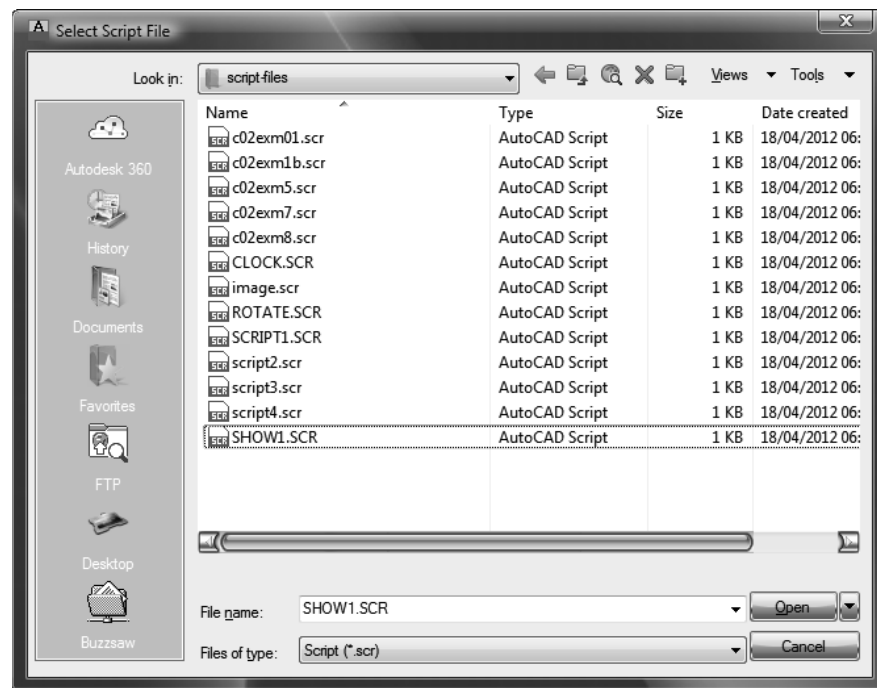


Figure 2-13 Selecting the script file from the **Select Script File** dialog box

Self-Evaluation Test

Answer the following questions and then compare them to those given at the end of this chapter:

SCRIPT FILES

1. AutoCAD has provided a facility of _____ that allows you to combine different AutoCAD commands and execute them in a predetermined sequence.
2. Before writing a script file, you need to know the AutoCAD _____ and the _____ required in response to the command prompts.

3. The AutoCAD _____ command is used to run a script file.
4. In a script file, the _____ is used to terminate a command or a prompt entry.
5. The **DELAY** command is to be followed by _____ in milliseconds.

SLIDE SHOW

6. Slides do not contain any _____ information, which means that the entities do not have any information associated with them.
7. Slides can be created using the AutoCAD _____ command.
8. To view a slide, use the AutoCAD _____ command.
9. AutoCAD provides a utility that constructs a library of the slide files. This is done with AutoCAD's utility program called _____.
10. Slides can be edited like a drawing (T/F).

Review Questions

Answer the following questions:

SCRIPT FILES

1. The _____ files can be used to generate a slide show, do the initial drawing setup, or plot a drawing to a predefined specification.
2. In a script file, you can _____ several statements in one line.
3. When you run a script file, the default script file name is the same as the _____ name.
4. Type the name of the script file without the _____ file, when you run a script file.
5. One of the limitations of script files is that all the information has to be contained _____ the file.
6. The AutoCAD _____ command allows you to re-execute a script file indefinitely until the command is canceled.
7. You cannot provide a _____ statement in a script file to terminate the file when a particular condition is satisfied.
8. The AutoCAD _____ command schedules a delay before the next command is executed.
9. If the script file is canceled and you want to resume the script file, you need to use the _____ command.

SLIDE SHOW

10. AutoCAD provides a facility through _____ files to combine the slides in a text file and display them in a predetermined sequence.
11. A _____ can also be introduced in the script file so that the viewer has enough time to view a slide.

12. Slides are the _____ of a screen display.
13. In model space, you can use the **MSLIDE** command to make a slide of the _____ display in the _____ viewport.
14. If you are in paper space viewport, you can make a slide of the display in paper space that _____ all floating viewports created in it.
15. If you want to make any changes in the slide, you need to _____ the drawing, then make a new slide from the edited drawing.
16. If the slide is in the slide library and you want to view it, the slide library name has to be _____ with the slide filename.
17. You cannot _____ a slide library file. If you want to change anything, you have to create a new list of the slide files and then use the _____ utility to create a new slide library.
18. The path name _____ be saved in the slide library. Therefore, if you have more than one slide with the same name, although with different subdirectories, only one slide will be saved in the slide library.

EXERCISE 2**Script Files**

Write a script file that will perform the following initial setup for a drawing.

Grid	2.0
Snap	0.5
Limits	0,0
	18.0,12.0
Zoom	All
Text height	0.25
LTSCALE	2.0
Overall dimension scale factor is 2	
Aligned dimension text with the dimension line	
Dimension text above the dimension line	
Size of the center mark is 0.75	

EXERCISE 3**Script Files**

Write a script file that will set up the following layers with the given colors and linetypes.

Layers		
<u>Name</u>	<u>Color</u>	<u>Linetype</u>
Contour	Red	Continuous
SPipes	Yellow	Center
WPipes	Blue	Hidden
Power	Green	Continuous
Manholes	Magenta	Continuous
Trees	Cyan	Continuous

EXERCISE 4**Script Files**

Write a script file that will perform the following initial setup for a new drawing.

Limits 0,0 24,18
 Grid 1.0
 Snap 0.25
 Ortho On
 Snap On
 Zoom All
 Pline width 0.02
 PLine 0,0 24,0 24,18 0,18 0,0
 Ltscale 1.5
 Units Decimal units
 Precision 0.00
 Decimal degrees
 Precision 0
 Base angle East (0.00)
 Angle measured counterclockwise

Layers

<u>Name</u>	<u>Color</u>	<u>Linetype</u>
Obj	Red	Continuous
Cen	Yellow	Center
Hid	Blue	Hidden
Dim	Green	Continuous

EXERCISE 5**Script Files**

Write a script file that will plot a given drawing according to the following specifications. (Use the plotter for which your system is configured and adjust the values accordingly.)

Plot, using the Window option
 Window size (0,0 24,18)
 Do not write the plot to file
 Size in inch units
 Plot origin (0.0,0.0)
 Maximum plot size (8.5,11 or the smallest size available on your printer/plotter)
 90° plot rotation
 No removal of hidden lines
 Plotting scale (Fit)

EXERCISE 6**Script Files**

Write a script file that will continuously rotate a line in 10° increments around its midpoint (Figure 2-14). The time delay between increments is one second.

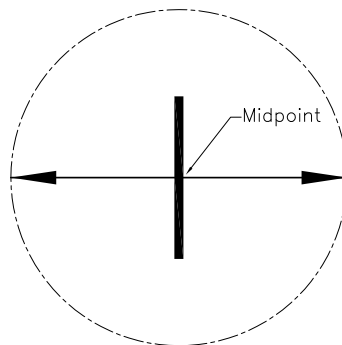


Figure 2-14 Drawing for Exercise 6

EXERCISE 7**Script Files**

Write a script file that will continuously rotate the arrangement shown in Figure 2-15 as per the following instructions:

One set of two circles and one line should rotate clockwise, while the other set of two circles and the other line should rotate counterclockwise. Assume the rotation to be 5° around the intersection of the lines for both sets of arrangements.

Specifications are given below:

Start point of the horizontal line	2,4
End point of the horizontal line	8,4
Center point of circle at the start point of horizontal line	2,4
Diameter of the circle	1.0
Center point of circle at the end point of horizontal line	8,4
Diameter of circle	1.0
Start point of the vertical line	5,1
End point of the vertical line	5,7
Center point of circle at the start point of the vertical line	5,1
Diameter of the circle	1.0
Center point of circle at the end point of the vertical line	5,7
Diameter of the circle	1.0

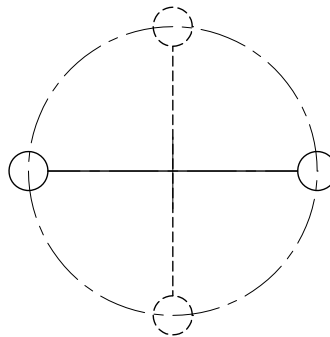


Figure 2-15 Drawing for Exercise 7

Hint: Select one set of two circles and one line and then create one group. Similarly, select another set of two circles and one line and then create another group. Now, rotate one group clockwise and another group counterclockwise.

EXERCISE 8**Slide Library**

List the slides used in Exercise 8 in a file SLDLIST2 and create a slide library file SLDLIB2. Then write a script file SHOW2 using the slide library with a time delay of 5 seconds after every slide.

Answers to Self-Evaluation Test

1. SCRIPT files, 2. Commands, options, 3. SCRIPT, 4. blank space, 5. time, 6. vector, 7. MSLIDE, 8. VSLIDE, 9. SLIDELIB, 10. F