Using Command Sessions

At the *OS/2 System* folder, open the **COMMAND PROMPTS** object.

These objects represent the various sessions that can be opened under OS/2.

OS/2 Sessions

Double-click on the **OS/2 FULL SCREEN** object. You will get a full screen OS/2 command line session with the OS/2 prompt in square brackets: **[C:\]**.

Most DOS commands have comparable OS/2 commands. Do a DIR. Copy a file. Make a directory. You'll see it functions exactly as you would expect. Press the UP cursor. Note that a buffer holds the last few commands. The size of this buffer can be changed in the CONFIG.SYS file.

A copy of OS/2 commands and their uses is attached. Review it for commands that are unique to OS/2 or operate differently than their DOS counterparts.

Because you formatted the hard drive as HPFS, you are able to make files with long file names. Test this as follows:

- Make a new directory off the root using the following command: MD "TEST DIRECTORY". The quotes are necessary to show OS/2 how to parse the line.

- Change directory to the "TEST DIRECTORY".

- Use COPY CON to build a file named "TEST FILE TO SEE HOW LONG FILE NAMES WORK"

- Fill the file with text then use ^Z to close it.

- Do a directory. You will see the long name.

OS/2 also has several new commands. You can get help on any command by typing HELP then the command. For example, one of the commands available in OS/2 is EAUTIL, which handles Extended Attributes.

Type HELP EAUTIL. You will be returned to the Desktop then the Command
Reference will open and turn to the correct page.
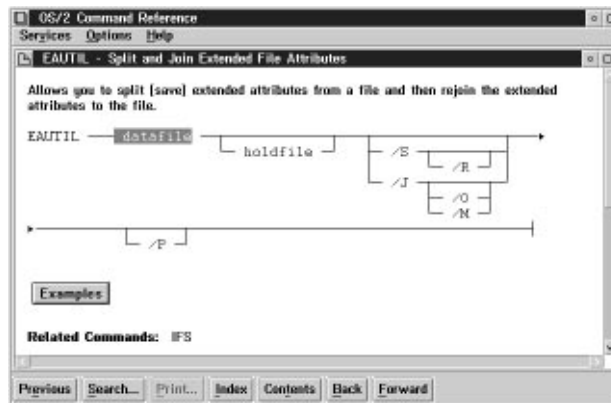
Double-click on *Examples* to see how the command is used. Close the window when
you're finished. Note that you stay at the Desktop. Press *Ctrl-Esc* to bring up the
WINDOW LIST then select the *OS/2 Full Screen* session.

Type EXIT and press *Enter*. This closes the session and returns you to the desktop.

In the **COMMAND PROMPTS** folder, open the **OS/2 WINDOW** object. An OS/2 Window
appears.

Click the right mouse button once on the upper left corner of the **OS/2 WINDOW** to
bring up the pull-down menu for the object.
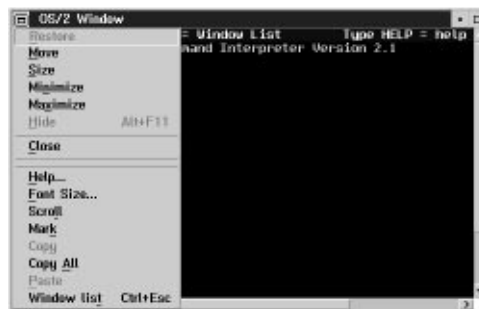
Select *Font Size*.

Take a look at the various font sizes available. Select one and click on *Save*.

Minimize the OS/2 session. At the **COMMAND PROMPT** folder, notice that the **OS/2 WINDOW** objects has hashmarks. This indicates it is open in the background. Double-click on the **OS/2 WINDOW** object. You will return to the session you just left. Minimize this window.

Open the **OS/2 SYSTEM** folder and then the **SYSTEM** object to get the *System-Settings* notebook. Click on the *Window* tab. Click on the *Create new window* radio button.

Minimize the notebook then go to the **COMMAND PROMPTS** folder and double-click on the **OS/2 WINDOW** object. Another OS/2 window session will launch. Verify this by pressing Ctrl-Esc. Note that there are two sessions on the Window List.

Use the *System-Settings* notebook to go back to *Display Existing Window* then close the window.

There are two ways to close an OS/2 session. In one OS/2 window, type EXIT and press Enter. The window will close.

In the second OS/2 window, double-click on the upper-left corner. You will be prompted to make sure you don't have anything running. Click on YES to close the window.

DOS Sessions

At the **COMMAND OBJECTS** folder, open a **DOS FULL SCREEN WINDOW** object. You will get a full screen DOS session.

Press Alt-Home. The session goes into a window. The same *Font* selections are available to this session as for the OS/2 session.

NOTE: The Alt-Home option is not available for OS/2 sessions. The full-screen and window sessions use different code.

Do a directory of the root. Note that you will not see the "TEST DIRECTORY." A DOS session can access a HPFS drive but it will not see any long file or directory names.

Exit the DOS session. At the **COMMAND OBJECTS** folder, open the Settings Notebook for the **DOS WINDOW** object. Select the *Sessions* tab then click on the *DOS Settings...* button. These settings allow a DOS session to emulate a real DOS machine, including how DOS handles memory, video access, and other hardware issues. Review the handout for what these settings do. They should require changing unless a particular application needs special memory or video/hardware handling.

As good as these emulations are, DOS under OS/2 isn't quite pure DOS. The emulator may or may not support a particular program. In case it doesn't, there is a way to boot up a pure DOS session.

- Insert a bootable DOS disk in drive A.

- Doule-click on the **DOS FROM DRIVE A** object. Note that the system accesses the A drive then opens a full-screen DOS session and boots the disk into that window. This is the much-heralded Virtual DOS Machine (VDM). At this point, though, it's not quite ready for prime-time. Go to drive C and do a directory. You will get an "Invalid Media type..." error. This is because the DOS session can't see a HPFS drive.

- Type EXIT and press Enter. Note that this does not close the window. You are not in a DOS session. In effect, you are at a stand-alone machine. Double-click in the upper left corner to close the window.

- Open an OS/2 window. Change directory to the OS2\MDOS directory. MDOS is where OS/2 keeps all the DOS emulator files. Copy the file named FSFILTER.SYS to the A drive.

- Change to the A drive. Use COPY CON to build a one-line CONFIG.SYS: DEVICE=FSFILTER.SYS

- Go back to the **COMMAND PROMPTS** folder and open the **DOS FROM DRIVE A:** object. You will boot once again from the A drive. Once you have the session, go to the C drive and do a directory. This time it will work. Note that you still can't see the long file names.

- Close the DOS window.

You don't need a disk in Drive A to use a VDM:

- Open an OS/2 window. Change directory to the OS2\MDOS directory.

- Issue the command: VMDISK A: TEST_VDM. The system will access the A drive and build an image file in the MDOS directory. This is similar to what happens when making a boot image on a remote boot server.

- When the file is completely built, close the OS/2 window and open the **COMMAND PROMPTS** object.

- Press and hold the Ctrl key. Press and hold the right mouse button on the **DOS FROM DRIVE A:** object and drag it to the Desktop. Release the mouse. A copy of the object is now on the Desktop.

- Press and hold the Alt key then click the left mouse button on the title of the **DOS FROM DRIVE A:** object. Note that there is now an editing cursor on the title. Erase the old title and name the object **TEST VDM.** Note that this is not the actual name of the object, just a title, so you can have spaces and special characters.

- Click the right mouse button on the newly named object and open the *Settings Notebook.*

- Click on the *Sessions* tab.

- Click on the *DOS settings...* button. This will bring up the DOS settings for this object.
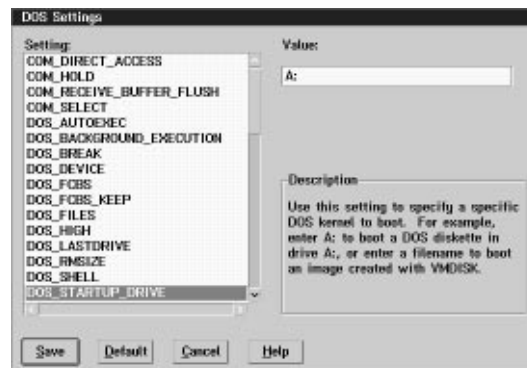
- Select the *DOS_STARTUP_DRIVE* item. In the *Value:* field, enter the path and name of the image file you made using VMDISK: C:\OS2\MDOS\TEST_VDM.

- Close the Settings Notebook.

- Double-click on the **TEST VDM** object. The VDM boots just as it did from the floppy, only faster.

- Close the window.

WIN-OS/2 Sessions

Go back to the **COMMAND PROMPTS** window. Open the **WIN-OS/2 FULL SCREEN** object. Note that a copy of COMMAND.COM loads first. This is because Windows is actually a DOS program.

You will be presented with a **PROGRAM MANAGER** screen exactly as you would be in regular Windows. Note the **DESKTOP** object in the lower corner of the desktop. Double click on it. This will return you to the OS/2 Desktop.

Note the **WIN-OS/2 FULL SCREEN** object in the lower corner of the Desktop. Double-click on this. You will return to the Windows session.

Launch the File Manager. Note that you have full access to the drives directories and drives. Also note that the long file names are not displayed.

Close Windows. You will return to the OS/2 Desktop.

Open the **DRIVE C** object. Click on the + sign at the **OS2** folder. Do the same on the **MDOS** folder. Open the **WINOS2** folder.

Find the **PBRUSH.EXE** object. Drag a shadow of this object to the Desktop. Close all open windows.

Double-click on the **PBRUSH.EXE** object. The system will bring up the Windows code in the background then launch *Paintbrush.* This is a so-called *seamless* session. Note that the mouse changes character when you pass back and forth from the application to the Desktop.

It took a while for *Paintbrush* to load. The second and subsequent Windows program will load faster because the code is already in memory.

Open the **WINOS2** object again and double-click on the **WRITE.EXE** object. See how much more quickly it loads?

Keep *Paintbrush* and *Write* open on the Desktop at once. Draw a rectangle in the *Paintbrush* window then use the scissors tool to cut out a piece of it. Use EDIT\CUT to put the piece in the clipboard.

Click on the *Write* window and use EDIT\PASTE to put the clipboard contents into the open file. Your screen should look like this:
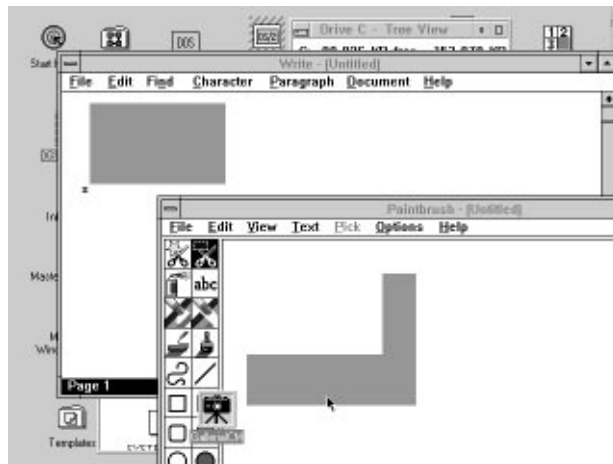

Now open the **OS/2 SYSTEM** folder. Open the **PRODUCTIVITY** folder. Open the **CLIPBOARD VIEWER** object. The piece you cut out will be in the window. This

demonstrates how the OS/2 clipboard can share data with the Windows clipboard. This can be turned off using the **WIN-OS2 SETTINGS** object in the **COMMAND PROMPTS** folder.

Associations

The default association for every object is the OS/2 System Editor, E.EXE. Test this as follows:

- Open the **DRIVE C** object then open the root directory at the top of the tree. Find the CONFIG.SYS file. Double-click on it. Note that the editor loads and the file is set up and ready for editing. Close the window.

- Open the **OS2** folder. Double-click on the **VDISK.SYS** object. Note that the system editor tries to load but you get this error window instead:
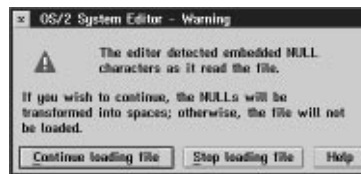

- Click on the *Stop loading file* button. The editor finishes loading with no file. Close the editor window then close all open windows.

Associations can be built for the various commands and programs. For example, you might want to automatically unzip a ZIP file simply by clicking on the file object. You do that as follows:

- Open the **DRIVE C** object and make a new folder under the root. Call the folder ZIP. Open the folder onto the Desktop.

- Put the disk labeled ZIP into the A drive. Open the **DRIVE A** object. Use drag-and-drop to copy the **ZIP.EXE** object into the **ZIP** folder.

- Double-click on the **ZIP** object. It is a self-extracting executable. Note that a DOS session spawns off to actually run the program.

- Once the files have finished expanding and the DOS session has closed, refresh the window so that the objects appear.

- Find the **PKUNZIP.EXE** object. Click the right mouse button on this object and open the *Settings Notebook.*
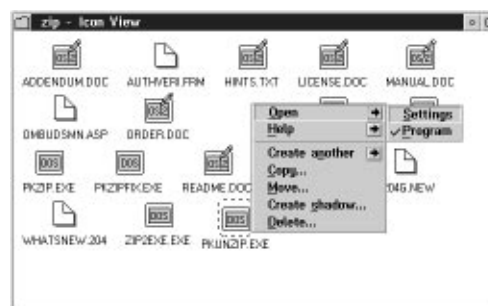
- Click on the *Association* tab.
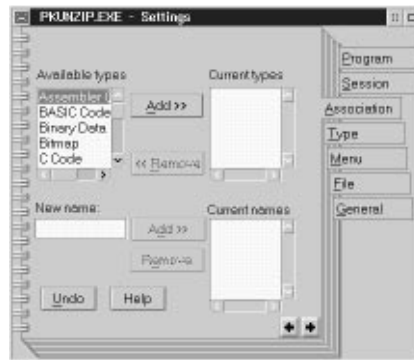
- Click the cursor in the *New name* field. Type *.ZIP into the field. Click the *Add* button. Note that the file extension is added to the *Current names* field.

- Close the settings notebook. Find the **PKWOW.ZIP** object in the **ZIP** folder. Double-click on this object. Note that it loads a copy of COMMAND then brings up a copy of PKUNZIP and unzips the file then closes.

- Refresh the window. The unzipped file **HOORAY.TXT** will now be in the folder. Double-click on it to open it.

This is the end of this section.