Using Puff with Windows 95

9-25-98 Notes on Hardware Incompatibilities from N. Ishitobi.

Display Problems:

Addendum: 9-25-98. Some S3 series devices may have problem. The fnit8x14.com file for MGA2064W can improve this problem.

6-26-98

1. S3 series display devices. The problem does not happen in most S3 series display devices.
2. Cirrus Logic display devices. The problem can be corrected with a patch program in display devices on the Cirrus Logic website at: http://www.cirrus.com/drivers/graphicdrv/util/
   The patch program is called “TSRFONT.COM”. The reason for the problem is the CL-GD5429 and CL-GD543X chipsets do not support the 8x14 (EGA) font is used by some older DOS software applications, producing garbage text characters when used with these chips. To use these applications, execute this file just before starting the DOS program or add it to your autoexec.bat file.
3. Matrox display devices
   For the MGA2064W display device, use the patch program found at: http://www.matrox.com/mga/web/whatnew(latdriv.htm
   Download the new unified BIOS file, “fnit8x14.com” from this site and unzip it.

If you have found the download site for a patch program for your video card, please let me know at email: puff@caitech.edu

12-10-97 Notes on running Puff on Windows NT

Puff 2.0 will not run inside Windows NT. You must partition your hard drive (you can give it 50 or 100 MB, for example) and install DOS as the operating system. When you reboot your computer, the boot manager will ask you which operating system you wish to use. You must reboot when you switch between operating systems.

9-19-97 Notes from Poan Sung and Jeff Liu. When using the ATi Rage II+ video card, you will run into a problem when using the puff.exe program in Windows 95. The solution is as follows:

1. Go to http://support.atitech.ca/drivers/3dragel-II+.html and download the file 64vbe210.exe
2. Copy the file m64vbe.com to the PUFF directory
3. Use notepad to write the puff.bat file. The command in the puff.bat file should be: m64vbe puff
4. Use the mouse right button to set up the shortcut for puff.bat
5. Double click the puff.bat shortcut, and you will be able to run puff properly!
6. The contents of the puff.bat is listed below:
   - Command /c m64vbe
   - Command /c m64vbe w
   - REM set path=%path%;c:\puff
   - C:\puff\puff.exe %1
   - REM command /c initgraph
   - REM command /c c:\puff\wga21asr.com
   - REM command /c c:\puff\puff.exe

4-17-97 There are font problems with some of the new video cards. The fonts come out corrupted or in Greek text. For example, the Matrox Millenium video has this problem. Apparently the ROM address space has been reassigned to new video BIOS extensions. The original 8x14 VGA font can be restored by using a TSR (Terminate Resident program) before starting Puff. We do not know at this time if the TSR program will work with other video cards, however, the supplier of your video card should provide an equivalent utility either on the disks that come with the card or on their respective web page.

Please note that Puff runs in the 480x640 mode.

One of our colleagues has an incompatible 3D-Rage video driver. He found a program similar to a TSR program at the ATI website that fixed most of the problems.

1-21-97 Some computers require that you follow the instructions below and do the additional item listed here. Click the right mouse button on the Puff.exe shortcut. Click on “Properties”, click on “Advanced”. This will open the “Advanced properties window. Check the box ‘Prevent MS DOS programs from detecting Windows’. Be default, the “Suggest MS DOS mode as necessary” box should also be checked.

Here is an alternate way to run Puff using your old version of DOS if you had installed Windows 95 as an upgrade: Boot your computer. When it is almost finished booting and just about ready to open the Windows 95 page (timing is essential), push the “F8” button. This will give you a screen with 8 choices. #8 will be your previous version of DOS. Push the “8” button and you will get a DOS prompt.
To preserve compatibility with MS-DOS programs, Windows95 allows the user to alter certain settings before launching the program. Older versions of Windows achieved this by the use of a PIF, or program information file. A PIF was required to run each DOS program. Windows95 condenses this feature into the shortcut links that are used to launch applications.

Two problems exist when using Puff with Windows95. The Print Screen button in Windows95 is configured to paste a copy of the screen to the clipboard instead of sending a screen dump to the printer. The shortcut link will have to be altered to return the Print Screen key back to its original function.

Also, the proper screen dump routine needs to be executed before Puff is started up. Windows95 allows the user to run a short program, called a batch file, before starting up the main application. The shortcut link should be configured to have the screen dump routine listed as its batch file.

**SETTING UP A SHORTCUT LINK TO PUFF**

1. Using Windows Explorer, go the directory that puff is located in. Click on the ‘puff.exe’ file using the right mouse button and select ‘Create Shortcut’. This will place a shortcut link to the executable in the puff directory.

2. Now right click on this shortcut and select ‘Properties’. This will bring up the dialog window that allows you to alter the MS-DOS settings for the shortcut link.

3. Click on the ‘Program’ tab near the top of the window. Go to the entry for ‘Batch file.’ and type in the name for the required screen dump routine. (Most network printers use the routine named VGA2LASR.COM)

4. Make sure the ‘Close on exit’ box is checked at the bottom.

5. Click on the ‘Screen’ tab at the top. In the ‘Usage’ section, select ‘Full-screen’. Puff doesn’t run within a window.

6. Click on the ‘Misc’ tab. In the ‘Windows shortcut keys’ section, make sure that ‘PrtSc’ is NOT checked. When this box is checked, pressing the PrintScreen button will dump an image of the screen to Windows clipboard instead of directing the output to the printer port.

7. Click on the ‘OK’ box to save the settings and close the properties dialog window.

Puff can now be run by simply clicking on this shortcut link. The screen dump routine that was entered as the batch file will run before Puff is started, and the Print Screen key will allow you to send a screen dump to the printer.

When doing a screen dump, Puff directs the output to the LPT1 printer port. In order to print on a network printer, the specific printer must be set to ‘capture’ the output from the LPT1 port.

**PRINTING A PUFF SCREEN DUMP USING A NETWORK PRINTER**

1. Under the Start Menu, click on ‘Settings’ and select printers. This will open a window with all the printers that your system is set up to use. Using the right mouse button, click on the network printer that you would like Puff to print to and select ‘properties’.

2. Click on the ‘Details’ tab. The entry entitled ‘Print to the following port:’ will be highlighted. Make note of this path. (An easy way is to press Ctrl-C. This copies the path into the clipboard.)

3. Click on ‘Capture Printer Port . . . ’. This will bring up another dialog box. Use the arrow keys to scroll up to ‘LPT1’ in the ‘Device’ entry. Go to the ‘Path:’ and type the path of the network printer EXACTLY as it appeared in the ‘Details’ window. (Or press Ctrl-V to paste it from the clipboard.)

4. Make sure that ‘Reconnect at login’ box is checked.

5. Click on ‘OK’ to capture the printer port. This will return you to the ‘Details’ window. Click on ‘OK’ in that window to save the settings and close the printer properties dialog box.

Warning: A screen dump can take as long as five minutes when using a networked printer. Don’t be alarmed if the printout doesn’t appear right away.
Suggestions for Printing Puff 2.1 on Windows NT

Your machine is connected to a printer by parallel port:

1. Create a file PUFF.BAT in the Puff directory with the following commands in it: VGA2LSR and PUFF

2. Change the MS-DOS properties for Puff (if there is no PUFF.PIF file yet, create one by right-clicking on PUFF.EXE and then ‘Properties’)
   - Program name is ‘Program’ tab, command line): PUFF.BAT
   - Misc tab, at the bottom, deactivate the check box for the Prt-Scr key (i.e. PrtScr should not be captured by Windows NT but be sent to the application)

3. Start Puff by double-clicking on PUFF.PIF (shortcut to PUFF.BAT with the MS-DOS icon). Printing should be possible directly by hitting Shift-Prt-Scr (as under DOS)

Your computer is trying to print through the network

For network printers or printers not supported by VGA2LSR, only the solution through the NT clipboard will work. Use a screen capture program which must be activated before opening Puff. We use Corel Capture ver 5.0 or higher to capture. It comes bundled with CorelDraw and Corel Photo Paint.

To print Puff 2.1 on a Windows NT system connected to a network printer:

Method #1

1. Open Puff
2. Do your simulation on the full DOS screen
3. ‘alt-enter’ will reduce it to a small window and freeze the program
4. ‘PrtScr’ will capture the whole screen and put it on the clipboard
5. Open MS Paint (this program is frequently bundled with NT)
6. Go to ‘edit’, then ‘paste’ (from clipboard)
7. Click ‘image’, ‘invert colors’
8. Crop and print

Method #2

If you get to step #7 above and cannot proceed, try the following:

7. Save as a 16 color bitmap
8. Crop image (center and put a box around window using the dashed-box icon) using ‘crtl-x’ or ‘edit’ then ‘cut’. Click on ‘file’, ‘new’, then ‘edit’ and ‘paste’
9. Open a graphical vector editor like ‘Coreldraw’ (version 5 or higher)
10. ‘New graphic’
11. ‘edit’ and ‘paste’
12. ‘Effects’ and ‘color adjustment’ then ‘invert’
13. Print to network printer

Method #3

1. Do steps #1-5 above
2. Open Microsoft photo editor (this program is frequently bundled with NT)
3. Paste from clipboard
4. Crop and paste as a new image
5. Your image may be displayed in reverse colors – go to ‘effects’ then ‘negative’
6. Print (don’t forget to check off ‘fit to page’ and ‘landscape’