

Inter-Office Memorandum

To	VLSI Versatec Users	Date	March 25, 1982
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Subject	Versatec Use	Organization	PARC VLSI Systems Design

XEROX

Filed on: [Indigo]<DA>VersatecPlotter>Versatec.Bravo, .press

The Versatec printer-plotter owned by the VLSI Systems Design Area is available on a preemptive basis for time-to-time use by others. This memo is intended to serve as a quick-reference guide for first-time users.

The Alto driving the Versatec plotter (net address 3#166#) has the name "Vice" as in "Vice-Versatec" (get it?).

All software is on "Current Press Disk", a one disk Alto system. The Versatec Alto has no drive switch, so it must be run in the lower drive.

Formats, Protocols and Command Files

There are three entirely distinct ways of LSI plotting on the Versatec; the ONLY thing they have in common is the hardware.

- 1) Icarus knows how to directly drive the Versatec, if it is running on the Versatec Alto.
- 2) Magic-Versatec produces a "bits" file which is printed with Oliver.
- 3) CDS produces a "press" file which is printed with Press.

Please note carefully that "bits" files and "press" files are quite different; a program which needs a "bits" file can't digest a "press" file, and neither vice-versa. Currently the only source of "bits" files is Magic-Versatec and the only way of printing them is with Oliver on the Versatec. But there are lots of sources of "press" files (e.g. Bravo hardcopy-to-file command, Sil/p, Markup, Draw, Griffin, to name a few), and two programs which digest them: Spruce and Press. Spruce implements only a subset of press-format, but prints them very quickly; Press handles just about anything but very slowly. Spruce drives Dovers (and some others), while Press drives Puffin and Versatec (and some others). [There is yet a third, mutually incompatible format: "ram", which is generated only by Magic-Ramtek and printed only by Phryxus--but this is tangential to the current discussion].

In addition, there are two quite distinct ways of moving files between two machines (file transfer protocols). The oldest, simplest one is EFTP. For historic reason, EFTP is the protocol used for sending press files to printers (from Empress to Spruce for example). The newer, fancier protocol is FTP, used for most other file-transfer applications. (One implementation is the program also named FTP. Another implementation of the FTP protocol is Magic's capability to store "press", "bits", and "ram" files on remote servers.)

Either protocol can transfer any kind of file. For example, you might retrieve a "press" file from Ivy via the FTP protocol, and then Empress it (EFTP protocol).

As if life weren't complicated enough, there are at least four different Server.cm's in the world, depending on what printer you're on:

On Lilac, Server.cm chains together EFTP and Press, to accept "press" files via the EFTP protocol.

On Color, Server.cm chains together FTP and Phryxus, to accept "ram" files via the FTP protocol.

On Vice, OliverServer.cm chains together EFTP and Oliver, to accept "bits" files via the EFTP protocol.

Also on Vice, PressServer.cm chains together EFTP and Press, to accept "press" files via the EFTP protocol. PressServer.cm operates press at the current resolution (no spooling takes place, precluding transmissions during printing)

In order to change the magnification level for Press printing on Vice, run one of the following command files: Press1x.cm, Press2x.cm, Press3x.cm, Press4x.cm install Press at a specified magnification level relative to 8.5x11", from 1X to 4X. (4X gives 34x44 inch output, nearly filling the 36" page.) You must hit "return" at least 25 times after running these files.

File etiquette.

None of these .cm files cause dp0 to fill up. Users who print local press files by using "press print foo.press" should delete foo.press from dp0 afterwards; the command Delete.~ *.press is fair game by anyone.

On the other hand, Trident files should be left alone. Lemma: (1) only store files on TP0 when necessary (2) remove them after a reasonable length of time; no one else will.

Other tips.

When leaving a server running on the Versatec, you might want to leave a note with phone extension. In any event, be prepared to be bumped off the machine by a priority VLSI job. Also, quit out of the server program when done; another "outsider" might be waiting to use the Versatec.

After turning on the Versatec, a manual or automatic advance should be done to clear about 8" of leader out of the toner housing. Print quality can be helped by gently sloshing the liquid toner within the unit (see us).

Instructions in paper loading, complex press installations, and server operation in general are encouraged. Please contact Al Paeth, (x4877) or Rich Pasco (x4390)