



# Tech Info Library

## Macintosh/VAX Integration: Queue & Bridge Questions (11/94)

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TOPIC -----

A law firm has VAX computer where 90% of the firm's 350 users have terminals and some Intel-based PCs. The VAX is the hub of the entire operation.

All printing is through the print Queue mechanism on the VAX. The VAX handles forty HP LaserJet clones with PCL as the communication mechanism from the queue to the printer. The printers are serially connected with terminal servers.

- 1) Is there a product that allows the Macintosh to access these print queues using PCL, or does this have to be done through PostScript?
- 2) Remote access to this system is through VitaLink bridges. Has any headway been made to incorporate AppleTalk into these bridges? All VAX resources are on one side of the bridge, so this would eliminate DECnet encapsulation. Any ideas?

DISCUSSION -----

- 1) We are not aware of any product that will do what you are looking for. To do this, the product must supply a receiver process on the VAX, which will act like a LaserJet printer and register its name on the network for users to choose from. Once a PCL print job is sent from the Macintosh, the receiver reads the LaserJet PCL format file and stores it as a standard VAX/VMS text file to be sent to the print queueing system. A print symbiont will take standard VMS text files and convert them to PCL format before they can be forwarded to the LaserJets. The symbiont translator is normally driven by a set of Device Control Library (DEVLIB) modules. Theoretically, one can write a Device Control Library module to translate file to PCLs.

Macintosh to VAX integration product such as PATHWORKS for Macintosh and Alisa use this above approach to get PostScript files to the VAX queue and then print on the Apple LaserWriters on LocalTalk or Digital PostScript printers on the network. Of course, the printers have to support PostScript. One way to allow printing on PCL-based printers is to write a Device Control Library module mentioned above to translate

from PostScript to PCL. This is not a trivial task.

In your situation, the easiest way, though not a seamless integration, is to send the text files to the printer device captured by the VMS print queue. These are the terminal server port names in your case. On VAX/VMS, once a terminal port or a terminal server port is captured by a queue, any file sent to the port directly will be queued. The file can be sent by NetCopy application over DECnet, specifying the destination node name followed by the terminal port name, such as YOURNODE::LTA12:, where LTA12 is the terminal server port connected to the LaserJet. You might want to check if the port protection is world write-able. Doing this way, there is no change required in their current PCL-based printer queues.

2. In theory, bridges will pass all protocols on the network unless you program them to filter a particular protocol. To our knowledge, the VitaLink bridge should pass AppleTalk protocol. You should check with Network Systems (formerly VitaLink) for the correct hardware and software version, and correct configuration to pass AppleTalk protocol.

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- 07 Nov 1994 - Reviewed for technical accuracy.
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