



# Tech Info Library

## PATHWORKS-DECnet: Wide-Area Network Issues (11/94)

Revised: 11/7/94  
Security: Everyone

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Article Created: 24 March 1991  
Article Reviewed/Updated: 07 November 1994

### TOPIC -----

I have a VAX in two countries: Hong Kong and Korea. Both sites have AppleTalk networks connected using PATHWORKS. I would like to connect these networks using X.25 (using VAX PSI software).

According to Digital and PATHWORKS documentation, I can run full DECnet over VAX PSI and have completely integrated operation. If I run PATHWORKS (AppleTalk-to-DECnet gateway), will I still have this level of transparency?

The literature I have read states that I can do this. But will I have to keep the X.25 link on all the time? How expensive is this? Or is the PSI software intelligent enough to connect to the X.25 network only when actually needed?

### DISCUSSION -----

In theory, your setup should work. As long as you have a line and a circuit between the two DECnet nodes, creating the DECnet tunnel is just a matter of defining the "tunnel" port, giving it a name, taking care of routing costs, turning on the system, and (most important) specifying a partner (the DECnet node name of the other VAX).

In practice, you may encounter these problems:

- With AppleTalk 3.0 for VMS, we don't recommend any tunneling below 56KB. In many X.25 networks, the connection between the computer and X.25 pad may be slower than the connection between the pads.
- The X.25 link should be up all the time. There is no way for DECnet PSI software to be dynamically connected and "know" when AppleTalk packets should go through. Even if the software could do this, the tunnel port definitions on both ends can't be dynamic.

- If your X.25 network has any two-minute delays, AppleShare will have problems. The ASP session timer expires at two minutes, terminating the session and losing the server connection.
- Another problem has to do with NBP lookup. You might not see the file server when opening the Chooser and selecting the AppleShare icon. Some sites have to change a resource called GNRL to increase the Chooser interval timer and retry timer values.

You can find a complete discussion of this subject in the Tech Info library in AppleLink. For more information, search on "AppleTalk and Wide and Area".

Article Change History:

07 Nov 1994 - Reviewed for technical accuracy.

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Tech Info Library Article Number:7238