Open Transport 1.0.8: Network Compatibility Q & A (3/96)

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TOPIC --

This article is a series of questions and answers on network compatibility in
Apple Open Transport 1.0.8.

Open Transport 1.1 is now available, and Apple recommends upgrading to it. Also
refer to Open Transport 1.1 Reference Questions and Answers Tech Info Library
articles for the most recent information.

DISCUSSION ---

Question: Is Open Transport interoperable with installed AppleTalk and TCP/IP
networks?

Answer: Open Transport 1.0.x is compatible with existing AppleTalk and TCP/IP
LocalTalk and ethernet network at the "packets on the wire" level. Organizations
can introduce one, a few, or hundreds of new Macintosh systems running Open
Transport into their environment without worrying about interoperability with
existing networking services.

Question: Is Open Transport compatible with existing Internet Service Provider
offerings?

Answer: As noted in "Network Interface Options" Open Transport/TCP currently
supports dial-up connectivity to TCP/IP networks, including the Internet,
through backward compatibility with select third party software modules known as
"mdevs".

With the appropriate mdev installed, end-nodes can use either SLIP or PPP to
connect to Internet Service Providers and other dial-up IP-access points.
However, not all versions of all mdevs are supported by Open Transport backward
compatibility services. It is important that the recommended versions of
software be installed for the greatest level of compatibility.

It is also important that TCP/IP addressing and other configuration information
be properly configured. As there is a new human interface provided by the Open
Transport/TCP configuration utility, there are some changes in the process as
compared to the older MacTCP software.

Question: Is there documentation available to assist with configuring Open Transport/TCP?

Answer: Yes. Although a full user's guide is planned for release with Open Transport v1.1, configuration tips for Open Transport 1.0.x are already available from various sites on the internet including:

ftp://seeding.apple.com/opentransport/OT_gen_info/TEXT/OTTCP_Config_Tips

Question: Does Apple offer a solution for SLIP or PPP dial-up to the Internet?

Answer: Yes. The Apple Internet Connection Kit is a selection of the most popular Internet applications from third party companies, including the Netscape Navigator and RealAudio Player from Progressive Networks, as well as Claris Emailer Lite. The kit includes MacPPP 2.1.4 along with the Apple Internet Dialer -- software designed to make it simpler for Macintosh customers to register with a qualified Internet Service Provider (ISP) and get connected to the Internet. To help users work with their Internet applications, the Apple Internet Connection Kit includes Apple Guide software for on-line assistance.

Question: What is MacPPP 2.1.4? Is it available on the Internet?

Answer: MacPPP 2.1.4 is a derivative of the MacPPP 2.1.x SD versions of Merit's PPP. It includes code contributed by Apple engineering to enhance compatibility with Open Transport/TCP. These Apple updates have also been provided to the authors of FreePPP (the successor to the "SD" releases of MacPPP).

FreePPP 1.0.x also includes these updates, and is available for download on the Internet.

Question: Does the Apple Internet Connection Kit require Open Transport?

Answer: The Apple Internet Connection Kit works with either MacTCP, or Open Transport/TCP.

Question: Which mdevs are currently supported by Open Transport/TCP?

Answer: Open Transport 1.0.8 supports the following MacTCP Link Access Modules (mdevs).

• FreePPP - version 1.0 or more recent; compatible with Open Transport.

• InterPPP - use version 1.2.9 or more recent.

• InterPPP II - use the most current version.

• MacSLIP - use version 3.0 or more recent; compatible with Open Transport.

- MacPPP - use version 2.1.3 SD, or more recent (version 2.2.0 is not recommended).

Apple is continuing to work with developers to better support existing mdevs; contact the third party developer of interest for the most recent information on compatibility.

Question: Are there known limitations to backward compatibility mdev support?

Answer: Yes. Due to differences in the underlying architectures (between MacTCP and Open Transport/TCP), and some current (1.0.8) shortcomings in the backward compatibility services, there are some additional limitations to mdev support:

- Some mdevs, when used with Open Transport, may not be able to auto-dial, that is, automatically connect to the service provider when launching a TCP/IP application. This is being addressed by updated versions of the mdevs.

- Once a TCP/IP application launches and uses a SLIP or PPP mdev, use of a different mdev may require restarting the Macintosh. Disconnecting from and redialing a service provider may also require restarting the Macintosh. This is planned to be addressed in Open Transport v1.1 (See Future Directions).

- Some Internet Service Providers do not strictly follow standards practices, which call for assigning end-node IP addresses on the same subnet as the router (gateway). Open Transport strictly enforces this requirement in versions prior to 1.0.7. Beginning with Open Transport 1.0.7, the TCP/IP configuration utility software will automatically generate a compatible router address to facilitate connectivity to the ISP if the user leaves the router address field empty.

Question: If a user needs an updated copy of one of these mdevs, how can they get the software?

Answer: Sources for mdev software will vary, as some of the noted products are commercial and some are shareware or public domain.

- FreePPP is shareware and can be found on a variety of internet sites; typically at "info-mac" mirror sites in the comm/tcp directory. A list of info-mac mirror sites can currently be found at:

   http://www.mcp.com.hayden/iskm/info-mac-mirrors.html

   Some sites where FreePPP can be found currently include:

   ftp://mirrors.aol.com/pub/info-mac/comm/tcp/
   ftp://mirror.apple.com/mirrors/Info-Mac.Archive/comm/tcp/

- InterPPP and InterPPP II are commercial software products. For

availability and ordering information contact InterCon Systems, US
1-703-709-5500

- MacSLIP is commercial software available developed by Hyde Park Software.
  For availability and ordering information contact TriSoft, US
  1-800-531-5170.

- MacPPP (v2.1.4) is available as a component of the Apple Internet
  Connection Kit, Apple Computer Inc., US 1-800-462-4396 for fax
  information or 1-800-538-9696 to locate an Apple authorized reseller near
  you.

Question: There have been reports of problems with Open Transport, PPP, and the
use of Virtual Memory. Is Open Transport compatible with Virtual Memory?

Answer: Open Transport fully supports the use of virtual memory. However there
are problems identified with MacPPP 2.1.2 SD and FreePPP 1.0 when used with Open
Transport and Virtual Memory (including RAM Doubler). These problems are under
investigation, with Apple engineering working together with the authors of
FreePPP. Current plans call for an update to FreePPP to be available once a fix
is determined. In the interim, users who experience problems with PPP and
Virtual Memory are advised to turn VM off.

Question: Will Apple provide a "native" SLIP or PPP solution for Open
Transport?

Answer: Apple is developing an implementation of PPP for Open Transport as a
part of the next generation of Apple Remote Access products. This is planned to
support dial-up access to both AppleTalk and TCP/IP networks. (see Future
Directions).

Question: Is Open Transport compatible with PowerTalk built-in support for SMTP
mail?

Answer: Apple recently announced that it has licensed, and will distribute and
maintain, the PowerTalk Internet PMSAM formerly available from StarNine
Technologies. This software provides the Mac OS with built-in support for
Internet SMTP mail. The Apple Internet PMSAM is fully compatible with Open
Transport 1.0.x when used on a LAN. When the PMSAM is to be used over a dial-up
SLIP or PPP link, the same recommendations and limitations noted above for SLIP
and PPP currently apply.

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26 Mar 1996 - Added statement on Open Transport 1.1 release.

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