



# Tech Info Library

## MacTCP: Recommended DDP-IP Gateways (1/95)

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Security: Everyone

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TOPIC -----

This article is about DDP-IP (Datagram Delivery Protocol/Internet Protocol) gateways. It presents an overview of TCP/IP and MacTCP and discusses DDP-IP gateways recommended for use with MacTCP.

DISCUSSION -----

MacTCP

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TCP/IP networks are widespread, especially in university, scientific, and engineering environments. UNIX systems have distributed TCP/IP as a standard.

MacTCP provides TCP/IP protocols to the Macintosh OS. It offers TCP/IP services (UDP, TCP, Domain name mapping) to applications. For example, a Telnet application for remote terminal service over a TCP/IP network would call MacTCP.

MacTCP is software only and runs over Ethernet. MacTCP also runs over LocalTalk, in which case a DDP-IP gateway is required.

DDP-IP Gateways

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If you have an AppleTalk network and want to communicate with a TCP/IP network, you require a "DDP-IP" gateway. This gateway encapsulates TCP/IP packets into AppleTalk (DDP) packets for sending over the AppleTalk zone to the target Macintosh. In turn, the gateway receives encapsulated packets from the Macintosh and strips out the TCP/IP packet for forwarding to the TCP/IP target.

MacTCP supports the encapsulation process, so that a Macintosh on LocalTalk can access TCP/IP networks and services on a TCP/IP Ethernet. Three commercial sources for gateways are Apple Computer, Shiva, and Cayman. There is also Stanford University's KIP software, a noncommercial alternative. To locate a

vendor's address and phone number, use the vendor name as a search string.

The Apple IP Gateway is Macintosh software which allows Macintosh computers using AppleTalk (Apple Remote Access, LocalTalk, or EtherTalk) to access IP services on an IP internet. MacTCP is required on both the client Macintosh and the gateway Macintosh.

The Shiva FastPath 5 is the latest version of their LocalTalk-EtherTalk bridge. KSTAR is the configuration and management software for the box; KSTAR offers DDP-IP gateway services.

The Cayman GatorBox is a LocalTalk-EtherTalk bridge, an NFS-AFP gateway, and a DDP-IP gateway.

Stanford University's KIP software provides DDP-IP gateway services among other things. It runs on the FastPath 2 from Shiva. It is NOT a commercial product and, therefore, is not supported. It currently requires UNIX daemons to configure the software. The only people who should try KIP are capable network engineers with UNIX knowledge, who require no support.

Apple recommends that users choose commercially-supported software to ensure that their needs are met. The vast majority of users requiring a DDP-IP gateway should consider the Apple IP Gateway, Cayman GatorBox, or Shiva FastPath 4 (not 2 or 3) with KSTAR software.

#### References

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##### MacTCP Administrator's Guide

The MacTCP Administrator's Guide is available through APDA.

MacTCP data sheets are available.

MacTCP first shipped in March 1989 and is available through APDA and Software Licensing. The current version of MacTCP is 2.0.6.

For more details, search the Tech Info Library under "APDA".

#### Article Change History:

27 Jan 1995 - Made corrections for technical accuracy.

21 Nov 1994 - Added the Apple IP Gateway, updated information, and updated format.

#### Support Information Services

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