Apple IP Gateway: Description, Features, Specifications (5/96)

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TOPIC ---

This article provides a description, lists features, and technical
specifications of the Apple IP Gateway.

DISCUSSION ---

With the Apple IP Gateway, Macintosh users with Apple Remote Access (ARA),
LocalTalk, or other AppleTalk network connection can connect easily to an
Ethernet-based TCP/IP network to use the full range of Internet Protocol (IP)
services. These include the vast array of Internet services such as Telnet, File
Transfer Protocol (FTP), Gopher, World Wide Web, and Wide Area Information
Servers (WAIS).

Note: The Apple IP Gateway wwill not run on Open Transport or on PCI Macintosh.

Acting as a translator between AppleTalk and TCP/IP networks, the Apple IP
Gateway allows data to move between the networks easily and transparently. It
can be used in many ways—depending on the particular needs of the individual or
organization. As a stand-alone product, it allows AppleTalk-networked Macintosh
computers to connect to an IP network and access any of its services. In
conjunction with the Apple Internet Router software, it provides IP access to
any Macintosh computer on any AppleTalk network that is part of the router's
network. And with an Apple Remote Access Personal or MultiPort Server, it
provides ARA clients with remote access to IP and AppleTalk services—just as if
there were a local connection.

Administration is simple. Dynamic addressing allows network administrators to
use a single MacTCP configuration for all IP users. The IP Gateway automatically
assigns new IP addresses whenever workgroup members change location, providing
access for PowerBook users whether they're in the office, at home, or on the
road. And users don't have to change MacTCP settings as they move between IP
subnets. In addition, the IP Gateway makes it easier for administrators to
control access through Internet firewalls. Firewall administrators don't have to
add and delete user-specific IP addresses continually as a network grows; the
single Ethernet address of the IP Gateway provides access for all approved IP
Gateway users.

To keep the network secure, the IP Gateway allows network administrators to

restrict IP access to specific AppleTalk networks. This gives administrators
tight control and allows them to easily track service use. Plus, the gateway
enables the monitoring of network activity and errors, keeping administrators up
to date on network status. The IP Gateway even has built-in support for the
Simple Network Management Protocol (SNMP), so it can be easily monitored by any
SNMP-based management station.

Apple is committed to leading the way in offering connectivity to other
networking protocols. Reflecting this commitment, the Apple IP Gateway provides
an easy, affordable, and secure way for AppleTalk users to take advantage of the
vast resources available on IP networks.

Features

Outstanding information access
• Lets mobile, remote, and local AppleTalk network users access
  Ethernet-based TCP/IP services, such as the Internet— even if the user's
  AppleTalk network does not directly support IP
• Provides access to Ethernet-based TCP/IP services such as SMTP-based
  electronic mail, Telnet, FTP, and NFS on UNIX hosts

Flexible configuration
• In conjunction with the Apple Internet Router software, provides IP
  access to any Macintosh computer that is part of the router's internet
• In conjunction with an Apple Remote Access server, provides IP access to
  remote or mobile users
• Can be used as a stand-alone product

Ease of setup, use, and administration
• Lets users transparently access TCP/IP and Internet resources
• Allows a single MacTCP configuration for all IP users, eliminating the
  need for individual IP addresses
• Simplifies the maintenance of Internet firewalls; only one Ethernet
  address needs to be updated
• Enables network administrators to monitor gateway activity visually

Increased security
• Reduces the chance of entry from external networks through dynamic
  address assignment
• IP access can be restricted to specific AppleTalk networks

Expandable
• Supports multiple Apple IP Gateways in a single AppleTalk zone
• Supports unlimited users with additional Apple IP Gateways
• Increases performance by distributing users across multiple gateways in
  the same AppleTalk zone

Technical Details

The following is an overview of Apple IP Gateway functions:

Setting up the gateway
• A Gateway Manager application allows you to set up and control the

gateway
- A range of automatically assigned (dynamic) IP addresses can be configured
- A range of manually assigned (static) IP addresses can be configured

Monitoring the gateway
- The Gateway Information window provides the following statistics:
  - The number of automatic addresses available for assignment
  - The number of automatic addresses already assigned
  - The number of connected users
  - The current level of network activity
  - The current level of invalid or illegal packets received by the gateway
- An SNMP-based management station provides both monitoring and configuration information

Establishing gateway security
- Prevent unauthorized use of the Gateway Manager by setting a password
- Control the AppleTalk networks that the Apple IP Gateway will accept clients from by using the Network Restrictions feature in Gateway Setup

System requirements
- Any Workgroup Server running system software version 7.1 or later, or any Power Macintosh computer, or any Macintosh or PowerBook computer with a 68020 processor or later. The Apple IP Gateway can run concurrently with Apple Remote Access, the Apple Internet Router, and other AppleTalk services.
- At least 4 MB of RAM
- System software version 7.1 or later
- A hard disk drive
- An Ethernet connection to an IP network
- Client computers require MacTCP client software

Note: It will also work with clients running Open Transport's TCP/IP control panel.

Internet requirements
- For Internet services, your site must be connected to the Internet. If you have an Internet connection and Macintosh computers on AppleTalk connections that do not support IP, the gateway provides the IP connection to the existing Internet services.

Ordering Information

Apple IP Gateway
Order No. M3562Z/A
- Apple IP Gateway Installer (two disks)
- Apple Network Software Installer
- Apple IP Gateway Administrator's Guide

Article Change History:
28 May 1996 - Added references to Open Transport and PCI machines.

03 May 1995 - Removed information on special offer which has expired.
09 Dec 1994 - Corrected for technical accuracy.

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