Apple IP Gateway Quick Reference (5/96)

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TOPIC ---

This article is a quick reference on the Apple IP Gateway.

DISCUSSION --

Overview

• Lets mobile, remote, and local AppleTalk network users access
   Ethernet-based TCP/IP services, such as the Internet — even if the
   AppleTalk network does not directly support IP.
• Translates packets between TCP/IP and IP encapsulated in AppleTalk (IP
   network and AppleTalk network may or may not be the same physical
   network).
• Can be used as a stand-alone product or in conjunction with Apple
   Internet Router or Apple Remote Access server.
• Is an IP forwarder, not an IP router.
• Can be configured as an IP address server.
• Allows IP access to be restricted to specific AppleTalk networks.

Hardware and Software

• Runs on Workgroup Servers (except the Apple Workgroup Server 95), Power
Macintosh, or Macintosh or PowerBook with a 68020 or later processor.
• Requires at least 4MB of RAM and a hard disk.
• Requires System 7.1 or later.
• Requires MacTCP 2.0.4 or later (included with Gateway Installer).
• Requires an Ethernet connection to IP network.

Note: The Apple IP Gateway will not run on Open Transport or PCI machines.

Gateway Setup

MacTCP Configuration
This section covers MacTCP configuration for a Macintosh running the IP Gateway.
Configuring the client is covered later in this document.

• Select the Ethernet port in the MacTCP Control Panel that is connected
   to the IP network. "EtherTalk" is not used in this case because that

refers to IP encapsulated in AppleTalk. Here you are configuring the
IP network connection, which is native IP.
- Enter the Gateway's manual address in the IP Address box.
- Click "More…" to get to the next dialog box.
- Under Obtain Address, select Manually.
- Enter the Domain Name Server information specified by the network
  manager.
- Set the subnet mask to the value specified by the network manager.
- In the Gateway Address box, enter the IP address of the subnet's IP
  router.

Gateway Configuration
- Select Automatic addressing if the gateway will assign IP addresses to
  clients. Select Manual addressing if each client has a fixed address.
  Select Both if both methods apply.
- Each mode can support up to 253 contiguous addresses. Enter the number
  of addresses and the first address in the range for each method that
  will be used.
- Specify whether or not to activate the gateway at Macintosh startup.
- Specify whether or not to impose network restrictions.
- Network Restrictions can be used to restrict access to the IP network
  from certain AppleTalk networks.
- Use the radio buttons to specify whether you are allowing or denying
  access to listed networks.
- Enter the beginning and ending numbers of each AppleTalk network range
  to be included.

Monitoring

- Upper section of Gateway Information window shows the following:
  - Number of automatic addresses available and assigned.
  - Number of users connected (both automatic and fixed addresses).
  - Relative levels of network activity and network errors.
- Lower section lists addresses and usage statistics of connected users.
- Table can be sorted by any field by clicking on heading.

Client Setup

Hardware and Software
- Requires Macintosh Plus or later with at least 2MB RAM
- Requires System 6.0.5 or later
- Requires AppleTalk version 57.0 or later

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

MacTCP Configuration
- Select in the MacTCP Control Panel the AppleTalk port being used
  (EtherTalk, TokenTalk, LocalTalk, or Remote Only), which specifies that
  IP will be encapsulated in AppleTalk.
- In the pop-up menu, select the zone where the IP Gateway resides.
- Click "More…" to get to the next dialog box.
- Enter the Domain Name Server information obtained from the network

manager.
  • If automatic addressing is being used, select Server under Obtain
    Address.
  • If manual addressing is being used, follow these steps:
    - Select Manually under Obtain Address
    - Set the subnet mask as specified by the network manager
    - In the Gateway Address box, enter the IP address of this subnet's IP
      router.

Article Change History:
28 May 1996 - Updated reference to Open Transport and PCI machines.
03 Nov 1995 - Corrected the Gateway Setup, MacTCP Configuration section.
09 Dec 1994 - Made correction for technical accuracy.

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