AppleShare IP 5.0 Beta: Technology Information (1/97)

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TOPIC -----

This article provides AppleShare IP 5.0 Beta technology information.

DISCUSSION -----

IMPORTANT: This is Beta Software and is Not Supported

Apple Macintosh Workstation Client 3.7

The Apple Macintosh Workstation Client 3.7 beta supports AppleTalk and TCP/IP. Since AppleTalk is always active on the AppleShare IP 5.0 Beta Server, a user will be able to select an AppleShare IP 5.0 server by name (NBP protocol) through the Chooser if AppleTalk is routed on the local network.

During the login procedure, the Apple Macintosh Workstation 3.7 client will query the server to determine if the server supports TCP/IP and/or AppleTalk. If the server supports AFP over TCP, then the Apple Macintosh Workstation Client 3.7 will use TCP/IP as the transport mechanism for AFP. From the end user's perspective, their experience is the same and the server volume appears on their Macintosh desktop. However, the underlying transport is TCP/IP.

If the server does not support AFP over TCP/IP then it will revert to using AppleTalk as the transport mechanism. This was implemented in order to support MacOS Personal File sharing and servers implementing AFP over AppleTalk, such as AppleShare 3.x and 4.x servers.

In the case that AppleTalk is not routed on the network, the Apple Macintosh Workstation Client 3.7 allows the end user to type in the server's IP address or DNS name to initiate the login process.

Since the Apple Macintosh Workstation Client 3.7 supports AppleTalk and TCP/IP, aliases made of AppleShare IP 5.0 volumes contain the necessary AppleTalk and TCP/IP information.

AFP over TCP Specification 2.2

This is on its way.

FTP and File Encoding/Decoding

The logic for conversions (MacBinary vs. BinHex) depends on the data type that the client has selected. There are two main data types: text and binary.

For Retrieving a file:

- If the data type is text and the file is a text file, it will be converted to the standard Telnet text type (CR gets replace with a CRLF).
- If the data type is text and the file is not a text file, it will be converted to BinHex.
- If the data type is binary and MacBinary is enabled, the file will be converted to MacBinary format.
- If the data type is binary and MacBinary is not enabled, only the data fork will be sent.

For Storing a file:

- If the data type is text, the MIME function is used to determine whether the data stream is likely to be text or BinHex.
- If text or BinHex, it will attempt to do the conversion on the fly.
- If not text or BinHex, it will just write out the data to the data fork of the new file. It will also fall back to writing the data fork if it discovers that the file is not in the format the MIME type had guessed.
- If the data type is binary, the MIME function is used to determine whether the data stream is likely to be in MacBinary or not.
- If it is, then it will attempt to convert it on the fly. If not, it will just write the data to the data fork. If the MacBinary guess is later found to be incorrect, it will just write everything out to the data fork.

Keywords: <None>

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