MacBinary: File Format Description (11/95)

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TOPIC ---

This article contains a brief description of the MacBinary file format. A
detailed description and technical information is available from APDA.

DISCUSSION --

Overview
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Because of the way the Macintosh file system keeps track of files, there was a
need to provide this tracking information when transmitting files through a
modem. A committee was established, which developed the original MacBinary and
later the MacBinary II format. These two formats remain functionally identical,
however the MacBinary II format added additional information to maintain the
integrity of the file system information.

Macintosh Files
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Every Macintosh file contains two parts; a resource fork, which contains data
used by an application, such as menus, fonts, and icons, and a data fork, which
contains data specific to an application.

Originally, telecommunication programs only sent one part of a Macintosh file
(the data fork). This meant that when a binary file was transferred from a
Macintosh it lost its icon, and Type & Creator information. Since this
information is important to the Macintosh file system, MacBinary was developed.

MacBinary
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MacBinary is not a transfer protocol like Xmodem, Kermit, or Zmodem. Instead, it
is used in conjunction with a transfer protocol, however it is independent of
that protocol. MacBinary is very important when binary files are placed on a BBS
(Bulletin Board Service), since a BBS can be run from any type of computer and
Operating System, not just a Macintosh computer.

MacBinary consists of 128 bytes, which are added to beginning of any file sent through a modem. Most Macintosh telecommunication programs (terminal applications) automatically use MacBinary when a binary file is sent. Most applications also allow you to turn off MacBinary. If you are sending a binary file such as a TIFF or JPEG file to someone who uses a Windows computer, you must turn off MacBinary. If you do not turn off MacBinary, the additional 128 bytes at the beginning of the file will corrupt the file. There are ways of removing the MacBinary information, but most of these are designed for Macintosh. At one time there were a couple of MS-DOS terminal programs that automatically detected MacBinary files and stripped off the first 128 bytes of the file.

MacBinary vs. BinHex and UUencode
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MacBinary, unlike BinHex or UUencode, does not convert the data into a text representation of the binary data. This is important when you want to send a binary file to someone through a an e-mail system. Most e-mail systems do not support MacBinary, so you should use BinHex or UUencode instead. The Tech Info Library articles "What is Binhex & Where To Obtain It", and "UUencode & UUdecode: Explained" provide additional information on UUencode and BinHex. These articles can help you decide the best way to send your files through e-mail systems. If you are placing binary files such as applications, compressed binary files (StuffIt, Compactor), or other Macintosh specific binary files on a remote file server or FTP site here is a chart that can help you determine if you need to use MacBinary or not.

Begin_Table

Primary users	MacBinary	Examples
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Macintosh	Yes	Applications, Control Panels
MS-DOS/Windows	No	GIF, TIFF, QuickTime, MIDI files
Mixture	No	GIF, TIFF, QuickTime, MIDI files

End_Table

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