



# Tech Info Library

## MAE & ftp: Transfer Macintosh Applications To UNIX Host (6/96)

Revised: 6/25/96  
Security: Everyone

MAE & ftp: Transfer Macintosh Applications To UNIX Host (6/96)

Article Created: 23 May 1994  
Article Reviewed/Updated: 25 June 1996

TOPIC -----

This article provides information about using ftp to transfer Macintosh application and document files from Macintosh computers to UNIX workstations running Macintosh Application Environment (MAE).

DISCUSSION -----

Under MAE 2.0 or later, you can transfer applications with AFP services because MAE has AppleTalk & AppleShare capabilities. If you chooses to use ftp, or not to load the AppleTalk Kernel modules, this article explains the process to use.

There are many third-party file transfer protocol (ftp) utilities that let you transfer Macintosh files (applications or documents) from a Macintosh to any UNIX workstation (Sun, HP, or A/UX) running the MAE. This article describes these useful utilities:

- fetch 2.1.2\* (freeware)
- ftpd (shareware)
- VersaTerm PRO (commercial)
- NCSA Telnet 2.6 (public domain)

NOTE: Use the correct format type when doing transfers so either the data, or resource forks are preserved while transferring files between a Macintosh and UNIX workstation.

\* Fetch 3.0 and higher will not work with MAE 2.0.2, use version 2.x.x.

Fetch  
=====

The fetch 2.1.2 utility is very straight forward; it acts as an ftp client on a

Macintosh with MacTCP installed. It supports these file format types:

- AppleSingle
- MacBinary I
- MacBinary II
- BinHex4
- Stuffit Archives
- MacHost

#### The ftpd Utility

=====

The ftpd utility acts as an ftp server on a Macintosh with MacTCP. You can ftp from a UNIX workstation (as an ftp client) to a Macintosh.

For transferring Macintosh applications, you should use the AppleSingle format if your ftp utility supports it. If the ftp utility does not support AppleSingle format, you could use other utilities like BinHex, MacBinary, and so on. First convert the files to be transferred into BinHex or MacBinary file format, then use the binary transfer form in ftp. After transferring to the remote UNIX workstation, you may use the same utility in MAE to convert them into their original file format.

For people who do not have a floppy drive on their MAE machine, getting the fetch and binhex utilities mentioned here can be a problem. The solution is to log into <ftp.abs.apple.com/pub/mae/utilites> and download the tar archives of fetch, stuffit, and binhex. The following read me is included in this directory:

README for /pub/mae/utilities

#### Tools for Making Macintosh Binaries Available to MAE

=====

The utilities in this directory are helpful if you need to transfer files between Macintosh computers and UNIX Workstations running MAE 1.0. This README explains how to get and use these tools.

#### How to Download

=====

There are 4 files in the utilities directory on the ftp server called <ftp.support.apple.com>:

/pub/mae/utilities/README  
-----

This file includes the text you are reading.

/pub/mae/utilities/fetch.tar - (630K)  
-----

This is a tar archive of Fetch and Fetch Help:

- Fetch 2.1.2 - (500K)

This is an ftp program that runs on any Macintosh computer with MacTCP installed.

- Fetch Help - (126K)

This is an optional file that includes the complete manual on the Fetch program. To use it, run Fetch with this file in the same directory, and pull down the Windows menu and select Fetch Help.

/pub/mae/utilities/stuffit\_exp.tar - (83K)

-----  
This is a tar archive of Stuffit Expander - Stuffit Expander 3.0.7 (81K). This is a program that can unpack Macintosh files in several formats.

/pub/mae/utilities/binhex4.tar - (10K)

-----  
This is a tar archive of BinHex4 - BinHex 4.0 (8K). This is a program that can encode and decode Macintosh files in BINHEX (.hqx) format.

Enter the following UNIX commands to uncompress the downloaded archives:

```
tar -xvf fetch.tar
tar -xvf stuffit_exp.tar
tar -xvf binhex4.tar
```

Example

-----  
NOTE: User input is shown in quotes, but you do not actually type the quotes:

```
% Ftp
ftp> "open ftp.support.apple.com"
Name (ftp.support.apple.com:xxxxx): "anonymous"
Password: "<your email address>"
ftp> "cd /pub/mae/utilities"
ftp> "ls"
-- directory list displayed --
ftp> "binary"
ftp> "get fetch.tar"
ftp> "get stuffit_exp.tar"
ftp> "get binhex4.tar"
ftp> "close"
ftp> "quit"
%
%
% "tar -xvf fetch.tar"
% "tar -xvf stuffit_exp.tar"
% "tar -xvf binhex4.tar"
```

## Using Fetch =====

Run Fetch on a Macintosh computer that is on the same network as your workstation (that you use to run MAE). When "get"ing a file, always select binary transfer mode. When "put"ing a file, on the final dialog select AppleSingle as the file format. For more complete instructions on using Fetch, read the online Fetch Help.

NOTE: Any "put" file format besides APPLESINGLE does not work.

There is an incompatibility that occurs when running Fetch under MAE. After an ftp transfer (get, put or directory listing) has completed, Fetch does not recognize the completion event and waits (the dog cursor keeps running). To manually correct this, just press the Cancel button or press Command-. (period) after the ftp transfer has completed. Note that the Fetch Transcript window (invoked from the Window menu) displays a message when the transfer has completed.

Fetch is Copyright (c) 1994, Trustees of Dartmouth College and is licensed free of charge for use in educational and non-profit organizations. Users in government and commercial enterprises may obtain an individual license for \$25. Please see the Fetch Help file for more information.

## Using Stuffit Expander =====

Stuffit Expander is a freeware Macintosh application that can decompress and decode a number of different formats including Stuffit, Compact Pro, AppleLink, and BinHex. This program is also invoked automatically by Fetch after the transfer process to decompress archive files (Fetch can decode BinHex files itself).

To use Stuffit Expander, drag the archive or encoded file on top of the Stuffit Expander icon or open the file from within Stuffit Expander.

Stuffit Expander is free for non commercial purposes and copyright 1992-1993 by Alladin Systems, Inc. and Raymond Lau.

## Using BinHex4 =====

BinHex 4.0 is a freeware Macintosh application that can encode and decode files in BINHEX format. This is the most common form of ASCII encoding and transfer used for Macintosh files.

To use BinHex 4.0, launch BinHex 4.0 and choose Application --> Upload from the File menu. Select the file you want to encode from the standard file dialog and save it (always make the suffix .hqx to show it is a BINHEX file). To decode a .hqx file, choose Upload --> Application from the File menu and select the file to decode from the standard file dialog and save it.

BinHex 4.0 is free for non-commercial purposes and copyright by Mainstay.

#### Special ftp Note

-----

.hqx files are the only files that can be downloaded in ASCII mode; all others must be downloaded in BINARY mode for the file to decompress properly. Otherwise you get errors like "unreadable file" or "file is corrupt" when you try to decompress them.

#### Legal Statement

=====

These tools are being provided to you "as is". Apple assumes no responsibility with regard to use of these tools. Apple does not offer any warranties, assumed or implied, regarding the usability and reliability of these tools. Apple is not responsible for any liability, direct or indirect, that may arise from the use of these tools.

#### Article Change History:

25 Jun 1996 - Updated Fetch information.

09 Jan 1996 - Updated for MAE 2.0 and later.

21 Feb 1995 - Added keyword and made several technical updates.

Copyright 1994-96, Apple Computer, Inc.

Tech Info Library Article Number:15499