



Tech Info Library

What is Binhex & Where To Obtain It (9/95)

Revised: 9/26/95
Security: Everyone

What is Binhex & Where To Obtain It (9/95)

=====
Article Created: 29 August 1995
Article Reviewed/Updated: 26 September 1995

TOPIC -----

This article describes what Binhex is and where to obtain it.

DISCUSSION -----

Binhex is both a set of application utilities and storage protocols developed by Yves Lempereur in 1984 and 1985. You can find Binhex at the following ftp sites:

ftp.bio.indiana.edu
/util/mac/binhex.bin
(F binhex.bin 7k)

ftp.cc.utexas.edu
/depts/AI_ATTIC/HelpDownloading/MacCompactors/BinHex/binhex.bin
(F binhex.bin 7k)

Why Binhex

The basic idea behind Binhex is to translate a binary representation of data -- which could be an application program, graphical image, sound, and so on -- into an encrypted text representation of that file.

There are two reasons for doing this:

- Many mail programs used on the Internet cannot handle binary transmissions. They were designed for use with text data. So, an application is "binhexed" and included as the text component of the message.
- Many mail programs and gateways have size limitations, often less than 50K, and it is sometimes necessary to use an editor to split or combine such files. Since mail header information makes the automatic joining of files difficult;

Binhex allows common text editors to be used to join and manipulate such files.

How can you tell if it's a Binhex file

Binhex 4.0 files have a suffix of ".hqx". Binhex 2.0 files have a suffix of ".hex". Binhex 4.0 has been out since 1985, and it is very rare to see any ".hex" files anymore.

A Binhex file can be identified by the first line of the file:

(This file must be converted with Binhex 4.0)

This line is followed by one blank line, followed by the start of the data:

:%0bBA0SG(0d,Qe`CbdI0\$Bi!%e348GY69"(!*!\$",!!N!92!J!!!E-2!,35rrr

The data block begins and ends with a colon.

What are the versions of Binhex

Both versions of Binhex are freeware.

Binhex 4.0 simply converts files into Binhex encoded files and back to the file format it was before.

Binhex 5.0 is a bit more complicated because it deals with "MacBinary" documents. It does not deal with Binhex 4.0-encoded files.

What is a MacBinary document

Macintosh files have two components, a data fork and a resource fork. In addition, they have header information specific to the file system, plus additional information which is stored in the Desktop database. Binhex 4.0 documents take all of this into account, when transferring data from system to system.

But suppose you wish to upload a file to a non-Macintosh computer? Binhex files tend to be larger than the equivalent Macintosh file. In addition, when you manipulate them, you have to go through the encryption and decryption process on each end (upload and download) which can be time consuming, especially if you download many files. The solution is to originally upload the file as a "MacBinary" file, it would be stored online as a simple binary file.

Once it is downloaded, if your communications software supports MacBinary, the file would automatically be re-assembled into a Macintosh file or application. However, if you did not have this kind of communications program -- for example, you download the file to a PC, and then transfer the file to a Macintosh using PC Exchange -- you will have a generic binary document which SimpleText may try to open and produce nonsense.

Binhex 5.0 is intended to address this issue. It converts binary documents back into Macintosh applications or files. It does not translate Binhex 4.0 files. There is, therefore, no advantage to using Binhex 5.0 unless you are facing this

unique transfer problem.

Since most online services and communications software will automatically perform MacBinary transmissions (or at least allow the user to select that as an option), it is not generally not necessary to use Binhex 5.0.

UUencode and UUdecode

UUencode and UUdecode were derived in the UNIX environment, and perform a similar function to Binhex 4.0 encryption; they convert raw binary into an alternate text representation. This format is generally not suitable for transferring Macintosh applications, because it does not address differences between resource and data forks, or Desktop issues. In effect, you will only be dealing with information in the data fork.

UUencode and UUdecode are, however, widely used on both UNIX and PC systems, and they are standards. It is likely a user will deal with this format to process data which only has a data fork.

Article Change History:

26 Sep 1995 - Add where to obtain Binhex.

07 Sep 1995 - Corrected typographical error.

Support Information Services

Copyright 1995, Apple Computer, Inc.

Tech Info Library Article Number:18499