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

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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.

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26 Sep 1995 - Add where to obtain Binhex.
07 Sep 1995 - Corrected typographical error.

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