XFR
An ENTER program that transfers files to and from Windows

The problem of transferring files from Comet to and from DOS and Windows applications is an old one indeed. Those who are old enough will remember fighting this issue with QTERM, QICTRAN, and LOS ENDOS.

Consider:

	Windows	**Comet**
File names	Accepts really long file names. File names can be at long as 250 plus characters.	Maximum of 8 characters. OK 12 if you count extensions. And Yadayada.txt is a different file from Yadayada.
File extensions	*Loves* file extensions. They are like titles to royalty. The define who created a file and what's in it.	Could not care less about extensions except as they differentiate file names. Just don't create a file with a .OBJ or a .I00 extension!
QDIRs	Knows nothing about QDIR.DIR files except that they are an entry in some directories.	*Lives* by the QDIR. If a file is not in the QDIR then the file might as well not exist at all. Sorta like being in the social register.
Records	Variable in length terminated by Carriage Returns / Line Feed.	Fixed length with no record delimiter.
Fields	Variable length terminated by a variety of field delimiters including commas, semi-colons, tabs, nulls, pipes. Whew!	Fixed length as defined in the record format and/or in the data dictionary.
Signs	Leading minus.	Trailing minus.
Dates	Who knows?	A great variety of formats are used.

Fortunately for the Comet programmer, both operating systems use the ASCII scheme for encoding data. UNICODE is coming soon and EBCDIC is history.

Signature added the "ACCESS a non-Comet directory" feature to Comet a while back as one tool that the Internet Basic programmer could use to get at Windows data files. It works quite nicely though it does pepper your system with

QDIRs that never go away. And, we learned recently, it can be very bad news indeed if you inadvertently issue one of these "non-Comet ACCESS" statements against an existing, configured Comet directory.

In late 2000 Signature added the special CREATE statement that acts as an ADD2QDIR command. When you issue a CREATE on a *text* file which exists but is not in the QDIR, the CREATE will take the exception branch, but a QDIR entry will be created and the file can then be opened. Another tool to deal with non-Comet files.

In addition, some folks were made privy to an undocumented Comet tool that took a long Windows file name and returned its 8 byte DOS equivalent. This DOS command makes it possible to add *any* Windows text file to the Comet QDIR.

```
DOSFILE$ = STRIP(PCNAME$) + "@00@"
TLEN$ = "@3E000000@"
AX$ = "@FFF2@"
DOSMS (AX$, PCNAME$, TLEN$, DOSFILE$) EXCP=PROCFILE
```

What is XFR?
XFR is yet another tool for dealing with the problem of getting files in and out of Comet. XFR is a general purpose file transfer utility.

XFR is a Comet Enter program that copies files. It is intended to be used to copy files between Comet directories and non-Comet directories. It requires three arguments:
1) A one byte command that specifies whether the new file is to over-write an existing file in the target directory with the same name, or should be appended to the end of such a file. The choices are **C** for copy or **A** for append.
2) The full pathname of the source file in a fixed length 125 byte string.
3) The full pathname of the target file also in a fixed length 125 byte string.

It is very important to understand that the data passed to XFR must be in standard Comet fixed length field format. Here is what the code would look like:

```
Length 1 & Local Command$
Length 125 & Local SourceFile$ TargetFile$
```

```
ToSystemBuffer: Format_
     Command$;_
     SourceFile$;_
     TargetFile$

Command$ = "C"
SourceFile$ = "F:\directory\filename.ext"
TagetFile$ =  "F:\otherdirectory\filename.ext"

Write (#,ToSystemBuffer)
Enter "XFR"
```

Included with XFR is another ENTER program, EXISTS. EXISTS can be used to determine if a file exists in Windows. You put the full path name of the file in the system buffer and ENTER "EXISTS"

If the file does exist the EXISTS program will return the word EXISTS in the system buffer. If the file does not exist, the program will return the complete DOS error message returned by Comet.

If it is important to your application that only new data be passed to an outside application, you can use the EXISTS tool to determine if you can use Copy or Append with XFR.

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