Bob Bressler BBN 6 April 1973

Free File Transfer

In the past several months, many people have commented to me about their difficulty in transferring files. The hang up appears to be with systems that have some flavor of security, but on which the user has no access privileges. Specifically, the FTP server demands a user and password before it will grant any system access. The loophole which people have been using is the MAIL FILE facility, which is both limited in scope and intended for other purposes.

A frequently used model for file protection is to define three levels of user access: 1) only the user himself; 2) all users in a group; 3) everyone. Up until now, "everyone" has meant anyone already granted logon privileges. A new class is, perhaps, needed to cover everyone, exclusive of whether or not they are logged on.

With all this in mind, I propose the following course of action:

If a user connects to an FTP server and makes a file request without supplying a user name-password, the server should then examine the file access parameters. If the file is listed as accessible to anyone, then the transfer should be allowed to proceed.

This scheme can be implemented so as not to yield file creations privileges - for example, store commands can be implemented via an append mechanism. If I wanted a file sent to me I could create an empty file with unlimited append access. I would then inform the foreign user to store (append?) to that file.

The problem of accounting is somewhat more complex. Clearly, storing a file in a user's directory can be charged to that user. When retrieving a file from a general system directory, there is no "user" specified, and overhead may have to be billed. The former case involved both CPU time for transfer and secondary storage charges for storing the new file. In the latter case, only CPU charges are involved, and these may be sufficiently small to not cause a major problem.

BBN TENEX has agreed to modify their FTP server to allow general access transfers as described above. Specific details for usage will be available when installation is complete. I urge other systems to make this service available, if only on an experimental basis. The success of such an experiment will be judged by the reaction of the general user

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community and the uses to which FTP is put.

NOTE: Bob Clements tells me that the BBN TENEX implementation will probably require a user name of something like "FREE" or "ANONYMOUS", but not require a password.

RB/jm

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