                    The UCSD-CC Server-FTP Facility

1.0 Introduction

   The UCSD Computer Center is a service site that must support itself
   by charging for the usage of its facilities. Because of this, the
   prospective user of our Server-FTP must supply a valid usercode
   (USER) and password (PASS) before any further FTP commands are
   accepted.

   Through FTP, you are allowed to access or store files on our disk or
   on any of our 7 or 9-track tape drives. Each individual file
   transfer is handled by a separate process on the B6700 and the user
   is charged for the processor, I/O, core, and (if any) tape charges
   incurred by this process (note that these charges are quite minimal).
   Each of these transfer processes is given a separate "job" number and
   is therefore billed separately for each transfer by our accounting
   system.

   Please note that we have implemented FTP as defined in RFC# 354 (July
   8, 1972) except as noted.

2.0 FTP Commands

(1)   USER

      As mentioned, you must supply a legal, known, UCSD--CC user-code.
      Following which, the "230" message will be given, asking for the
      corresponding password.

(2)   PASS

      After the ‘USER’ command is accepted, you must then enter the PASS
      command giving the corresponding password. If the usercode and
      password are of correct form, if they match, if there is money in
      your account, if your account is active, and if you are authorized
      for "Q1" service, then you will be properly logged-on and the
      "230" response will be returned.

(3)   BYTE

      We allow only the (default) byte-size of "8" - all others will be
      rejected.

(4)   MODE

       We only allow the (default) mode of "S" (Stream) - all others will
       be rejected

(5)   TYPE

       We allow "A" (ASCII) and "I" (Image) types - all others will be
       rejected. As in standard-FTP, "A" is default.

(6)   STRU

       We allow both "F" (file) and "R" (Record) structuring. Record-
       structuring is meaningful only in ASCII/Stream, where CRLF is used
       as End-of-Line. When using Record-structuring in a STOR to us, if
       an incoming record is longer than the "MAXRECSIZE" of the
       designated B6700 file, then we close the data connection, issue a
       reject message, and abort the local (B6700) transfer process. If
       a record of incoming data is shorter than the specified MAXRECSIZE
       of the file, then the record is filled-out with blanks in type-
       ASCII or with nulls (0) in type-Image. With Image, of course,
       this applies only to the last record of the B6700 file. As in
       standard-FTP, "F" is default.

(7)   ALLO

       We have taken the liberty with the FTP-protocol of using the
       "ALLO" command to enable the user to designate the B6700 "file-
       attributes" of his UCSD file. The FTP-standard form of ALLO is
       ignored (i.e. "ALLO n", where 'n' is some integer), although a
       "200" response will be returned in this case. Our "special" form
       is where the ALLO verb is immediately followed by a "#", which is
       in turn followed by a parenthesized list of standard B6700 file
       attributes as used on B6700 "label-equate" cards. Following is an
       example of this usage;

            ALLO #(KIND=TAPE9,MAXRECSIZE=10,MYUSE=OUT,TITLE=XYZ)

       If this form of the ALLO command is not given prior to a STOR,
       then the file will have the name given prior in the STOR command
       and will have the same characteristics as a standard "CANDE"
       type-DATA disk file (i.e. where (MAXRECSIZE=14, BLOCKSIZE=420,
       AREAS=15, AREASIZE=450)). If no special ALLO is given preceding a
       RETR, then the file attributes are those of the file itself as it
       exists on the disk and are not altered. In cases where the
       special ALLO is given prior to a transfer, the name of the file is
       determined by the TITLE attribute and the name given as the
       pathname of the STOR or RETR command is ignored. If no TITLE is

specified in an ALLO, then the internal filename of "LOCALFILE" is used. With the "file-attribute-list" form of the ALLO command, the user has much of the same liberty to govern file characteristics as he does in using a "label-equate" card with a normal B6700 job. For information concerning the available file attributes and their possible values, please contact the UCSD-CC consultant. Additionally, you must remember that when doing a STOR to a tape at UCSD, you must specify MYUSE=OUT in the file-attribute list of the ALLO command. Also, when transferring to or from tapes at UCSD, you must make prior arrangements with our operators (over TELNET) to locate and mount the tape. We will soon implement a means whereby you may communicate with the operators directly through FTP.

(8)   XLINE

      This special command sets Record-structuring in our Server-FTP without the foreign user having to use a STRU R command (which may be rejected by his own host system). This is specifically useful when transferring text files between UCSD and TENEX's (which do not implement Record-structuring) - i.e., if we are sending, we will append CRLF's to the end of each line of text (we do not store these in the file) and will store a line upon receiving data when a CRLF is seen, stripping the CRLF. Entering "XLINE OFF" will restore File-structuring on our end.

(9)   RETR , STOR

      As specified in standard-FTP except as modified by the "special" ALLO command (see part (7)).

(10) APPE

      Not implemented at this time, but will be in near future.

(11) DELE , RNTO , RNFR

      Not implemented. It is suggested that to perform these functions, the user log to our TELNET server ("CANDE"), invoke the "LIBMAINT" program (simply type LIBMAINT), and say;

            REMOVE file-name
                or
            CHANGE file-name-1 TO file-name-2

      Say BYE in order to exit LIBMAINT.

(12) ABOR, BYE

>   As specified in standard-FTP; except that, until further notice, a
>   BYE given while a transfer is in progress will not be queued for
>   action following the transfer.

  Any commands not mentioned above are not yet implemented.

           [This RFC was put into machine readable form for entry]
     [into the online RFC archives by Helene Morin, Via Genie, 12/1999]