Printed March 22, 2024

This Manual applies to Release 05
Modification 02 or later of FileXfer3X/400™

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For additional information about this product please write to:

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INTRODUCTION

FileXfer3X/400 Features

FileXfer3X/400 will move information to and from any of the supported components: System/36, System/38, AS/400 and S/370 MVS. It has the following major functions:

File Transfer (Upload/Download)

It will move data files from one system to another. Sequential and Indexed files are supported. File record lengths from 4 char to 4088 char are supported. If the file does not exist on the remote system, it will be created.

Member or Object Transfer

It will upload Source File members from a S/38 or AS/400 into a S/36 Library (Source or Proc) and upload S/36 Library members (Source or Proc) into a S/38 or AS/400 Source File. S/36 to S/36 member Xfer supports all library types. S/38 to S/38 object transfer, and S/38 or AS/400 to AS/400 object transfer support all object types.

Save File Transfer

It will transfer the contents of a Save File from a S/38 to a S/38 or AS/400, or from an AS/400 to an AS/400.

User Exec Option

The user can specify a procedure (S/36) or command (S/38, AS/400) or user exit program (S/370) to be executed on the remote system. The process can be started independently or after a transfer has completed. Procedure parms/call parameters passed to the remote procedure are supported. This function is useful if the user wishes to start a job to process after data has been transferred.

File Retrieval

It can retrieve a file on another system and place it into a file on the local system.

Features common to the above functions

+ SNA/SDLC APPC is used: S/3X Upload/Download will run on any configuration which supports SNA/SDLC APPC (including X.25 and Token Ring). It can share a comm. line with Pass thru, DDM, and other APPC applications. If APPN is used, S/3X Upload/Download will participate in the APPN network.

+ No chargeable prerequisites needed: S/3X Upload/Download does not require S/36 IBM's ICF Base or any other chargeable feature to operate.

+ Multiple concurrent transfers supported: Multiple concurrent Upload or Download tasks can be executing concurrently.

+ Data Integrity Maintained: User data on the target system will not be updated permanently until the transfer is completed. For example if a line failure occurs during transmission the target file is not corrupted.

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Data File Transfer Features

+ If the file exists on the target system, transmitted records replace the records in the existing file. If the file does not exist on the target system, it is created using sizing parameters obtained from the source system. Record lengths from 4 to 4088 are supported.

Member/Object Features

+ S/36 All Library member types supported (S/36 <=>S/36).

+ S/36 Source and Proc types supported (S/36 <=> S/38, AS/400).

+ All object types supported, (S/38 <=>S/38, S/38, AS/400 to AS/400) except for i.e. user profiles, device descriptions and modes.

+ Generic Member names or ALL/*ALL supported.

+ Member type (i.e COB/CBL, RPG, BAS) maintained.

Operations

To use the FileXfer3X/400, the user enters commands (S/38, AS/400) or procedures (S/36). All functions can execute on line or in batch. The commands and their functions follow:

System/38 or AS/400 to System/36

S36DWNLD: Transfers the specified S/38 or AS/400 file to the specified S/36 file.

S36DWNMBR: Transfers the specified S/38 or AS/400 source file member(s) to the specified S/36 library.

For a detailed description of the above commands, refer to Chapter 3, "Downloading S/38, AS/400 Information".

System/36 to System/38 or AS/400

S38UPLD: Transfers the specified S/36 file to the specified S/38 or AS/400 file.

S38UPMBR: Transfers the specified S/36 Library member(s) to the specified S/38 or AS/400 source file.

For a detailed description of the above procedures, refer to Chapter 4, "Uploading System/36 Information".

System/36 to System/36

S36XFILE: Transfers the specified S/36 file to the specified S/36 file.

S36XMBR: Transfers the specified S/36 Library member(s) to the specified S/36 Library file.

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For a detailed description of the above procedures, refer to Chapter 5, "System/36 to System/36 Transfer".

System/38 or AS/400 to System/38 or AS/400

XFILE: Transfers the specified file members from the source machine to the target machine.

XOBJ: Transfers the specified objects from the source machine to the target machine.

XSAVF: Transfers the contents of the specified save file from the source machine to the target machine.

For a detailed description of the above procedures, refer to Chapter 6, S/38, AS/400 to S/38 to AS/400 Transfer.

AS/400, System/36, or System/38 to System/370 MVS

XVSAM: Transfers the specified file members from the source machine to an MVS VSAM dataset.

For a detailed description of the above procedures, refer to Chapter 7, AS/400, S/3X to S/370 VSAM Transfer.

AS/400 to MVS (SAM)

XSAM: Transfers the specified file members from the source machine to an MVS SAM dataset.

For a detailed description of the above procedures, refer to Chapter 9, AS/400 to S/370 SAM Transfer.

AS/400 to MVS (Partitioned Dataset)

XPDS: Transfers the specified file members from the source machine to an MVS Partitioned dataset.

For a detailed description of the above procedures, refer to Chapter 10, AS/400 to S/370 PDS Transfer.

AS/400 File Retrieval

R400FILE: Retrieves a file from a remote AS/400 and places the data into a local file.

R36FILE: Retrieves a file from a remote System/36 and places the data into a local file.

RMVSFILE: Retrieves SAM file members and places the data into a local file.

For a detailed description of the above commands and procedures, refer to Chapters 11 and 12, AS/400 and S/36 File Retrieval.

S/36 File Retrieval

R400FILE: Retrieves a file from a remote AS/400 and places the data into a local file.

R36FILE: Retrieves a file from a remote System/36 and places the data into a local file.

RMVSFILE: Retrieves SAM file members and places the data into a local file.

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AS/400 to AS/400 TCP Operations

XTFILE: Transfers the specified file members from the source machine to the target machine.

XTOBJ: Transfers the specified objects from the source machine to the target machine.

XTSAVF: Transfers the contents of the specified save file from the source machine to the target machine.

RT400FILE: Retrieves a file from a remote AS/400 and places the data into a local file.

For a detailed description of the above procedures, refer to Chapter 6, S/38, AS/400 to S/38 to AS/400 Transfer.

IASPs and Multiple FileXfer3X/400 Instances

FileXfer3X/400 product libraries can be placed onto Basic and Independent ASPs, giving the Administrator great flexibility. Multiple instances of FileXfer3X/400 can be running within an LPAR. Each FileXfer3X/400 instance is independent of the other instances.

INSTALLATION

BEFORE YOU BEGIN:

1. A compatible release of FileXfer must be installed on all systems which will be sending or receiving data.

2. Use these instructions if you are installing FileXfer3X/400 for the first time. If you are updating your existing FileXfer software to a new release, use the Update Instructions provided with the update package.

3. FileXfer/370 users: Refer to the "FileXfer/370 Reference Manual" for setting up the S/370, and for example S/3X, AS/400 to S/370 configurations. Use this manual to install FileXfer on the S/3X or AS/400.

4. A temporary password is needed once FileXfer is installed. The same temporary password will work on all machines. If you plan to install FileXfer after business hours, you may wish to call Broderick Data Systems in advance to get your temporary password.

5. AS/400 Users: The install procedure will create a user profile BDSUSER, password BDSPASS. See Appendix B, "AS/400 Security Considerations" for more information.

6. If you already have an instance of FileXfer running on this LPAR, or you have one of our other products on this LPAR, you will need to update them **before** installing this instance. Refer to Appendix F, Release Compatibility for more information. Failure to do so could cause other BDS software to stop working after this instance is installed.

7. If you plan to install more than one instance of FileXfer on this LPAR, or you plan to install FileXfer onto APSs other than the System ASP (ASP 1), refer to Appendix E, "ASP Considerations" prior to performing the install.

Prerequisites

The following hardware and system software is needed to execute FileXfer. Please insure that all needed equipment and system software is installed before beginning the installation.

AS/400

+ OS/400 Version 07 Release 02 Modification 00 or later.

+ Properly configured Line, Control Unit, Device Descriptions. Please note that if you are currently using Pass Thru or other communications software which uses APPC, you have already configured the required objects.

+ For TCP operation:
  - TCP/IP Connectivity Utilities (57xx-TC1)
+ For TCP operation with Secure Socket layer (SSL):
  - IBM HTTP Server for AS/400 (57xx-DG1)
  - Digital Certificate Manager (Product Option 34)

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- Cryptographic Access Provider for AS/400 (57xx-AC3)

System/36

+ SSP Release 5.1 or later.

+ SSP feature code 6001, Base Communications. (Please note that 6001 is a no charge feature from IBM. Also note that it is a prerequisite for Pass Thru, DDM, and other IBM SSP communications features).

+ Properly configured ICF Line Member and Subsystem Member Descriptions. Please note that if you are currently using Pass Thru or other communications software which uses APPC, you have already configured the required objects.

Please note that FileXfer3X/400 must be installed on each system which will be uploading or downloading data.

AS/400 Installation

WARNING: Refer to "Before you begin" on page 2-1 before proceeding.

1) Sign on as QSECOFR

2) Load the media.

3) Restore the install objects. Enter one of the following:

If you are using Tape:

> **RSTOBJ OBJ(BXFERIN*) SAVLIB(XFER40) DEV(xxxxx) VOL(*MOUNTED) RSTLIB(QTEMP)**

If you are using CD-ROM:

> **RSTOBJ OBJ(BXFERIN*) SAVLIB(XFER40) DEV(OPT01) VOL(BDS) RSTLIB(QTEMP) OPTFILE(XFER40)**

If you are using a Save file:

> **RSTOBJ OBJ(BXFERIN*) SAVLIB(XFER40) DEV(*SAVF) SAVF(mylib/myfile) RSTLIB(QTEMP)**

Enter the lib/name of the save file containing library **XFER40**.

4) Execute the install command. Enter one of the following:

INSTALLATION

Note: If you are planning to install FileXfer3X/400 into ASPs other than the system ASP (ASP 1), refer to Appendix E, "ASP Considerations" to determine the values for the xxxASP and xxxASPDEV parameters on the following BXFERINS command. Refer to the command help text for more information regarding the xxxASP and xxxASPDEV parameters.

Note: If you are planning to install FileXfer3X/400 into an IASP, verify that the IASP device's status is **AVAILABLE**. Use the command WRKCFGSTS CFGTYPE(*DEV) CFGD(your-IASP-dev).

If you are using Tape or CD-ROM:

> **QTEMP/BXFERINS DEV(xxxxx)**

If you are using a Save file:

> **QTEMP/BXFERINS DEV(*SAVF) PGMSAVF(mylib/myfile)**

> Enter the save file containing library **XFER40**.

The message "Installation of FileXfer/400 is complete." should appear. If any other message appears, the installation may not have completed properly.

FileXfer3X/400 is now installed on the AS/400.

5)   Access the BDS Software Server (optional).

Note: Your AS/400 must be connected to the Internet to perform this procedure.

a) If you have not done so previously, access the tailoring options screen:

> **BRODERICK/BRSPLSETUP**

b) Note the fields "BDS Access Userid" and "Password". You will need a user ID and password to access some of the server options. If needed, contact BDS administration to get this information. If you add your user id and password, press **ENTER** to enter them and re-enter the setup command.

c) Press F14, E-Comm. The Software Server display will appear. Take note of the options available to you. When you are finished, press F3 to exit

System/36 Installation

WARNING: Refer to "Before you begin" on page 2-1 before proceeding.

1)   Sign on to the System/36 as a security officer.

2)   If FileXfer3X/400 is not the first product from Broderick Data Systems installed on your System/36,

then you may skip this step to proceed with step 3).

Build library BDSLIB. Enter the following command:

BLDLIBR BDSLIB,300,30

3) Restore the media from diskette:

a) Place the diskette into slot 1

b) Enter the following command:

RESTORE XFERLIB

c) Enter the following command:

Note: FileXfer requires 300 blocks and 30 directory sectors.

TOLIBR XFERLIB,F1,,REPLACE,BDSLIB,,,,ALL,LIBRARY Answer 0 to SYS-2594 --
Trying to copy privileged modules.

4) Restore the control file from diskette:

RESTORE BDS.XFCT

FileXfer/36 is now installed on the System/36.

S/38, AS/400 TO S/36 DOWNLOAD

S/38, AS/400 to S/36 File Download

The S36DWNLD Command will transmit a file from the specified System/38 or AS/400 file into the specified System/36 file, and optionally execute a S/36 procedure after the transfer is completed. The file to be transmitted must exist on the System/38 or AS/400.

If the file exists on the System/36, transmitted records will replace the file's existing records. If the System/36 file does not exist, it will be created and the S/36 file's record length will be taken from the System/38 or AS/400 file. The number of records allocated to the System/36 file if created will be taken from the number of active records in the System/38 or AS/400 file (not the allocation from the SIZE parameter). For example if the System/38 or AS/400 file currently has 100 active records, the System/36 file if created will be allocated 100 records.

The System/38, AS/400, and System/36 files' record lengths do not have to be equal. FileXfer3X/400 will truncate or pad with blanks transmitted records as necessary.

S36DWNLD Parameters

At the command line, enter S36DWNLD, then press enter. The following screen should appear:

```
                 Download File to S/36 (S36DWNLD)

 Type choices, press Enter.


 S36 Remote Location Name . . . .                     Name
 Device Mode Entry  . . . . . . .     *NETATR          Name, *NETATR
 File to Transfer . . . . . . . .     *NOCOPY          Name, *NOCOPY
                                      *LIBL            Name, *LIBL
 File Member  . . . . . . . . . .     *FILE            Name, *FILE
 S/36 File Name . . . . . . . . .     *FILE            Character value,*FILE
 Proc to execute after transfer       *NONE


 Data Compression . . . . . . . .     *YES             *YES, *NO
 Records to extend file . . . . .     0                Number
 Target file allow deleted recs       *YES             *YES,  *NO
 Target file type (if create) . .     *SEQ             *SEQ, *IDX
 Target key pos (1=1st pos) . . .     *NONE            1-4092, *NONE
 Target file key length . . . . .     *NONE            1-120,  *NONE
 Target file allow dup keys . . .     *NO              *YES, *NO
                                                          More. . .
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

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```
                      Download File to S/36 (S36DWND)

Type choices, press Enter.


Device. . . . . . . . . . . . . . . . .     *LOC   Name, *LOC
Local Location Name . . . . . . . . .       *LOC   Name, *LOC, *NETATR
Remote Network Identified . . . .           *LOC   Name, *LOC, *NETATR, *NONE



                                                                    Bottom
F3=Exit    F4=Prompt    F5=Refresh    F12=Cancel    F13=How to use this display
F24=More keys
```

The S36DWNLD command has the following parameters:

DEVD Parameter (S/38 only)
Specifies the name of the *PEER device description which communicates to the remote system.

RMTLOCNAME Parameter (AS/400 only)
Specifies the name of the Remote Location Name which communicates to the remote system.

MODE Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description/remote location name specified above.

> *FIRST: (S/38 only) The first mode added to the device description during configuration will be used.

> *NETATR: (AS/400 only) The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

FILE Parameter
Specifies the file which is to be transmitted. The file record length must be between 4 and 4092 characters (inclusive).

> *NOCOPY: Specifies that no file is to be downloaded. The user in this case wishes to evoke the System/36 procedure specified in the EXEC parameter without downloading a file.

MEMBER Parameter
Specifies the file member to transmit.

> *FILE: The member name is the same as the file name.

S/38, AS/400 TO S/36 DOWNLOAD

S36FILE Parameter

Specifies the name of the S/36 file to receive the transmitted file.

> <u>*FILE:</u> The System/36 file name is the same as the S/38 or AS/400 file name. If the S/38 or AS/400 file name is longer than 8 characters, the S/36 file name will be truncated to 8 characters.

Note: Lower case characters will be converted to upper case.

Executing a System/36 Procedure

EXEC Parameter

Specifies an optional S/36 procedure to be executed after the file is downloaded. Enter up to 119 characters, appearing as if you were keying from a System/36 command display screen. Lower case characters will be converted to upper case. S/36 features such as parameters and jobq supported.

Notes:
The System/38 or AS/400 task will not complete until the System/36 task, including the EXEC procedure, completes. If the EXEC procedure ends abnormally a message will appear at the System/38 or AS/400 indicating that the transfer did not complete normally even though the file may have been successfully downloaded.

The user may wish to send long running EXEC procedures to the jobq.

If the user wishes to execute a S/36 command without transferring a file, enter FILE(*NOCOPY). See the FILE parameter above for more information.

COMPRESS Parameter

Specifies whether data compression will be performed during transmission. Compression of data during transmission can reduce transmission time. Repetitive characters will be converted into a repetition character. Data compression is totally transparent to the user, and the input data.

> <u>*YES:</u> Data compression will be performed.

> *NO: Data compression will not be performed.

Data compression performance notes:

1) Data compression can increase throughput for 2 reasons; less characters are transmitted, and a large communications record length is used (SNA requires CPU overhead to format a record). Optimum increase in throughput occurs when 1) there are many repetitive characters in the record and 2) the file's record length is small, and 3) the line speed is slow (i.e 4800 baud dial-up).

2) Data compression requires considerable CPU overhead on the System/38 or AS/400.

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The following parameters are used to create the file on the S/36 and are ignored if the S/36 file currently exists:

EXTEND Parameter

Specifies the number of records to extend the created S/36 file when it becomes full.

ALWDEL Parameter

Specifies if the created S/36 file is to allow deleted records.

   *YES: Deleted records are allowed.

   *NO: Deleted records are not allowed.

FILETYPE Parameter

Specifies, if the file does not exist on the target S/36, the type of file to create.

   *CALC: Specifies that FileXfer/3X will determine the file type (sequential or indexed), key starting position and length, and if duplicate keys are allowed.

Notes:
If the S/38 or AS/400 file has more than one key field, the highest order key field will be used and duplicate keys will be allowed.

The S/36 file will be built with an ascending key regardless of the S/38 or AS/400 file definition.

   *IDX: An indexed file will be created. The S/36 file will be built with an ascending key regardless of the S/38 or AS/400 file definition.

   *SEQ: A sequential file will be created.

KPOS Parameter

Specifies the starting position of the record key (1=first pos).

   ***NONE:** Keys will not be used, or are determined by FILETYPE(*CALC).

KLEN Parameter

Specifies the key length, in bytes.

   ***NONE:** Keys will not be used, or are determined by FILETYPE(*CALC).

ALWDUP Parameter

Specifies if duplicate keys are allowed.

   *NO: Specifies for the created S/36 file, duplicate keys will not be allowed, or are determined by

S/38, AS/400 TO S/36 DOWNLOAD

FILETYPE(*CALC).

> *YES: Duplicate keys will be allowed on the created S/36 file.

DEV Parameter (AS/400 Only)

Specifies the APPC/APPN Device description to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

> <u>*LOC:</u> The name specified on the device description (WRKDEVD command) will be used.

LOCLOCNAME Parameter (AS/400 Only)

Specifies the APPC/APPN Local Location Name to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

> <u>*LOC:</u> The Local Location Name specified on the device description (WRKDEVD command) will be used.

> *NETATR: The Default Local Location Name on the Network Attributes Display (DSPNETA command) will be used.

RMTNETID ID Parameter (AS/400 Only)

Specifies the APPC/APPN Network ID to use. Please note this parameter is only needed if more than 1 network ID exists. In all other situations, specify *LOC.

> *LOC: The name specified on the device description (WRKDEVD command) will be used.

> *NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

S36DWNLD Examples

The following example downloads the S/38 file ORDTRAN.DB, member TUESDAY into the S/36 file ORDTRAN. Please note to execute this command on an AS/400, specify FILE(DB/ORDTRAN). It executes a S/36 procedure UPDT in library OEI (i.e. apply downloaded transactions to the master file) after the file is downloaded.:

> **S36DWNLD (DET36) MODE(*BLANK) FILE(ORDTRAN.DB) MEMBER(TUESDAY)**
> **EXEC('UPDT,OEI TUESDAY')**

The following example executes a procedure without downloading a file:

> **S36DWNLD (DET36) MODE(*BLANK) EXEC('CATALOG ALL,F1')**

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Downloading Source Members

The S36DWNMBR command will download S/38 or AS/400 source file members into the Specified S/36 Library, and optionally execute a S/36 procedure after the transfer is completed.

S36DWNMBR Parameters

At the command line, enter S36DWNMBR, then press Help. The following screen should appear:

```
                  Download Source mbrs to S/36 (S36DWNMBR)

 Type choices,press Enter.


 S36 Remote Location Name . . . . .                Name
 Device Mode Entry. . . . . . . . .                Name, *NETATR
 File to Transfer. . . . . . . . . .               Name
                                       *LIBL       Name, *LIBL
 Member name, gen*, or *ALL. . . . . *ALL          Name, generic*, *ALL
 S/36 Library to contain mbrs. . . . *FILE         Character value, *FILE
 Proc to execute after transfer. . . *NONE _____

 _____
 _____
 Date Compression (*YES *NO) . . .   *YES          *YES, *NO
 Device. . . . . . . . . . . . . . . *LOC          Name, *LOC
 Local Location Name . . . . . . . . *LOC          Name, *LOC, *NETATR
 Remote Network Identifier . . . . . *LOC          Name, *LOC, *NETATR, *NONE


                                                                         Bottom
 F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
 F24=More keys
```

The S36DWNMBR command has the following parameters:

DEVD Parameter (S/38 only)
Specifies the name of the *PEER device description which communicates to the remote system.

RMTLOCNAME Parameter (AS/400 only)
Specifies the name of the Remote Location Name which communicates to the remote system.

MODE Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the

device description/remote location name specified above.

> *FIRST: (S/38 only) The first mode added to the device description during configuration will be used.

> *NETATR: (AS/400 only) The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

FILE Parameter
Specifies the qualified S/38 or AS/400 Source file which contains the members to be transmitted.

MEMBER Parameter
Specifies the file member to transmit. The member name can be generic, or *ALL.

> ALL: All members in the specified file will be downloaded.

S36LIB Parameter
Specifies the name of the S/36 Library to receive the transmitted file. The library must currently exist on the target S/36.

> *FILE: The System/36 Library name is the same as the S/38 file name. If the S/38 file name is longer than 8 characters, the S/36 Library name will be truncated to 8 characters.

Note: Lower case characters will be converted to upper case.

LIBTYPE Parameter
Specifies the member type (source or procedure) when the member is placed into the S/36 Library. The record length assigned to the S/36 member is taken from the value specified using the BXFERSETUP command. To change the member record length, refer to Appendix A, "Tailoring FileXfer3X/400".

> SOURCE: The downloaded members will become source members when placed into the S/36 Library.

> PROC: The downloaded members will become procedure members when placed into the S/36 Library.

Executing a System/36 Procedure

EXEC Parameter
Specifies an optional S/36 procedure to be executed after the source file member is downloaded. Enter up to 119 characters, appearing as if you were keying from a System/36 command display screen. Lower case characters will be converted to upper case. S/36 features such as procedure parameters and jobq are supported.

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Notes:

The System/38 or AS/400 task will not complete until the System/36 task, including the EXEC procedure, completes. If the EXEC procedure ends abnormally a message will appear at the System/38 or AS/400 indicating that the transfer did not complete normally even though the members may have been successfully downloaded.

The user may wish to send long running procedures to the jobq.

If the user wishes to execute a S/36 command without transferring a file, use the S36DWNLD command and specify FILE(*NOCOPY). See the S36DWNLD command; FILE parameter earlier in this chapter for more information.

COMPRESS Parameter

Specifies whether data compression will be performed during transmission. Compression of data during transmission can reduce transmission time. Repetitive characters will be converted into a repetition character. Data compression is totally transparent to the user, and the input data.

    *YES: Data compression will be performed.

    *NO: Data compression will not be performed.

Data compression performance notes:

Because there is usually many blanks in source and procedure members, data compression usually greatly increases throughput when downloading source file members.

S36DWNMBR Examples

The following command downloads the member AR0030 in the S/38 Source file S36ARSRC into the S/36 Library AR. The member becomes a source member when placed into the S/36 Library. The procedure COMPAR in library PGMR (i.e. a user written proc to compile the member) is executed after the member is downloaded:

    S36DWNMBR DEVD(DET36) MODE(*BLANK) FILE(QS36SRC) MEMBER(AR0030)
        S36LIB(AR) EXEC('// JOBQ PGMR,COMPAR,AR0030,AR')

The following command downloads all members in file S36ARPROC into the S/36 Library AR. The members become procedures when placed into the S/36 Library. Data compression is not used:

    S36DWNMBR DEVD(DET36) MODE(*BLANK) FILE(QS36PRC)
        S36LIB(ALIBTYPE(PROC) COMPRESS(*NO)

UPLOADING SYSTEM/36 INFORMATION

S/36 to S/38, AS/400 File Upload

The S38UPLD command will transmit the specified S/36 file to the remote System/38, AS/400 and place it into the specified file library member. The file must exist on the S/36.

If the file exists in the System/38 or AS/400, transmitted records will replace the file's existing records. If the file does not exist, it will be created using the S/36 file record length. The created file will be allocated the same number of records as the S/36 file, with 1 additional increment of 1/5 the allocated records. For example if the S/36 file is allocated 100 records, the S/38 or AS/400 file if created will be created with SIZE(100 20 1).

The System/36 and System/38 or AS/400 record lengths do not have to be equal. FileXfer3X/400 will truncate or pad with blanks as necessary.

S38UPLD Parameters

At the command line, enter S38UPLD then press Help. The following screen should appear:

```
                         S38UPLD PROCEDURE
                                               Optional-*
                    Upload a S/36 file to a S/38 file


S/36 file name . . . . . . . . . . . . . . file name,  *NOCOPY
S/38 file name . . . . . . . . . . . . . . . . . . . . . . . .
        Library . . . . . . . . . . . . . . . . . . . . . . .
         Member . . . . . . . . . . . . . . . . . . . . . . .
Remote location name . . . . . . . . . . . . . . . . . . . . .
Session group name . . . . . . . . . . . . . . . . . . . . . .
Compress . . . . . . . . . . . . . . . . . . . . . . . Y,N          *
Exec command . . . . . . . . . . . . . . . . . . . . .cmd, *LDA      *


APPC Userid. . . . . . . . . . . . . . . . . Name, *NONE, *USER      *
APPC Password. . . . . . . . . . . . . . . . . .Name, *NONE          *



                                         Cmd7: Exit
                                         Help
                              Copyright 1988, Broderick Data Systems
```

Or, on the command line, you can enter the following:
    S38UPLD S/36 file name, remote file name, remote library, remote member, APPC remote location, APPC session group, compress, exec, APPC user ID, APPC password.

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The S38UPLD proc uses the following positional parameters:

S/36 File Name
Specifies the name of the file on the local System/36 to transmit.

Remote File Name
Specifies the name of the file residing on the remote System/38 or AS/400 which is to receive the data.

Remote Library Name
Specifies the name of the library where the file resides on the remote system.

Remote Member
Specifies the System/38 file member to receive the data.

APPC Remote Location
Specifies the Remote Location defined (when configuring the ICF Subsystem member) to communicate to the remote System/38.

APPC Session Group
Specifies the APPC session group defined (when configuring the ICF Subsystem member) to use during transmission.

Compress
Specifies whether data compression will be performed during transmission. Compression of data can reduce transmission time. Repetitive characters will be converted to a repetition character. Data compression is totally transparent to the user and the input data.

> Y: Data compression will be performed.

> N: Data compression will not be performed.

Exec
Specifies a S/38 or AS/400 command to execute after the upload completes. Enter up to 256 characters, appearing as if you typed them on the S/38 or AS/400 command entry screen. The double quote character (") will be converted to a single quote (') before executing the command.

*LDA
Specifies that the exec command has been placed in the Local Data Area, starting a position 257. The user may find this option useful when the intended command will not fit on the command line (the S/36 command line is a maximum of 119 characters, much of which is used for the S38UPLD command).

APPC User ID
Specifies the APPC User Profile the target task will use.

UPLOADING SYSTEM/36 INFORMATION

  *DFT: The setup screen (XFCTRL) will provide the user ID and password values.

  *NONE: No userid or password will be sent. The remote system must have a valid Default User ID in
  its Subsystem Communications Entry.

Note: FileXfer/400 creates a user profile BDSUSER with password BDSPASS when installed. We
recommend using BDSUSER,BDSPASS when sending to an AS/400 and *NONE,*NONE when sending
to a S/38.

APPC Password
Specifies the APPC password sent to the remote system.

  *NONE: No password is sent to the remote system.

  *USER: The AVI (Already verified indicator) flag is sent to the remote system.

S38UPLD Examples

The following example uploads the S/36 file ORD.W1 to the S/38 file ORDTRAN in library DB, member
TUESDAY. A job is submitted (i.e. to apply the transmitted records) after the transmission completes.
Note that the S/38 command is placed into the Local Data Area prior to performing the upload. To execute
the EXEC command on an AS/400, change the call program to OEI/UPDTORD:

  **// LOCAL OFFSET-257,DATA-'SBMJOB JOBD(UPDATE) RQSDTA("CALL UPDTORD.OEI
    (""""TUESDAY"""" """"MANSFIELD"""")")'**

  S38UPLD ORD.W1,ORDTRAN,DB,TUESDAY,L36DET,*BLANK,,*LDA

The following example uploads the S/36 file GL.TMGEN into the S/38 file S36TRAN in library DB,
member S36TRAN. Data compression is not used. A display active job command is executed after the
transfer occurs.

  S38UPLD GL.TMGEN,S36TRAN,DB,S36TRAN,L36DET,*BLANK,N,DSPACTJOB

Uploading Library Members

The S38UPMBR command will transmit the specified S/36 Library member(s) to the remote System/38 or
AS/400 and place them into the specified source file. The Library and member(s) must exist on the S/36.

If the file exists in the System/38 or AS/400, transmitted members will replace the S/38 or AS/400 file's
existing members. If the remote source file does not exist, it will be created. The created file will be
allocated records using the default SIZE parameters for the CRTSRCPF command.

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The System/36 and System/38 record lengths do not have to be equal. S/3X Upload/Download Utilities will truncate or pad with blanks as necessary.

S38UPMBR Parameters

At the command line enter S38UPMBR, then press enter. The following screen should appear:

```
                         S38UPMBR PROCEDURE

                                                      Optional-*
                   Upload a S/36 member to a S/38 file member


         S/36 member name . . . . . . . . . . . . .
         ALL for generic copy . . . . . . . . . . . . . ALL          *
         Member type. . . . . . . . . . . . . . . .SOURCE,.PROC      *
         S/36 library name. . . . . . . . . . . . . . . . . .
         S/38 file name . . . . . . . . . . . . . . . . . . .
                     Library . . . . . . . . . . . . . .
         Remote location name:. . . . . . . . . . . . . . . .
         Session group name:. . . . . . . . . . . . . . . . .
         Compress:. . . . . . . . . . . . . . . . . . . .Y,N         *
         Exec command . . . . . . . . . . . . . . . .cmd, *LDA       *
         APPC User ID:. . . . . . . . . . . Name, *NONE, *USER       *
         APPC User Password . . . . . . . . . . . .Name, *NONE       *


                                         Cmd7: Exit
                                         HELP
                            Copyright 1988, Broderick Data Systems
```

Or, on the command line, you can enter the following:
S38UPMBR S/36 member name, ALL,mbr type, S/36 library, remote file name, remote library, APPC remote location, APPC session group, compress, exec, APPC user ID, APPC password.

The S38UPMBR proc uses the following positional parameters:

S/36 Member Name
Specifies the name of the file on the local System/36 to transmit.

ALL: Specifies that all members of the specified type will be uploaded.

ALL

UPLOADING SYSTEM/36 INFORMATION

Specify ALL to upload the generic member name. This parameter is ignored if ALL is specified as the member name.

Mbr Type
Specifies the member type to upload.

    <u>SOURCE:</u> Specifies to upload source members.

    PROC: Specifies to upload procedure members.

S/36 Library
Specifies the System/36 library containing the members.

Remote File Name
Specifies the name of the file residing on the remote System/38 or AS/400 which is to receive the uploaded S/36 members.

Remote Library Name
Specifies the name of the library where the file resides on the remote system.

APPC Remote Location
Specifies the Remote Location defined (when configuring the ICF Subsystem member) to communicate to the remote System/38.

APPC Session Group
Specifies the APPC session group defined (when configuring the ICF Subsystem member) to use during transmission.

Compress
Specifies whether data compression will be performed during transmission. Compression of data can reduce transmission time. Repetitive characters will be converted to a repetition character. Data compression is totally transparent to the user and the input data.

    <u>Y:</u> Data compression will be performed.

    N: Data compression will not be performed.

Exec
Specifies a S/38 or AS/400 command to execute after the upload completes. Enter up to 256 characters, appearing as if you typed them on the S/38 or AS/400 command entry screen. The double quote character (") will be converted to a single quote (') before executing the command.

*LDA
Specifies that the exec command has been placed in the Local Data Area, starting a position 257. The user

may find this option useful when the intended command will not fit on the command line (the S/36 command line is a maximum of 119 characters, much of which is used for the S38UPLD command).

APPC User ID

Specifies the APPC User Profile the target task will use.

> *DFT: The setup screen (XFCTRL) will provide the user ID and password values.

> *NONE: No userid or password will be sent. The remote system must have a valid Default User ID in its Subsystem Communications Entry.

Note: FileXfer/400 creates a user profile BDSUSER with password BDSPASS when installed. We recommend using BDSUSER,BDSPASS when sending to an AS/400 and *NONE,*NONE when sending to a S/38.

APPC Password

Specifies the APPC password sent to the remote system.

> *NONE: No password is sent to the remote system.

> *USER: The AVI (Already verified indicator) flag is sent to the remote system.

S38UPMBR Examples

The following example uploads the S/36 member AR0030 in Library AR to the S/38 file ARSRC in library PGMSRC. A job is submitted (i.e. to compile the transmitted member) after the upload completes. Note that the S/38 command is placed into the Local Data Area prior to performing the upload. To execute the EXEC on an AS/400, change the CRTRPGPGM command to AS/400 syntax:

> **// LOCAL OFFSET-257,DATA-'SBMJOB JOBD(UPDATE) RQSDTA("CRTRPGPGM AR0030.TEST SRCFILE(QRPGSRC.TEST)")'**

> **S38UPMBR AR0300,,AR,ARSRC,PGMSRC,L36DET,*BLANK,,*LDA**

The following example uploads all S/36 procedure members in the library PAYROLL into the S/38 file QRPGSRC in library QPGMR. Data compression is not used. A display active job command is executed after the transfer occurs.

> **S38UPMBR ALL,,PROC,PAYROLL,QRPGSRC,QPGMR,L36DET, *BLANK,N,DSPACTJB**

SYSTEM/36 TO SYSTEM/36 TRANSFER

S/36 to S/36 File Transfer

The S36XFILE command will transmit the specified S/36 file to the remote System/36 and place it into the specified file. The file must exist on the source S/36.

If the file exists on the target System/36, transmitted records will replace the target S/36 file's existing records. If the S/36 file does not exist, it will be created using the source S/36 file record length. The created file will be allocated the same number of records as the source S/36 file.

The source and target files' record lengths do not have to be equal. FileXfer/3X will truncate or pad with blanks as necessary.

S36XFILE Parameters

At the command line enter S36XFILE, then press Help or Enter. The following screen should appear:

```
          S36XFILE PROCEDURE                Optional-*


          Transfer a local S/36 file to a remote S/36


  Local file name . . . . . . . . . file name, *NOCOPY
  Remote file name . . . . . . . . . . . . . . . . . .              *
  Remote location name:. . . . . . . . . . . . . . .
  Session group name:. . . . . . . . . . . . . . . .
  Compress:. . . . . . . . . . . . . . . . . . . ..Y,N             *
  Exec command:. . . . . . . . . . . . . . . cmd, *LDA             *




                                     Cmd7:Exit
                                     HELP
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```

Or, on the command line, you can enter the following:
    S36XFILE source file name, target file name, remote location, APPC session group, compress, exec.

The S36XFILE proc uses the following positional parameters:

Source File Name
Specifies the name of the file on the source (local) System/36 to transmit.

*NOCOPY: No file is transferred. This option is useful if the user wishes to execute a procedure on the

target without transferring data.

Target File Name
Specifies the name of the file residing on the remote System/36 which is to receive the data. If not specified, the source file name is used.

Remote Location
Specifies the Remote Location defined (when configuring the ICF Subsystem member) to communicate to the remote System/36.

Session Group
Specifies the APPC session group defined (when configuring the ICF Subsystem member) to use during transmission.

Compress
Specifies whether data compression will be performed during transmission. Compression of data can reduce transmission time. Repetitive characters will be converted to a repetition character. Data compression is totally transparent to the user and the input data.

Y: Data compression will be performed.

N: Data compression will not be performed.

Exec
Specifies a procedure to execute after the upload completes. Enter up to 119 characters, appearing as if you typed them on the S/36 commend entry screen. The double quote character (") will be converted to a single quote (') before executing the command.

*LDA
Specifies that the exec command has been placed in the Local Data Area, starting at position 257. The user may find this option useful when the intended command will not fit on the command line (the S/36 command line is a maximum of 119 characters, much of which is used for the S36XFILE command).

S36XFILE Examples

The following example uploads the file ORD.W1 to the target file ORD.W1. A job is submitted (i.e. to apply the transmitted records) after the transmission completes. Note that the target S/36 proc is placed into the Local Data Area prior to performing the upload.

// LOCAL OFFSET-257,DATA-'// JOBQ ,UPDATE,W1,"TUESDAY"'

S36XFILE ORD.W1,,L36DET,*BLANK,,*LDA

SYSTEM/36 TO SYSTEM/36 TRANSFER

The following example uploads the GL.TMGEN into the target S/36 file S36TRAN . Data compression is not used. A CATALOG proc is executed after the transfer occurs.

S36XFILE GL.TMGEN,S36TRAN,DB,S36TRAN,L36DET,*BLANK,N,'CATALOG ALL,F1'

The following example executes the procedure BACKUP on the remote S/36. No data is transferred.

S36XFILE *NOCOPY,,L36DET,*BLANK,,'// JOBQ ,BACKUP'

Transferring Library Members

The S36XMBR command will transmit the specified S/36 Library member(s) to the remote System/36 and place them into the specified library. The Library and member(s) must exist on the source S/36. The target S/36 library must exist. If the transferred members exists on the target System/36, transmitted members will replace the target S/36 members.

S36XMBR Parameters

At the command line, enter S36XMBR then press Help or Enter. The following screen should appear:

```
        S36XMBR PROCEDURE                            Optional-*


            Transfer S/36 library members to a remote S/36


    S/36 member name . . . . . . . . . . . . . . . . .
    ALL for generic copy . . . . . . . . . . . . .  ALL                *
    Member type. . .   SOURCE, PROC, LOAD, SUBR, LIBRARY               *
    Local S/36 library name. . . . . . . . . . . . .
    Remote S/36 Library name . . . . . . . . . . . .
    Remote location name . . . . . . . . . . . . . .
    Session group name . . . . . . . . . . . . . . .
    Exec command . . . . . . . . . . . . . . . . .cmd, *LDA            *



                                        Cmd7:Exit
                                         HELP
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```

Or, on the command line, you can enter the following:

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S36XMBR source member name, ALL, mbr type, source library name, target library name, remote location, APPC session group, exec.

The S36XMBR proc uses the following positional parameters:

Source Member Name
Specifies the name of the member on the local System/36 to transmit.

ALL: Specifies that all members of the specified type will be transferred.

ALL
Specify ALL to upload the generic member name. This parameter is ignored if ALL is specified as the member name.

Mbr Type
Specifies the member type to upload.

SOURCE: Specifies to transfer source members.

PROC: Specifies to transfer procedure members.

SUBR: Specifies to transfer subroutine members.

LOAD: Specifies to transfer load modules.

LIBRARY: Specifies to transfer all types.

Source Library Name
Specifies the name of the library on the local System/36 which contains the members to be transmitted.

Target Library Name
Specifies the name of the library on the remote S/36 which is to contain the transferred members.

Remote Location
Specifies the Remote Location defined (when configuring the ICF Subsystem member) to communicate to the remote System/36.

Session Group
Specifies the APPC session group defined (when configuring the ICF Subsystem member) to use during transmission.

Exec
Specifies a S/36 procedure to execute after the transfer completes. Enter up to 256 characters, appearing

SYSTEM/36 TO SYSTEM/36 TRANSFER

as if you typed them on the S/36 command entry screen. The double quote character (") will be converted to a single quote (') before executing the command.

*LDA
Specifies that the exec command has been placed in the Local Data Area, starting a position 257. The user may find this option useful when the intended command will not fit on the command line (the S/36 command line is a maximum of 119 characters, much of which is used for the S36XMBR command).

S36XMBR Examples

The following example transfers the local S/36 member AR0030 in Library AR to the remote S/36 library ARSRC. A job is submitted (i.e. to compile the transmitted member) after the upload completes. Note that the procedure is placed into the Local Data Area prior to performing the upload.

> **// LOCAL OFFSET-257,DATA-'// JOBQ ,RPGC,AR0030'**

> **S36XMBR AR0300,,,AR,ARSRC,L36DET,*BLANK,*LDA**

The following example transfers all S/36 procedure members in the library PAYROLL into the remote S/36 library PGMR. A LISTLIBR command is executed after the transfer occurs.

> **S36XMBR ALL,,PROC,PAYROLL,PGMR,L36DET,*BLANK,'LISTLIBR ALL'**

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File Transfer

The XFILE command will transmit the specified data file from a S/38 or AS/400 to a S/38 or AS/400. Up to 50 members can be specified, each generic, or *ALL. If the file exists on the target system the transmitted records will replace the existing records. If the file does not exist on the target system, it will be created. Since DDS will not be used, the created file will be a sequential, internally described file.

XFILE Parameters

At the command line enter XFILE then press Enter. The following screen should appear:

```
                 Transfer files to S/38, AS/400 (XFILE)


 Type choices, press Enter.


 Remote Location Name . . . . . . . . . . . . . Name
 Device Mode Entry . . . . . .   *NETATR      Name, *NETATR
 From file  . . . . . . . . . .  *NOCOPY      Name, *NOCOPY
                                     *LIBL     Name, *LIBL
 To File  . . . . . . . . . . .*FROMFILE    Name, *NOCOPY, *FROMFILE
                                    *LIBL      Name, *LIBL
 From File Member, Gen*, *AL. .  *FILE        Name, generic*, *FILE, *ALL
              + for more values
 To File Member .. . . . . .     *FROMMBR     Name, *FROMMBR
 Cmd to execute after transfer . *NONE



 Device . . . . . . . . . . . .*LOC          Name, *LOC
 Local Location Name  . . . . . *LOC          Name, *LOC, *NETATR
 Remote Network Identifier . .   *LOC          Name, *LOC, *NETATR, *NONE
                                                              More...
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

FILEXFER3X/400™

```
                 Transfer files to S/38, AS/400 (XFILE)


Type choices, press Enter.



APPC Security User Profile. . . . .*DFT       Name, *DFT, *NONE, *USER
APPC Security Password . . . . . . *NONE      Name, *NONE
Target System ASP Group Name . . . *NONE      Name, *DFT, *NONE



F3=Exit  F4=Promt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More Keys
```

The XFILE command has the following parameters:

DEVD Parameter (S/38 only)
Specifies the name of the *PEER device description which communicates to the remote system.

RMTLOCNAME Parameter (AS/400 only)
Specifies the name of the Remote Location Name which communicates to the remote system.

MODE Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

*FIRST: (S/38 only) The first mode added to the device description during configuration will be used.

*NETATR: (AS/400 only) The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

FROMFILE Parameter
Specifies the file on the source system to be transferred. The file's record length must be between 4 and 4088 characters (inclusive).

*NOCOPY: Specifies that no file is be transferred. The user in this case wishes to execute a command on the remote system without transferring data.

TOFILE Parameter
Specifies the name of the file on the target system which is to receive the transferred records.

*FROMFILE: The file on the target system is the same as the file on the source system.

FROMMBR Parameter

Specifies the members to transfer. Specify up to 50 members, each can be generic, or specify *ALL. If the member exists within the file on the target system, the transmitted records will replace the existing records. If the member does not exist, it will be added to the target file.

*FILE: The member name is the same as the file name.

*ALL: All members in the file are to be transferred.

TOMBR Parameter

Specifies the member name on the target system to contain transferred records. The TOMBR parameter is ignored if on the FROMMBR parameter a) more than one member is specified, b) a generic member is specified, or c) *ALL is specified.

*FROMMBR: The member on the target system will be the same as on the source system.

EXEC Parameter

Specifies the command to be executed, using QCAEXEC (S/38) or QCMDEXC (AS/400), after all records are transferred to the target system successfully. Any double quote (") encountered in the EXEC string will be changed to a single quote ('). Lower case letters will be translated to upper case.

*NONE: No command is to be executed after the transfer completes. Please note if FROMFILE(*NOCOPY) is specified, EXEC cannot be *NONE.

DEV Parameter (AS/400 Only)

Specifies the APPC/APPN Device description to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

LOCLOCNAME Parameter (AS/400 Only)

Specifies the APPC/APPN Local Location Name to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The Local Location Name specified on the device description (WRKDEVD command) will be used.

*NETATR: The Default Local Location Name on the Network Attributes Display (DSPNETA command) will be used.

RMTNETID Parameter (AS/400 Only)

Specifies the APPC/APPN Network ID to use. Please note this parameter is only needed if more than 1 network ID exists. In all other situations, specify *LOC.

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<u>*LOC:</u> The name specified on the device description (WRKDEVD command) will be used.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

TGTASPGRP Parameter (AS/400 Only)

Specifies the ASP Group on the target system containing the File Xfer product Library. For more information refer to the File Xfer User Guide, Appendix E, ASP Considerations. Specify the ASP Group Name or one of the following

<u>*DFT:</u> The values specified on the setup screen (BXFERSETUP command) are used. This option allows the user to change ASP Group information at one location for all FileXfer commands.

*NONE: The File Xfer Pgms library is in the *SYSBAS ASP, so no ASP Group is needed.

XFILE Examples

The following command transfers the file CUSTMAST to the remote system. After the transfer, a completion message will be sent to the system operator's message queue:

S/38
    XFILE DEVD(RMTA) MODE(BATCH) FROMFILE(CUSTMAST.DATALIB)
            EXEC('SNDMSG ''CUSTOMER TRANSFER DONE'' QSYSOPR')

AS/400
    XFILE RMTLOCNAME(RMTA) MODE(BATCH) FROMFILE(DATALIB/CUSTMAST)
            EXEC('SNDMSG ''CUSTOMER TRANSFER DONE'' QSYSOPR')

The following command copies the specified source file members to the remote system:

S/38, AS/400
    XFILE (RMTA) MODE(BATCH) FROMFILE(QCLSRC) MBR (ABC* MAINCL)

Object Transfer

The XOBJ command will transfer objects from a S/38 to S/38, or from a S/38 or AS/400 to an AS/400 (Object transfer from an AS/400 to a S/38 is not supported by CPF and OS/400).

Note: Object transfer utilizes the RSTOBJ command on the target system, which in certain circumstances will not restore desired objects. Some examples are:
    - Object owner is different on the source and target systems.
    - File Level different on the source and target systems.

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- Based on Physical File for Logical File not found.

The user must insure the object transfer completes normally and that objects are not skipped for the above (or other) reasons.

XOBJ Parameters

At the command line enter XOBJ then press Enter. The following screen should appear:

```
                    Copy objects to Rmt AS/400 (XOBJ)

Type choices, press Enter.


Remote Location Name. . . . . .              Name
Device Mode Entry . . . . . . .              Name, *NETATR
Object names, generic* or *ALL               Name, generic*, *ALL
        + for more values
From Library (on local system).              Name
To Library (on remote system) .  *FROMLIB    Name, *FROMLIB
Object types. . . . . . .         *ALL        *ALL, *ALRTBL, *CFGL...
        + for more values
Cmd to execute after transfer.   *NONE_____


_____


_____

Device. . . . . . . . . . . . .  *LOC        Name, *LOC
Local Location Name . . . . . .  *LOC        Name, *LOC, *NETATR
Remote Network Identifier . . .  *LOC        Name, *LOC, *NETATR, *NONE
APPC Security User Profile. . .  *DFT        Name, *DFT, *NONE, *USER
                                                                More...
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

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```
                      Copy objects to Rmt AS/400 (XOBJ)


Type choices, press Enter.



APPC Security Password. . . . .  *NONE          Name, *NONE
Target Release. . . . . . . . .  *CURRENT       Character value
Target System ASP Group Name  .  *NONE          Name, *DFT, *NONE


F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
```

The XOBJ command has the following parameters:

DEVD Parameter (S/38 only)
Specifies the name of the *PEER device description which communicates to the remote system.

RMTLOCNAME Parameter (AS/400 only)
Specifies the name of the Remote Location Name which communicates to the remote system.

MODE Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

*FIRST: (S/38 only) The first mode added to the device description during configuration will be used.

*NETATR: (AS/400 only) The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

FROMLIB Parameter
Specifies the library on the source system which contains the objects to be transferred.

TOLIB Parameter
Specifies the library on the target system which is to receive the transferred records.

*FROMLIB: The library on the target system is the same as the library on the source system.

OBJ Parameter
Specifies the objects to transfer. Specify up to 50 objects, each can be generic, or specify *ALL.

*ALL: All objects in the library are to be transferred.

OBJTYPE Parameter
Specifies the object type to be transferred. Specify up to 31 object types, or *ALL.

*ALL: All object types will be transferred to the remote system.

EXEC Parameter

Specifies the command to be executed, using QCAEXEC (S/38) or QCMDEXC (AS/400), after all records are transferred to the target system successfully. Any double quote (") encountered in the EXEC string will be changed to a single quote ('). Lower case letters will be translated to upper case.

DEV Parameter (AS/400 Only)

Specifies the APPC/APPN Device description to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

LOCLOCNAME Parameter (AS/400 Only)

Specifies the APPC/APPN Local Location Name to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The Local Location Name specified on the device description (WRKDEVD command) will be used.

*NETATR: The Default Local Location Name on the Network Attributes Display (DSPNETA command) will be used.

RMTNETID ID Parameter (AS/400 Only)

Specifies the APPC/APPN Network ID to use. Please note this parameter is only needed if more than 1 network ID exists. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

TGTRLS Parameter (AS/400 Only)

Specifies the OS/400 version/release/modification level of the receiving system. For valid values, see the "Target Release" parameter of the IBM SAVOBJ command.

*CURRENT: The current OS/400 release will be used.

ALWSKP Parameter (AS/400 Only)

Specifies the command will continue if some of the specified objects cannot be accessed. Reasons objects are skipped include allocate problems and authority problems.

*NO: If any specified object cannot be processed, the command will fail and issue escape message XFR-

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1000.

*YES: If some specified objects cannot be processed, the command will continue and at successful completion will issue escape message XFR-1091. If no specified objects are processed, the command will fail and issue escape message XFR-1000.

TGTASPGRP Parameter (AS/400 Only)

Specifies the ASP Group on the target system containing the File Xfer product Library. For more information refer to the File Xfer User Guide, Appendix E, ASP Considerations. Specify the ASP Group Name or one of the following

*DFT: The values specified on the setup screen (BXFERSETUP command) are used. This option allows the user to change ASP Group information at one location for all FileXfer commands.

*NONE: The File Xfer Pgms library is in the *SYSBAS ASP, so no ASP Group is needed.

XOBJ Examples

The following example transfers all programs in library TEST on the source system to library PAYROLL on the remote system:

**XOBJ DEVD(RMTA) MODE(BATCH) FROMLIB(TEST) TOLIB(PAYROLL) OBJ(*ALL)
        OBJTYPE(*PGM)**

The following sends several objects of different types to the remote system. The from and to library names are TEST. After the transfer, the program UPDT in library PGMS is executed. Please note that the EXEC command must be in a format that can be understood by the remote system (in this example, the remote system is an AS/400):

**XOBJ DEVD(RMTA) MODE(BATCH) FROMLIB(TEST) OBJ(BXFER* X* S36*)
        OBJTYPE(*CMD *PGM *DTAARA *MSGF)EXEC('CALL PGMS/UPDT
        ("PARM1" "PARM2" "PARM3")')**

Save File Transfer

The XSAVF command will transfer the contents of a Save File from a S/38 to S/38, or from a S/38 or AS/400 to an AS/400 (Object transfer from an AS/400 to a S/38 is not supported by CPF and OS/400).

XSAVF Parameters

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At the command line enter XSAVF then press enter. The following screen should appear:

```
                    Transfer Save files to AS/400 (XSAVF)

 Type choices, press Enter.


 Remote Location Name. . . . . . .              Name
 Device Mode Entry . . . . . . . .              Name, *NETATR
 From file . . . . . . . . . . . .              Name
                                   *LIBL      Name, *LIBL
 To File . . . . . . . . . . . . .*FROMFILE   Name, *FROMFILE
                                   *LIBL      Name, *LIBL
 Cmd to execute after transfer. . *NONE_____
 _____
 _____
 _____
 Device . . . . . . . . . . . . . .*LOC       Name, *LOC
 Local Location Name . . . . . . . *LOC       Name, *LOC, *NETATR
 Remote Network Identifier . . . . *LOC       Name, *LOC, *NETATR, *NONE
 APPC Security User Profile. . . . *DFT       Name, *DFT, *NONE, *USER
 APPC Security Password. . . . . . *NONE      Name, *NONE
 Target System ASP Group Name . .  *NONE      Name, *DFT, *NONE


 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

The XSAVF command has the following parameters:

DEVD Parameter (S/38 only)
Specifies the name of the *PEER device description which communicates to the remote system.

RMTLOCNAME Parameter (AS/400 only)
Specifies the name of the Remote Location Name which communicates to the remote system.

MODE Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

*FIRST: (S/38 only) The first mode added to the device description during configuration will be used.

*NETATR: (AS/400 only) The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine this value.

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FROMFILE Parameter
Specifies the Save file on the source system to be transferred.

TOFILE Parameter
Specifies the name of the Save file on the target system which is to receive the transferred records.

*FROMFILE: The file on the target system is the same as the file on the source system.

EXEC Parameter
Specifies the command to be executed, using QCAEXEC (S/38) or QCMDEXC (AS/400), after all records are transferred to the target system successfully. Any double quote (") encountered in the EXEC string will be changed to a single quote ('). Lower case letters will be translated to upper case.

DEV Parameter (AS/400 Only)
Specifies the APPC/APPN Device description to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

LOCLOCNAME Parameter (AS/400 Only)
Specifies the APPC/APPN Local Location Name to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The Local Location Name specified on the device description (WRKDEVD command) will be used.

*NETATR: The Default Local Location Name on the Network Attributes Display (DSPNETA command) will be used.

RMTNETID ID Parameter (AS/400 Only)
Specifies the APPC/APPN Network ID to use. Please note this parameter is only needed if more than 1 network ID exists. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

TGTASPGRP Parameter (AS/400 Only)
Specifies the ASP Group on the target system containing the File Xfer product Library. For more information refer to the File Xfer User Guide, Appendix E, ASP Considerations. Specify the ASP Group Name or one of the following

*DFT: The values specified on the setup screen (BXFERSETUP command) are used. This option allows the user to change ASP Group information at one location for all FileXfer commands.

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*NONE: The File Xfer Pgms library is in the *SYSBAS ASP, so no ASP Group is needed.

File Transfer Using TCP/IP

The XTFILE command will transmit the specified data file via TCP/IP from an AS/400 to an AS/400. Up to 50 members can be specified, each generic, or *ALL. If the file exists on the target system the transmitted records will replace the existing records. If the file does not exist on the target system, it will be created. Since DDS will not be used, the created file will be a sequential, internally described file.

XTFILE Parameters

At the command line enter XTFILE then press Enter. The following screen should appear:

```
                   Transfer files to AS/400 (TCP) (XTFILE)

 Type choices, press Enter.


 Remote Name or IP address. .   _____
 _____
 _____
 From file  . . . . . . . . . .  *NOCOPY     Name, *NOCOPY
                                   *LIBL      Name, *LIBL
 To File  . . . . . . . . . . . .*FROMFILE   Name, *NOCOPY, *FROMFILE
                                   *LIBL      Name, *LIBL
 From File Member, Gen*, *AL. .  *FILE       Name, generic*, *FILE, *ALL
               + for more values
 To File Member .. . . . . .     *FROMMBR    Name, *FROMMBR
 Cmd to execute after transfer . *NONE
 Remote Server Port Number. . . .*DFT        1-65535, *DFT
                                                                   More...

 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys


```

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```
                  Transfer files to AS/400 (TCP) (XTFILE)

 Type choices, press Enter.



 Use Secure Socket Layer (SSL) . . .*SVR        *SVR, *YES, *NO
 System Store Name  . . . . . . . . *DFT
 System Store Password  . . . . . . *DFT        Character, *NONE
 Application ID   . . . . . . . . . *DFT        Character, *DFT, *NONE
 Security User Profile  . . . . . . *DFT        Name, *DFT, *NONE
 Security Password  . . . . . . . . *DFT        Name, *NONE



 F3=Exit  F4=Promt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More Keys
```

The XTFILE command has the following parameters:

RMTADDR Parameter

Specifies the name or IP address of the remote system. If a name is specified, the sending AS/400 must be able to look up the specified name and determine its IP address. If an IP address is specified, it must be in dotted decimal form (192.168.1.1).

FROMFILE Parameter

Specifies the file on the source system to be transferred. The file's record length must be between 4 and 4088 characters (inclusive).

*NOCOPY: Specifies that no file is be transferred. The user in this case wishes to execute a command on the remote system without transferring data.

TOFILE Parameter

Specifies the name of the file on the target system which is to receive the transferred records.

*FROMFILE: The file on the target system is the same as the file on the source system.

FROMMBR Parameter

Specifies the members to transfer. Specify up to 50 members, each can be generic, or specify *ALL. If the member exists within the file on the target system, the transmitted records will replace the existing records. If the member does not exist, it will be added to the target file.

*FILE: The member name is the same as the file name.

*ALL: All members in the file are to be transferred.

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TOMBR Parameter

Specifies the member name on the target system to contain transferred records. The TOMBR parameter is ignored if on the FROMMBR parameter a) more than one member is specified, b) a generic member is specified, or c) *ALL is specified.

*FROMMBR: The member on the target system will be the same as on the source system.

EXEC Parameter

Specifies the command to be executed, using QCMDEXC, after all records are transferred to the target system successfully. Any double quote (") encountered in the EXEC string will be changed to a single quote (').

*NONE: No command is to be executed after the transfer completes. Please note if FROMFILE(*NOCOPY) is specified, EXEC cannot be *NONE.

Remote Server Port number (SVRPORT) Parameter

Specifies the port number to use to communicate with the FileXfer Server on the receiving system. This value must match the value specified on the Server Attributes on the remote system.

*DFT: The FileXfer Server port number attribute for the Local system will be used for the port number.

Use Secure Socket Layer (SSL) Parameter

Specifies if the Secure Socket Layer (SSL) feature of TCP is used. Specify one of the following:

*SVR: The FileXfer Server on the remote system will determine if SSL will be used.

*YES: SSL will be used.

*NO: SSL will not be used.

Note: SSL requires additional setup on both the sending and receiving machines. Refer to Appendix D, "TCP Considerations" for more information.

System Store Name and Password Parameters

Specifies, for SSL, the System store containing the Digital Certificate to use.

*DFT: The values defined for the Local system's FileXfer Server will be used.

*SYSTEM: The default System Store contains the Digital Certificate.

Application ID (APPLID) Parameter

Specifies, for SSL, the Application ID to use to specify the Digital Certificate.

*DFT: The value defined for the Local system's FileXfer Server will be used.

*NONE: No Application ID is specified. The Digital Certificate to use is the default for the specified System Store.

Security User ID and Password Parameters

Specifies the User ID and Password the source system will send to the target AS/400 when TCP communications is established. If the FileXfer Server on the remote system requires a User ID and Password, these values must match.

*DFT: The values defined for the Local system's FileXfer Server will be used.

*NONE: No Userid or Password is sent.

Object Transfer using TCP/IP

The XTOBJ command will transfer objects from an AS/400 to an AS/400 using TCP/IP.

Note: Object transfer utilizes the RSTOBJ command on the target system, which in certain circumstances will not restore desired objects. Some examples are:
- Object owner is different on the source and target systems.
- File Level different on the source and target systems.
- Based on Physical File for Logical File not found.

The user must insure the object transfer completes normally and that objects are not skipped for the above (or other) reasons.

XTOBJ Parameters

At the command line enter XTOBJ then press Enter. The following screen should appear:

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```
                  Copy objects to Rmt AS/400 TCP (XTOBJ)


Type choices, press Enter.


Remote Name or IP Address  . . . _____
_____
_____
Object names, generic* or *ALL              Name, generic*, *ALL
        + for more values
From Library (on local system).             Name
To Library (on remote system) .  *FROMLIB    Name, *FROMLIB
Object types. . . . . . .         *ALL         *ALL, *ALRTBL, *CFGL...
        + for more values
Cmd to execute after transfer.   *NONE_____
_____
_____
Remote Server port number . . .  *DFT         1-65535, *DFT
Use Secure Socket Layer   . . .  *SVR         *SVR, *YES, *NO


                                                            More...

F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

```
                  Copy objects to Rmt AS/400 TCP (XTOBJ)


Type choices, press Enter.



System Store Name . . . . . . . *DFT          Name, *DFT, *SYSTEM, *NONE
System Store Password   . . . . *DFT          Character, *DFT
Application ID  . . . . . . . . *DFT          Character, *DFT, *NONE
Security User Profile   . . . . *DFT          Name, *DFT, *NONE
Security Password   . . . . . . *NONE         Name, *NONE
Target Release  . . . . . . . . *CURRENT      Character, *CURRENT



F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
```

The XTOBJ command has the following parameters:

RMTADDR Parameter

Specifies the name or IP address of the remote system. If a name is specified, the sending AS/400 must

be able to look up the specified name and determine its IP address. If an IP address is specified, it must be in dotted decimal form (192.168.1.1).

FROMLIB Parameter
Specifies the library on the source system which contains the objects to be transferred.

TOLIB Parameter
Specifies the library on the target system which is to receive the transferred records.

*FROMLIB: The library on the target system is the same as the library on the source system.

OBJ Parameter
Specifies the objects to transfer. Specify up to 50 objects, each can be generic, or specify *ALL.

*ALL: All members in the file are to be transferred.

OBJTYPE Parameter
Specifies the object type to be transferred. Specify up to 31 object types, or *ALL.

*ALL: All object types will be transferred to the remote system.

EXEC Parameter
Specifies the command to be executed, using QCMDEXC, after all records are transferred to the target system successfully. Any double quote (") encountered in the EXEC string will be changed to a single quote (').

Remote Server Port number (SVRPORT) Parameter
Specifies the port number to use to communicate with the FileXfer Server on the receiving system. This value must match the value specified on the Server Attributes on the remote system.

*DFT: The FileXfer Server port number attribute for the Local system will be used for the port number.

Use Secure Socket Layer (SSL) Parameter
Specifies if the Secure Socket Layer (SSL) feature of TCP is used. Specify one of the following:

*SVR: The FileXfer Server on the remote system will determine if SSL will be used.

*YES: SSL will be used.

*NO: SSL will not be used.

Note: SSL requires additional setup on both the sending and receiving machines. Refer to Appendix D, "TCP Considerations" for more information.

System Store Name and Password Parameters

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Specifies, for SSL, the System store containing the Digital Certificate to use.

DFT: The values defined for the Local system's FileXfer Server will be used.

*SYSTEM: The default System Store contains the Digital Certificate.

Application ID (APPLID) Parameter

Specifies, for SSL, the Application ID to use to specify the Digital Certificate.

DFT: The value defined for the Local system's FileXfer Server will be used.

*NONE: No Application ID is specified. The Digital Certificate to use is the default for the specified System Store.

Security User ID and Password Parameters

Specifies the User ID and Password the source system will send to the target AS/400 when TCP communications is established. If the FileXfer Server on the remote system requires a User ID and Password, these values must match.

DFT: The values defined for the Local system's FileXfer Server will be used.

*NONE: No Userid or Password is sent.

TGTRLS Parameter (AS/400 Only)

Specifies the OS/400 version/release/modification level of the receiving system. For valid values, see the "Target Release" parameter of the IBM SAVOBJ command.

*CURRENT: The current OS/400 release will be used.

ALWSKP Parameter (AS/400 Only)

Specifies the command will continue if some of the specified objects cannot be accessed. Reasons objects are skipped include allocate problems and authority problems.

*NO: If any specified object cannot be processed, the command will fail and issue escape message XFR-1000.

*YES: If some specified objects cannot be processed, the command will continue and at successful completion will issue escape message XFR-1091. If no specified objects are processed, the command will fail and issue escape message XFR-1000.

Save File Transfer Using TCP/IP

The XTSAVF command will transfer the contents of a Save File via TCP/IP from an AS/400 to an

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AS/400.

XTSAVF Parameters

At the command line enter XTSAVF then press enter. The following screen should appear:

```
                Move Save files to AS/400 TCP (XTSAVF)

 Type choices, press Enter.


 Remote Name or IP Address   . .  _____
 _____
 From file . . . . . . . . . . . .          Name
                                  *LIBL    Name, *LIBL
 To File . . . . . . . . . . . . .*FROMFILE Name, *FROMFILE
                                  *LIBL    Name, *LIBL
 Cmd to execute after transfer . *NONE_____
 _____
 _____

 _____
 Remote Server Port Number . . . *DFT       1-65535, *DFT
 Use Secure Socket Layer   . . . *SVR       *SVR, *YES, *NO
 System Store Name . . . . . . . *DFT       Name, *DFT, *SYSTEM, *NONE
 System Store Password . . . . . *DFT       Name, *DFT, *NONE
 Security User ID  . . . . . . . *DFT       Name, *DFT, *NONE
 Security Password . . . . . . . *NONE      Name, *NONE


 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

The XTSAVF command has the following parameters:

RMTADDR Parameter
Specifies the name or IP address of the remote system. If a name is specified, the sending AS/400 must be able to look up the specified name and determine its IP address. If an IP address is specified, it must be in dotted decimal form (192.168.1.1).

FROMFILE Parameter
Specifies the Save file on the source system to be transferred.

TOFILE Parameter

Specifies the name of the Save file on the target system which is to receive the transferred records.

*FROMFILE: The file on the target system is the same as the file on the source system.

EXEC Parameter

Specifies the command to be executed, using QCMDEXC, after all records are transferred to the target system successfully. Any double quote (") encountered in the EXEC string will be changed to a single quote (').

Remote Server Port number (SVRPORT) Parameter

Specifies the port number to use to communicate with the FileXfer Server on the receiving system. This value must match the value specified on the Server Attributes on the remote system.

*DFT: The FileXfer Server port number attribute for the Local system will be used for the port number.

Use Secure Socket Layer (SSL) Parameter

Specifies if the Secure Socket Layer (SSL) feature of TCP is used. Specify one of the following:

*SVR: The FileXfer Server on the remote system will determine if SSL will be used.

*YES: SSL will be used.

*NO: SSL will not be used.

Note: SSL requires additional setup on both the sending and receiving machines. Refer to Appendix D, "TCP Considerations" for more information.

System Store Name and Password Parameters

Specifies, for SSL, the System store containing the Digital Certificate to use.

*DFT: The values defined for the Local system's FileXfer Server will be used.

*SYSTEM: The default System Store contains the Digital Certificate.

Application ID (APPLID) Parameter

Specifies, for SSL, the Application ID to use to specify the Digital Certificate.

*DFT: The value defined for the Local system's FileXfer Server will be used.

*NONE: No Application ID is specified. The Digital Certificate to use is the default for the specified System Store.

Security User ID and Password Parameters

Specifies the User ID and Password the source system will send to the target AS/400 when TCP communications is established. If the FileXfer Server on the remote system requires a User ID and

Password, these values must match.

<u>*DFT:</u> The values defined for the Local system's FileXfer Server will be used.

*NONE: No Userid or Password is sent.

S/3X, AS/400 TO S/370 VSAM TRANSFER

AS/400, S/38 to S/370 File Transfer

The XVSAM command will transmit the specified data file from a S/36, S/38 or AS/400 to a S/370 MVS VSAM dataset. ESDS (sequential) or KSDS (Keyed) dataset types are supported. If the dataset exists on the target system the transmitted records will replace the existing records. If the dataset does not exist on the target system, it will be created.

AS/400, S/38 XVSAM Parameters

At the command line enter XVSAM then press Enter. The following screen should appear:

```
                    Transfer files to MVS VSAM (XVSAM)


 Type choices, press Enter.


 Remote Location Name . . . .                    Name
 Device Mode Entry  . . . . .    *NETATR         Name, *NETATR
 From file  . . . . . . . . .    *NOCOPY         Name, *NOCOPY
                                 *LIBL           Name, *LIBL
 From File Member   . . . . .    *FILE           Name, *FILE, *FIRST
 VSAM File Name . . . . . . .    *FROMFILE


 VSAM File Catalog  . . . . .    *NONE_____


 VSAM Model for Build Cluster . *NONE_____


 VSAM Model Catalog . . . . . . *NONE_____


 File Password  . . . . . . . . *NONE       Character value
 Catalog Password . . . . . . . *NONE       Character value
 Model Password . . . . . . . . *NONE       Character value


                                                                  More...
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

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```
                     Transfer Files to MVS VSAM (XVSAM)

 Type choices, press Enter.


 Model Catalog Password. . . . . . .     *NONE      Character value
 VSAM File Type. . . . . . . . . . .     ESDS       ESDS, KSDS
 Key Position. . . . . . . . . . . .     *NONE      Number, *NONE
 Key Length. . . . . . . . . . . . .     *NONE      Number, *NONE
 Record Length . . . . . . . . . . .     *CALC      Number, *CALC
 VSAM VOLUMES if Build . . . . . . .     *NONE      Character value, *NONE
                  + for more values
 User Data for User Exits. . . . . .     *NONE_____
 _____
 _____
 Device. . . . . . . . . . . . . . .     *LOC       Name, *LOC
 Local Location Name . . . . . . . .     *LOC       Name, *LOC, *NETATR
 Remote Network Identifier . . . . .     *LOC       Name, *LOC, *NETATR, *NONE


                                                                      Bottom
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

The XVSAM command has the following parameters:

DEVD Parameter (S/38 only)
Specifies the name of the *PEER device description which communicates to the remote system.

RMTLOCNAME Parameter (AS/400 only)
Specifies the name of the Remote Location Name which communicates to the remote system.

MODE Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

*FIRST: (S/38 only) The first mode added to the device description during configuration will be used.

*NETATR: (AS/400 only) The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

FROMFILE Parameter
Specifies the file on the source system to be transferred. The file's record length must be between 4 and 4088 characters (inclusive).

S/3X, AS/400 TO S/370 VSAM TRANSFER

*NOCOPY: Specifies that no file is be transferred. The user in this case wishes to execute a command on the remote system
                without transferring data.

FROMMBR Parameter
Specifies the member to transfer.

*FILE: The member name is the same as the file name.

*FIRST: The first member in the file will be transferred.

TOFILE Parameter
Specifies the name of the VSAM dataset on the target system which is to receive the transferred records.

*FROMFILE: The file on the target system is the same as the file on the source system.

TOFILECAT Parameter
Specifies the VSAM User Catalog the dataset resides in.

*NONE: The dataset does not reside in a user catalog.

TOMODEL and TOMODELCAT Parameters
Specifies the dataset to use as a model if the dataset is created on the target system. Contact the remote system for this information.

*NONE: No Model is used to create the dataset.

FILEPW, CATALOGPW, MODELPW, and MODCATPW Parameters
Specifies the password needed to access the corresponding dataset and catalog.

*NONE: No password is required.

VSAMTYPE Parameter
Specifies the type of dataset on the remote system.

ESDS: The dataset is an Entry-sequenced dataset (sequential).

KSDS: The dataset is a Key-sequenced dataset.

Note: The following KEYPOS, KEYLEN, RECLEN, and VOLUMES parameters are only used if the dataset is created by FileXfer. Otherwise they are ignored.

KEYPOS Parameter
Specified the key position for KSDS datasets. Please note VSAM datasets start their relative position at zero. FileXfer will subtract 1 from the specified value to be compatible with VSAM.

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KLEN Parameter
Specifies the key length.

RECLEN Parameter
Specifies the record length. If greater than the from file's record length, FileXfer will right pad the transmitted records with blanks. If smaller, FileXfer will truncate the transmitted records.

VOLUMES Parameter
Specifies the VSAM volumes to contain the dataset. Contact the remote location for this information.

User Data Parameter
Specifies the data passed to User Exit Programs. Refer to the FileXfer/370 Reference Manual, Appendix B, "User Exit Programs" for more information.

*NONE: A blank area will be passed to the exit programs.

DEV Parameter (AS/400 Only)
Specifies the APPC/APPN Device description to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

LOCLOCNAME Parameter (AS/400 Only)
Specifies the APPC/APPN Local Location Name to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The Local Location Name specified on the device description (WRKDEVD command) will be used.

*NETATR: The Default Local Location Name on the Network Attributes Display (DSPNETA command) will be used.

RMTNETID ID Parameter (AS/400 Only)
Specifies the APPC/APPN Network ID to use. Please note this parameter is only needed if more than 1 network ID exists. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

PREJCLFILE, PREJCLMBR, PSTJCLFILE and PSTJCLMBR Parameters (AS/400 Only)
Specifies the file which contains MVS JCL statements to include into the submitted job. See Chapter 13,"Specifying Pre and Post JCL Files" for a description of JCL files.

S/3X, AS/400 TO S/370 VSAM TRANSFER

AS/400, S/38 XVSAM Examples

The following command transfers the file CUSTMAST to the remote system.

S/38

  XVSAM DEVD(RMTA) MODE(BATCH) FROMFILE(CUSTMAST.DATALIB)
     TOCATALOG(CATALOG.DATA) USERDATA('CUSTMAST')

AS/400

  XVSAM RMTLOCNAME(RMTA) MODE(BATCH) FROMFILE(DATALIB/CUSTMAST)
     TOCATALOG(CATALOG.DATA) USERDATA('CUSTMAST')

S/36 to S/370 Transfer

The XVSAM procedure will transfer a sequential or indexed file from the S/36 to an MVS VSAM ESDS (sequential) or KSDS (keyed) dataset. If the dataset exists on the target system the transmitted records will replace the existing records. If the data-set does not exist on the target system, it will be created. The XVSAM procedure uses the following positional parameters:

S/36 XVSAM Parameters

At the command line enter XVSAM then press Enter. The following screen should appear:

```
                         XVSAM Procedures
                                                      Optional: *


                Upload a S/36 file to an MVS VSAM Dataset


S/36 file name. . . . . . . . . . . . file name, *NOCOPY   _____
VSAM Specifications Name. . . . . . . . . . . . . . . .    _____
Remote location name. . . . . . . . . . . . . . . . .     _____
Session group name. . . . . . . . . . . . . . . . . .     _____


                                                       Cmd7:Exit
                                                        Help
                                   Copyright 1988, Broderick Data Systems
```

Or, on the command line you can enter the following:
   XVSAM S/36 file name, VSAM specs name, remote location name, session group.

S/36 File Name
Specifies the file on the S/36 to send to the remote system.

VSAM Specs Name
Specifies the VSAM Specifications Name to retrieve to get the VSAM dataset information. See Chapter 8, "Managing VSAM Specifications" for more information.

Remote Location Name
Specifies the APPC Remote Location Name to use to communicate to the remote system.

Session Group Name
Specifies the APPC Session Group Name to use to communicate to the remote system.

User Data Information
Specify user data which will be passed to user exit programs in the Local Data Area, starting a position 256 for length 256.

S/36 XVSAM Examples

The following procedure transfers the file CUSTMAST to the remote system:

   **// LOCAL OFFSET-257,BLANK-256,DATA-'CUSTMAST' XVSAM
      CUSTMAST,CUSTSPEC,RMTA,BATCH**

MANAGING SAM AND VSASM SPECIFICATIONS

Maintaining SAM and VSAM

The MNGVSAM procedure allows the user to describe the name, catalog, model, passwords, and other attributes of a VSAM dataset. The user refers to this specification by name when using the S/36 XVSAM procedure. The LSTVSAM prints the VSAM Specifications.

The MNGSAM procedure allows the user to describe the name and other attributes of a SAM dataset. The user refers to this specification by name when using the S/36 XSAM or RMVSFILE procedures. The LSTSAM prints the SAM Specifications.

SAM Specifications

Enter the MNGSAM proc, enter a name to add or change, and the following screen should appear:

```
                            FileXfer/36
                   Manage SAM File Specifications


 Specifications Name:_____


         Dataset name:_____
 Create if not found: *NO
     Use MVS Catalog: *NO
             Volumes:*NONE    _____  _____  _____  _____
     Unit Identifier:SYSDA
      GDG Model Name:*NONE
             Keep RDW:*YES
          Description:_____



                                            Cmd3=Return
                                            Cmd7=Exit
```

The MNGSAM proc has the following parameters:

Dataset Name
Specifies the dataset on the remote system which will receive or retrieve records.

Create if not found (XSAM proc only)
Specifies if the dataset will be created on the remote system if it does not already exist.

Use MVS Catalog (XSAM Only)
Specifies if the MVS catalog facility will be used to locate the dataset.

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VOLUMES Parameter
Specifies the volumes to contain the dataset. Contact the remote location for this information. If *NONE is specified during an RMVSFILE operation, the MVS catalog will be used.

Unit Identifier
Specifies the unit to use. Contact the remote system for this information. Specify *NONE to indicate no unit.

GDG Model Name (XSAM only)
Specifies, for transfers to a GDG dataset, the file to use as a model to retrieve DSCB information.

Keep RDW (RMVSFILE only)
Specifies, for variable length records, if the 4 byte RDW is to be transmitted at the beginning of each record.

Description
Enter a brief description.

VSAM Specifications

Enter the MNGVSAM proc, enter a name to add or change, and the following screen should appear:

```
                        FileXfer/36
                Manage VSAM File Specifications


Specifications Name:_____
                                        Passwords
       Dataset name:  *NOCOPY             *NONE
       Catalog name: *NONE                *NONE
         Model name: *NONE                *NONE
 Model Catalog name: *NONE                *NONE
       Dataset type: ESDS      ESDS or KSDS
         Record Len: 00000     0=NONE, 1-4088
        Num Records: 000000000 0=NONE
       Key Position: 00000     0=NONE
         Key Length: 00000     0=NONE


       Volumes: *NONE__  _____  _____  _____  _____
   Description: _____
                                        Cmd3=Return
                                        Cmd7=Exit
```

MANAGING SAM AND VSASM SPECIFICATIONS

The MNGVSAM proc has the following parameters:

File Name
Specifies the dataset on the remote system which will receive the records.

*NOCOPY: No data file will be sent. In this case the user wishes to send data to the user exit program at the remote system.

Catalog Name
Specifies the VSAM User Catalog where the dataset resides.

*NONE: The dataset does not reside in a user catalog.

Model Name and Catalog
Specifies the model to use if the dataset is created. Ask the remote system for this information.

*NONE: A model will not be used to create the dataset.

Dataset Type
Specify ESDS for sequential or KSDS for keyed dataset types.

Note: The Record Length, Number of Records, Key, and Volumes fields are only used if the file is being created. They are ignored otherwise.

Record Length
Specifies the record length. If greater than the from file's record length, FileXfer will right pad the transmitted records with blanks. If smaller, FileXfer will truncate the transmitted records.

Number of Records
Specifies the number of records to allocate to the file.

Key Position
Specified the key position for KSDS datasets. Please note VSAM datasets start their relative position at zero. FileXfer will subtract 1 from the specified value to be compatible with VSAM.

Key Length
Specifies the key length.

VOLUMES Parameter
Specifies the VSAM volumes to contain the dataset. Contact the remote location for this information.

Description
Enter a brief description.

S/36, AS/400 TO S/370 SAM TRANSFER

S/36, AS/400 to S/370 File Transfer

The XSAM command will transmit the specified data file from an AS/400 or System/36 to a S/370 MVS SAM dataset. If the dataset exists on the target system the transmitted records will replace the existing records. If the dataset does not exist on the target system, it can be created.

AS/400 XSAM Parameters

At the command line enter XSAM then press enter. The following screen should appear:

```
                   Transfer files to MVS SAM (XSAM)

 Type choices, press Enter.


 Remote Location Name . . . . . .  _____      Name
 Device Mode Entry  . . . . . . .  *NETATR         Name, *NETATR
 From file  . . . . . . . . . . .  _____      Name
                                    *LIBL   _      Name, *LIBL
 From File Member   . . . . . . .  *FILE   __      Name, *FILE, *FIRST
 SAM File Name  . . . . . . . . .  *FROMFILE_____
 _____
 Create file if not found . . . .  *NO             *YES, *NO
 Use MVS Catalog  . . . . . . . .  *YES            *YES, *NO
 Volume Serials . . . . . . . . .  *NONE           Character value, *NONE
             + for more values
 User Data for User Exits . . . .  *NONE_____
 _____
 _____
 _____
 Device . . . . . . . . . . . . .  *LOC            Name, *LOC
                                                                   More...
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

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```
                        Transfer files to MVS SAM (XSAM)

 Type choices, press Enter.


 Local Location Name. . . . .    *LOC      __        Name, *LOC, *NETATR
 Remote Network Identifier. . .  *LOC                Name, *LOC, *NETATR, *NONE
 Remote System Unit Identifier.  SYSDA              Character value *NONE
 GDG Model file name. . . . . .  *NONE_____
 _____


                                                                      Bottom
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

The XSAM command has the following parameters:

RMTLOCNAME Parameter
Specifies the name of the Remote Location Name which communicates to the remote system.

MODE Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

FROMFILE Parameter
Specifies the file on the source system to be transferred. The file's record length must be between 4 and 4088 characters (inclusive).

FROMMBR Parameter
Specifies the member to transfer.

*FILE: The member name is the same as the file name.

*FIRST: The first member in the file will be transferred.

TOFILE Parameter
Specifies the name of the SAM dataset on the target system which is to receive the transferred records.

S/36, AS/400 TO S/370 SAM TRANSFER

FROMFILE: The file on the target system is the same as the file on the source system.

CREATE Parameter
Specifies if File Xfer is to create the dataset on the remote system if it does not exist.

CATALOG Parameter
Specifies if the dataset is a cataloged dataset. Also specifies if it is to be created as a cataloged dataset.

VOLUMES Parameter
Specifies the volumes to contain the dataset. Contact the remote location for this information.

USER DATA Parameter
Specifies the data passed to User Exit Programs. Refer to the FileXfer/370 Reference Manual, Appendix B, "User Exit Programs" for more information.

NONE: A blank area will be passed to the exit programs.

DEV Parameter
Specifies the APPC/APPN Device description to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

LOC: The name specified on the device description (WRKDEVD command) will be used.

LOCLOCNAME Parameter
Specifies the APPC/APPN Local Location Name to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

LOC: The Local Location Name specified on the device description (WRKDEVD command) will be used.

NETATR: The Default Local Location Name on the Network Attributes Display (DSPNETA command) will be used.

RMTNETID ID Parameter
Specifies the APPC/APPN Network ID to use. Please note this parameter is only needed if more than 1 network ID exists. In all other situations, specify *LOC.

LOC: The name specified on the device description (WRKDEVD command) will be used.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

UNIT Parameter (AS/400 only)
Specifies the Unit the remote system will use. Contact the remote system for this information.

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<u>SYSDA:</u> System Direct access devices (UNIT=SYSDA) will be used.

*NONE: No unit will be used.

GDGMODEL Parameter (AS/400 only)

Specifies the name of the file on the remote system which will be used as a model for DSCB information. This model is used when adding the latest (+n) revision to a generation data group.

<u>*NONE:</u> No model file is used.

PREJCLFILE, PREJCLMBR, PSTJCLFILE and PSTJCLMBR Parameters (AS/400 Only)

Specifies the file which contains MVS JCL statements to include into the submitted job. See Chapter 13,"Specifying Pre and Post JCL Files" for a description of JCL files.

AS/400 XSAM Examples

The following command transfers the file CUSTMAST to the remote system.

XSAM RMTLOCNAME(RMTA) MODE(BATCH) FROMFILE(DATALIB/CUSTMAST) USERDATA('CUSTMAST')

System/36 XSAM Parameters

At the command line enter XSAM then press Enter. The following screen should appear:

```
                          XSAM PROCEDURE

                                                      Optional-*
              Upload a S/36 file to an MVS SAM Dataset


   S/36 file name. . . . . . . . . . . . file name _____
   SAM Specifications name. . . . . . . . . .     _____
   Remote location name. . . . . . . . . . .      _____
   Session group name. . . . . . . . . . . .      _____



                                          Cmd7:Exit
                                          HELP
                         Copyright 1988, 1993 Broderick Data Systems
```

The XSAM procedure has the following format:

S/36, AS/400 TO S/370 SAM TRANSFER

XSAM S/36 file, SAM specification, remote location, session group.

S/36 File Parameter

Specifies the name of the file on the local system which is to receive the transferred records.

Sam Specification Parameter

Specifies the name of the SAM Specification which contains information describing the remote file. Refer to Chapter 8, "Managing VSAM and SAM Specifications" for more information.

Remote Location Parameter

Specifies the APPC Remote Location Name which communicates to the remote system.

Session Group Parameter

Specifies the APPC Session Group within the above Remote Location to use.

AS/400 TO S/370 PDS TRANSFER

Transferring Partitioned Dataset Members

The XPDS command will transmit the specified source file members from an AS/400 to S/370 MVS Partitioned Dataset members. If the members exist on the target system the transmitted records will replace the existing records. If the member does not exist on the target system it will be added. The PDS must exist on the target system. Up to 50 generic member names can be specified, or *ALL.

AS/400 XPDS Parameters

At the command line enter XPDS then press enter. The following screen should appear:

```
                    Transfer file mbrs to MVS PDS (XPDS)

Type choices, press Enter.

Remote Location Name . . . . . .   _____    Name
Device Mode Entry. . . . . . . .   *NETATR        Name, *NETATR
From file . . . . . . . . . . .    _____    Name
                                     *LIBL        Name, *LIBL
From File Member . . . . . . . .   *ALL           Name, generic*,  *ALL
                + for more values
Partitioned Dataset Name . . . .   _____

User Data for Users Exits . . . .  *NONE _____
_____
_____
Device . . . . . . . . . . . . . . *LOC           Name, *LOC
Local Location Name . . . . . . .  *LOC           Name, *LOC, *NETATR
Remote Network Identifier . . .    *LOC           Name, *LOC, *NETATR, *NONE
Remote System Unit Identifier .    SYSDA          Character value, *NONE
                                                                     Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More Keys
```

The XPDS command has the following parameters:

RMTLOCNAME Parameter
Specifies the name of the Remote Location Name which communicates to the remote system.

MODE Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

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FROMFILE Parameter
Specifies the file on the source system to be transferred. The file's record length must be between 4 and 4088 characters (inclusive).

FROMMBR Parameter
Specifies the members to transfer. Specify up to 50 members or *ALL. To specify a generic member, place a '*' at the end.

*ALL: The member name is the same as the file name.

TOFILE Parameter
Specifies the name of the SAM dataset on the target system which is to receive the transferred records.

*FROMFILE: The file on the target system is the same as the file on the source system.

USER DATA Parameter
Specifies the data passed to User Exit Programs. Refer to the FileXfer/370 Reference Manual, Appendix B, "User Exit Programs" for more information.

*NONE: A blank area will be passed to the exit programs.

DEV Parameter
Specifies the APPC/APPN Device description to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

LOCLOCNAME Parameter
Specifies the APPC/APPN Local Location Name to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The Local Location Name specified on the device description (WRKDEVD command) will be used.

*NETATR: The Default Local Location Name on the Network Attributes Display (DSPNETA command) will be used.

RMTNETID ID Parameter
Specifies the APPC/APPN Network ID to use. Please note this parameter is only needed if more than 1 network ID exists. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

UNIT Parameter (AS/400 only)

AS/400 TO S/370 PDS TRANSFER

Specifies the Unit the remote system will use. Contact the remote system for this information.

<u>SYSDA:</u> System Direct access devices (UNIT=SYSDA) will be used.

*NONE: No unit will be used.

PREJCLFILE, PREJCLMBR, PSTJCLFILE and PSTJCLMBR Parameters (AS/400 Only)
Specifies the file which contains MVS JCL statements to include into the submitted job. See Chapter 13,"Specifying Pre and Post JCL Files" for a description of JCL files.

AS/400 XPDS Examples

The following command transfers all members that begin with ABC in file ARSRC to the remote system.

XPDS RMTLOCNAME(RMTA) MODE(BATCH) FROMFILE (SOURCELIB/ARSRC) FROMMBR(ABC*) USERDATA('CUSTMAST')

AS/400 FILE RETRIEVAL

Data files on other AS/400, System/36, or MVS machines can be retrieved and placed into an AS/400 file member. The retrieved data replaces the existing data in the file. The entire file's data is replaced only after the transfer completes normally. The following commands are used to retrieve data from another system:

+   R400FILE - Retrieves data from a remote AS/400 file member.
+   R36FILE - Retrieves data from a remote S/36 file.
+   RMVSFILE - Retrieves data from a remote MVS SAM file.
+   RT400FILE - Retrieves data from a remote AS/400 file member using TCP/IP.

R400FILE Parameters

At the command line enter R400FILE then press enter. The following screen should appear:

```
                   Receive files from AS/400s (R400FILE)

  Type choices, press Enter.

  Remote Location Name . . . . . . .            Name
  From File (on remote system) . . .            Name
                                      *LIBL     Name, *LIBL
  To File (on local system). . . . .            Name, *RMTFILE
                                      *LIBL     Name, *LIBL
  From Member (on remote system) . .  *FILE     Name, *FIRST, *FILE
  To Member (on local system). . . .  *FILE     Name, *RMTMBR, *FILE, *FIRST
  Device Mode Entry. . . . . . . . .  *NETATR   Name, *NETATR
  Device . . . . . . . . . . . . . .  *LOC      Name, *LOC
  Local Location Name. . . . . . . .  *LOC      Name, *LOC, *NETATR
  Remote Network Identifier. . . . .  *LOC      Name, *LOC, *NETATR, *NONE
  APPC Security User Profile . . . .  *DFT      Name, *DFT, *NONE, *USER
  APPC Security Password . . . . . .  *NONE     Name, *NONE
  Target System ASP Group Name . . .  *NONE     Name, *DFT, *NONE


                                                                   Bottom
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

The R400FILE command has the following parameters.

RMTLOCNAME Parameter
Specifies the name of the Remote Location Name which communicates to the remote system.

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RMTFILE Parameter

Specifies the file on the remote system to be retrieved. The file's record length must be between 4 and 4089 characters (inclusive). For remote S/36, the file must be sequential or indexed. For remote MVS, the file must be a SAM file.

LCLFILE Parameter

Specifies the name of the file on the local system which is to receive the transferred records.

*RMTFILE: The file on the target system is the same as the file on the source system.

RMTMBR Parameter

Specifies the member on the remote system to transfer.

*FILE: The member name is the same as the file name.

*FIRST: The first member added to the file contains the desired records.

LCLMBR Parameter

Specifies the member name on the local system to receive transferred records.

*RMTMBR: The member on the target system will be the same as on the source system.

*FILE: The member name is the same as the file name.

*FIRST: The first member added to the file will receive the retrieved records.

MODE Parameter

Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

DEV Parameter

Specifies the APPC/APPN Device description to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

LOCLOCNAME Parameter

Specifies the APPC/APPN Local Location Name to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The Local Location Name specified on the device description (WRKDEVD command) will be

used.

*NETATR: The Default Local Location Name on the Network Attributes Display (DSPNETA command) will be used.

RMTNETID ID Parameter

Specifies the APPC/APPN Network ID to use. Please note this parameter is only needed if more than 1 network ID exists. In all other situations, specify *LOC.

<u>*LOC:</u> The name specified on the device description (WRKDEVD command) will be used.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

APPCUSER Parameter

Specifies the user profile and password APPC will use to evoke the remote programs. Specify *DFT, *NONE, *USER, or a user profile.

*DFT: The values specified on the setup screen (BXFERSETUP command) are used. This option allows the user to change user profile and password information at one location for all FileXfer commands.

*NONE: No User profile or password information is sent during the evoke operation. The remote AS/400 must be properly configured with a communications entry specifying a valid user profile in the Default User Profile field.

*USER: User profile QSYSOPR will be sent with the AVI (already verified indicator) flag set on.

User Profile

Specifies the user profile to send during the evoke operation. This user must exist on the remote system and must be activated. The remote task will execute using this user profile.

APPCPASS Parameter

Specifies the password sent during the evoke operation. This parameter must be specified when a user profile is specified in the APPCUSER parameter, and this must be the correct password for the specified user.

TGTASPGRP Parameter (AS/400 Only)

Specifies the ASP Group on the target system containing the File Xfer product Library. For more information refer to the File Xfer User Guide, Appendix E, ASP Considerations. Specify the ASP Group Name or one of the following

<u>*DFT:</u> The values specified on the setup screen (BXFERSETUP command) are used. This option allows the user to change ASP Group information at one location for all FileXfer commands.

*NONE: The File Xfer Pgms library is in the *SYSBAS ASP, so no ASP Group is needed.

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Notes:

1) See Appendix B, "AS/400 Security Considerations" for information concerning configuration requirements for the above options.

2) User profile BDSUSER with password BDSPASS is created on AS/400 machines during the install of FileXfer.

3) To verify a user profile and password, bring up a sign on screen on the remote system and attempt to sign on using the desired user profile and password.

R36FILE Parameters

At the command line enter R36FILE then press enter. The following screen should appear:

```
                     Receive files from S/36s (R36FILE)

  Type choices, press Enter.


  Remote Location Name. . . . . .                Name
  From file (on remote system). .                Name
  To file (on local system) . . .                Name
                                     *LIBL       Name, *LIBL
  To Member (on local system) . .  *FILE        Name *RMTMBR, *FILE, *FIRST
  Device Mode Entry . . . . . . .  *NETATR       Name, *NETATR
  Device. . . . . . . . . . . . .  *LOC          Name, *LOC
  Local Location Name . . . . . .  *LOC          Name, *LOC, *NETATR
  Remote Network Identifier . .    *LOC          Name, *LOC, *NETATR, *NONE
                                                                      Bottom
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

The command R36FILE has the following parameters:

RMTLOCNAME Parameter

Specifies the name of the Remote Location Name which communicates to the remote system.

RMTFILE Parameter

Specifies the file on the remote system to be retrieved. The file's record length must be between 4 and 4089 characters (inclusive). For remote S/36, the file must be sequential or indexed. For remote MVS, the

file must be a SAM file.

LCLFILE Parameter

Specifies the name of the file on the local system which is to receive the transferred records.

LCLMBR Parameter

Specifies the member name on the local system to receive transferred records.

*RMTMBR: The member on the target system will be the same as on the source system.

*FILE: The member name is the same as the file name.

*FIRST: The first member added to the file will receive the retrieved records.

MODE Parameter

Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

DEV Parameter

Specifies the APPC/APPN Device description to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

LOCLOCNAME Parameter

Specifies the APPC/APPN Local Location Name to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

*LOC: The Local Location Name specified on the device description (WRKDEVD command) will be used.

*NETATR: The Default Local Location Name on the Network Attributes Display (DSPNETA command) will be used.

RMTNETID ID Parameter

Specifies the APPC/APPN Network ID to use. Please note this parameter is only needed if more than 1 network ID exists. In all other situations, specify *LOC.

*LOC: The name specified on the device description (WRKDEVD command) will be used.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

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RMVSFILE Parameters

At the command line enter RMVSFILE then press enter. The following screen should appear:

```
                  Receive files from MVS Systems (RMVSFILE)

    Type choices, press Enter.


    Remote Location Name. . . . . . .            Name
    From file (on remote system). . .            Name
    To file (on local system) . . . .            Name, *RMTFILE
                                       *LIBL     Name, *LIBL
    To Member (on local system) . . . *FILE      Name, *FILE, *FIRST
    Device Mode Entry . . . . . . . . *NETATR    Name, *NETATR
    Device. . . . . . . . . . . . . . *LOC       Name, *LOC
    Local Location Name . . . . . . . *LOC       Name, *LOC, *NETATR
    Remote Network Identifier . . . . *LOC       Name, *LOC, *NETATR
    Remote system Unit Identifier . . SYSDA      Character value
    Volume Serials. . . . . . . . . . *NONE      Character value, *NONE
                 + for more values
    Keep RDW on variable len recs . . *YES       *YES, *NO
                                                                  More...
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

AS/400 FILE RETRIEVAL

```
                    Receive files from MVS Systems (RMVSFILE)

   Type choices, press Enter.


   User Data for User Exits. . . . .   *NONE_____
   _____
   _____
   _____
                                                                   Bottom
   F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
   F24=More keys
```

The command RMVSFILE has the following parameters:

RMTLOCNAME Parameter
Specifies the name of the Remote Location Name which communicates to the remote system.

RMTFILE Parameter
Specifies the file on the remote system to be retrieved. The file's record length must be between 4 and 4089 characters (inclusive). For remote S/36, the file must be sequential or indexed. For remote MVS, the file must be a SAM file.

LCLFILE Parameter
Specifies the name of the file on the local system which is to receive the transferred records.

LCLMBR Parameter
Specifies the member name on the local system to receive transferred records.

*RMTMBR: The member on the target system will be the same as on the source system.

*FILE: The member name is the same as the file name.

MODE Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

DEV Parameter
Specifies the APPC/APPN Device description to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

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<u>*LOC:</u> The name specified on the device description (WRKDEVD command) will be used.

LOCLOCNAME Parameter
Specifies the APPC/APPN Local Location Name to use. Please note this parameter is only needed for certain situations, communicating to a S/370. In all other situations, specify *LOC.

<u>*LOC:</u> The Local Location Name specified on the device description (WRKDEVD command) will be used.

*NETATR: The Default Local Location Name on the Network Attributes Display (DSPNETA command) will be used.

RMTNETID ID Parameter
Specifies the APPC/APPN Network ID to use. Please note this parameter is only needed if more than 1 network ID exists. In all other situations, specify *LOC.

<u>*LOC:</u> The name specified on the device description (WRKDEVD command) will be used.

*NETATR: The value is retrieved from the Default Network Attributes screen. Use the command DSPNETA to determine the value.

UNIT Parameter
Specifies the Unit Identifier. Contact the remote system for this information.

<u>SYSDA:</u> Unit SYSDA will be used.

VOLUMES Parameter
Specifies the volume serial(s) where the file resides. Specify up to 5 volume serials, or *NONE.

<u>*NONE:</u> The MVS catalog facility will be used to locate the file.

KEEPRDW Parameter
Specifies, for variable length record files (RECFM=V or VB), if the 4 byte RDW is to be included as part of the record. Please note the RDW contains the length of the record and may be useful.

<u>*YES:</u> The 4 byte RDW will be included at the beginning of the record.

NO: The RDW will not be included in the record

RT400FILE Parameters

At the command line enter RT400FILE then press enter. The following screen should appear:

AS/400 FILE RETRIEVAL

```
                  Receive files from AS/400s TCP (RT400FILE)

  Type choices, press Enter.

  Remote Name or IP Address. . . . ._____
_____
  From File (on remote system) . . .            Name
                                      *LIBL     Name, *LIBL
  To File (on local system). . . . .            Name, *RMTFILE
                                      *LIBL     Name, *LIBL
  From Member (on remote system) . . *FILE     Name, *FIRST, *FILE
  To Member (on local system). . . . *FILE     Name, *RMTMBR, *FILE, *FIRST
  Remote Server Port Number. . . . . *DFT      1-65535, *DFT
  Submitted Job Port Number. . . . . *SVR      1-65535. *SVR
  Use Secure Socket Layer (SSL) . .  *SVR      *SVR, *YES, *NO
  System Store Name  . . . . . . . . *DFT
  System Store Password  . . . . . . *DFT      Character, *NONE
  Application ID  . . . . . . . . .  *DFT      Character, *DFT, *NONE
  Security User Profile  . . . . . . *DFT      Name, *DFT, *NONE
  Security Password  . . . . . . . . *DFT      Name, *NONE
                                                                     Bottom
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

The RT400FILE command has the following parameters.

RMTADDR Parameter
Specifies the name or IP address of the remote system. If a name is specified, the sending AS/400 must be able to look up the specified name and determine its IP address. If an IP address is specified, it must be in dotted decimal form (192.168.1.1).

RMTFILE Parameter
Specifies the file on the remote system to be retrieved. The file's record length must be between 4 and 4089 characters (inclusive). For remote S/36, the file must be sequential or indexed. For remote MVS, the file must be a SAM file.

LCLFILE Parameter
Specifies the name of the file on the local system which is to receive the transferred records.

*RMTFILE: The file on the target system is the same as the file on the source system.

RMTMBR Parameter
Specifies the member on the remote system to transfer.

*FILE: The member name is the same as the file name.

*FIRST: The first member added to the file contains the desired records.

LCLMBR Parameter
Specifies the member name on the local system to receive transferred records.

*RMTMBR: The member on the target system will be the same as on the source system.

*FILE: The member name is the same as the file name.

*FIRST: The first member added to the file will receive the retrieved records.

Remote Server Port number (SVRPORT) Parameter
Specifies the port number to use to communicate with the FileXfer Server on the receiving system. This value must match the value specified on the Server Attributes on the remote system.

*DFT: The FileXfer Server port number attribute for the Local system will be used for the port number.

Submitted Job Port number (SBMPORT) Parameter
Specifies the port number to use to communicate with the submitted job on the receiving system. Please note that the FileXfer Server on the remote system submits a job for each transfer request, and the submitted job communicates with this command to transfer the data. For more information refer to Appendix D, "TCP Considerations".

*SVR: The FileXfer Server on the remote system will determine the port number to use.

Use Secure Socket Layer (SSL) Parameter
Specifies if the Secure Socket Layer (SSL) feature of TCP is used. Specify one of the following:

*SVR: The FileXfer Server on the remote system will determine if SSL will be used.

*YES: SSL will be used.

*NO: SSL will not be used.

Note: SSL requires additional setup on both the sending and receiving machines. Refer to Appendix D, "TCP Considerations" for more information.

System Store Name and Password Parameters
Specifies, for SSL, the System store containing the Digital Certificate to use.

*DFT: The values defined for the Local system's FileXfer Server will be used.

AS/400 FILE RETRIEVAL

*SYSTEM: The default System Store contains the Digital Certificate.

Application ID (APPLID) Parameter
Specifies, for SSL, the Application ID to use to specify the Digital Certificate.

*DFT: The value defined for the Local system's FileXfer Server will be used.

*NONE: No Application ID is specified. The Digital Certificate to use is the default for the specified System Store.

Security User ID and Password Parameters
Specifies the User ID and Password the source system will send to the target AS/400 when TCP communications is established. If the FileXfer Server on the remote system requires a User ID and Password, these values must match.

*DFT: The values defined for the Local system's FileXfer Server will be used.

*NONE: No Userid or Password is sent.

SYSTEM/36 FILE RETRIEVAL

Data files on other AS/400, System/36, or MVS machines can be retrieved and placed into a System/36 file. The retrieved data replaces the existing data in the file. The entire file's data is replaced only after the transfer completes normally. The following procedures are used to retrieve data from another system:

Retrieving from an AS/400:
R400FILE remote file, remote library, remote member, local file, remote location, session group, appc user, appc password

Retrieving from another System/36:
R36FILE remote file, local file, remote location, session group

Retrieving from a MVS/SAM:
RMVSFILE sam Specification, local file, remote location, session group

Retrieve R400FILE Parameters

At the S/36 command line enter R400FILE then press enter. The following screen should appear:

```
                              R400FILE
                                              Optional=*
                      Retrieve an AS/400 FILE



          AS/400 file name. . . . . . . .   _____
                  Library. . . . . . . .   _____
                  Member. . . . . . . .   _____
          S/36 file Name. . . . . . . .   _____
      Remote Location Name. . . . . . . .   _____
        Session Group Name. . . . . . . .   _____
APPC User ID        *DFT, Name, *NONE, *USER   _____*
APPC Password                  Name, *NONE   _____*
                                              CMD7:EXIT
                                              HELP
                              Copyright 1993, Broderick Data Systems
```

The R400FILE command has the following parameters:

Remote File Parameter
Specifies the file on the remote system to be retrieved. The file's record length must be between 4 and 4089 characters (inclusive). For remote S/36, the file must be sequential or indexed.

FILEXFER3X/400™

Local File Parameter
Specifies the name of the file on the local system which is to receive the transferred records.

Remote Location Parameter
Specifies the name of the Remote Location Name which communicates to the remote system.

Session Group Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

APPC User Parameter
Specifies the user profile and password APPC will use to evoke the remote programs. Specify *DFT, *NONE, *USER, or a user profile.

*DFT: The values specified on the setup screen (XFCTRL proc) are used. This option allows the user to change user profile and password information at one location for all FileXfer commands.

*NONE: No User profile or password information is sent during the evoke operation. The remote AS/400 must be properly configured with a communications entry specifying a valid user profile in the Default User Profile field.

*USER: User profile QSYSOPR will be sent with the AVI (already verified indicator) flag set on.

User Profile
Specifies the user profile to send during the evoke operation. This user must exist on the remote system and must be activated. The remote task will execute using this user profile.

APPC Password Parameter
Specifies the password sent during the evoke operation. This parameter must be specified when a user profile is specified in the APPCUSER parameter, and this must be the correct password for the specified user.

NOTES:

1) See Appendix B, "AS/400 Security Considerations" for information concerning configuration requirements for the above options.

2) User profile BDSUSER with password BDSPASS is created on AS/400 machines during the install of the FileXfer.

3) To verify a user profile and password, bring up a sign on screen on the remote system and attempt to sign on using the desired user profile and password.

SYSTEM/36 FILE RETRIEVAL

Retrieve R36FILE Parameters

At the S/36 command line enter R36FILE then press enter. The following screen should appear:

```
                            R36FILE Procedures
                                                    Optional:*
                            Retrieve a S/36 File


    Remote S/36 file name. . . . . . . . . .  _____
    Local S/36 file name . . . . . . . . . .  _____
    Remote location name . . . . . . . . . .  _____
    Session group name . . . . . . . . . . .  _____


                                                    CMD7:EXIT
                                                    HELP
                                    Copyright 1993, Broderick Data Systems
```

The R36FILE has the following parameters:

Remote File Parameter
Specifies the file on the remote system to be retrieved. The file's record length must be between 4 and 4089 characters (inclusive). For remote S/36, the file must be sequential or indexed.

Local File Parameter
Specifies the name of the file on the local system which is to receive the transferred records.

Remote Location Parameter
Specifies the name of the Remote Location Name which communicates to the remote system.

Session Group Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

Retrieve RMVSFILE Parameters

At the S/36 command line enter RMVSFILE then press enter. The following screen should appear:

FILEXFER3X/400™

```
                        RMVSFILE Procedures
                                                     Optional=*


    SAM Specifications Name. . . . . . . .    _____
    Local S/36 file name . . . . . . . . .    _____
    Remote location name . . . . . . . . .    _____
    Session group name . . . . . . . . . .    _____


                                              CMP7:EXIT
                                              HELP
                              Copyright 1993, Broderick Data Systems
```

The command RMVSFILE has the following parameters:

Sam Specification Parameter
Specifies the name of the SAM Specification which contains information describing the remote file. Refer to Chapter 8, "Managing VSAM and SAM Specifications" for more information.

Local File Parameter
Specifies the name of the file on the local system which is to receive the transferred records.

Remote Location Parameter
Specifies the name of the Remote Location Name which communicates to the remote system.

Session Group Parameter
Specifies the device mode entry to use during the transfer. The specified mode must be attached to the device description specified above.

User Data Parameter
Specifies 256 characters which is passed to User Exit Program XFEXIT07 on the MVS system. Contact the remote system to determine if user data is requested. To pass user data, place the desired data into the Local Data Area starting at position 257 prior to the RMVSFILE procedure:

// LOCAL OFFSET-257,BLANK-256,DATA-'YOUR DATA'// RMVSFILE ...

SPECIFYING PRE AND POST JCL FILES

File Xfer XSAM, XVSAM, and XPDS commands allow the administrator to send JCL statements to the MVS system. The statements are executed when the MVS task (BDSMON) submits a job to perform the update of the specified TOFILE. The JCL files will be ignored if Submit is specified as N on the RMTDESC setup file for the LU. The job submitted by BDSMON can be considered a card deck, and BDSMON builds the card deck in the following order:

- Exit Program 1, 3, or 5 cards (1-10) (see note)
- PREJCLFILE cards
- BDS cards to perform the file update
- PSTJCLFILE cards
- Exit program 2, 4, or 6 cards (0-10)

Note: If a pre-JCL file is specified, the pre-exit program can return zero cards.

The specified JCL file can be a physical or source physical file. Records will be truncated or padded with blanks to 80 character card images. For source files, the 6-digit sequence number and 6-digit change date fields will be removed. The file can contain zero records.

The specified JCL file can contain *INCLUDE statements, which signal File Xfer to include the contents of another file at this point. The rules for creating an include file are the same for a pre or post JCL file. The format of the *INCLUDE statement are as follows:

Col	Len	Description
1	10	*INCLUDE (must be capital letters)
11	10	File name
21	10	Library name or *LIBL
31	10	Member name or *FILE

Include files cannot be nested. If an include file contains *INCLUDE, the *INCLUDE card will be sent to the MVS system. The include file can contain zero records.

The following parameters specify pre and post JCL files:

PREJCLFILE Parameter
Specifies the file which contains MVS JCL statements to include into the submitted job.

*NONE: No JCL file is included.

PREJCLMBR Parameter
Specifies the member to include.

*FILE: The member name is the same as the file name.

PSTJCLFILE Parameter
Specifies the file which contains MVS JCL statements to include into the submitted job.

*NONE: No JCL file is included.

PSTJCLMBR Parameter

Specifies the member to include.

<u>*FILE:</u> The member name is the same as the file name.

Note: The PREJCLFILE, PREJCLMBR, PSTJCLFILE, and PSTJCLMBR parameters are passed to the Exit Programs on the MVS system.

APPENDIX A: TAILORING FILEXFER3X/400™

Tailoring Options

The BXFERSETUP command (AS/400, S/38) or XFCTRL procedure (S/36) allows the user to tailor functions of FileXfer3X/400.

BXFERSETUP Parameters

At the command line enter BXFERSETUP then press Enter. The following screen should appear:

```
                             FileXfer/400
                            Setup Display
          Rel:    05     CPU Serial:  xxxxxxxx       Model:  xxx
          Mod:    01      Proc Feat:  xxx         Proc Grp:  xxx
          PTF:    0000  System Name:  xxxxxxxx     LPAR Num:  xxxxx
       Permanent Password: F1F2F3F4F5F6F7F8    Hex Digits  (A-F, 0-9)
       Temporary Password: F1F2F3F4F5F6        Hex Digits  (A-F, 0-9)
      High Avail Password: F1F2F3F4F5F6F7F8    Hex Digits  (A-F, 0-9)


         Source Record Len: xxx                  40-120
           Proc Record Len: xxx                  40-120
  Default APPC User/Password: BDSUSER            Name,  *NONE,  *USER
                            BDSPASS              Name
     BDS Access User, Passw: xxx                 character
   Default SNA Tgt ASP Group: *NONE              Name, *NONE


  CMD-3 Exit w/o Update     CMD-10 Server   CMD-14 BDS SwSvr
```

The BXFERSETUP command has the following parameters:

Rel/Mod/PTF
Displays the current Release, Modification, and PTF level of FileXfer3X/400 installed on your system.

Password
You will be instructed to enter this field when you receive your permanent/temporary passwords from BDS. If this machine is being replicated to a High Availability machine, specify the Permanent Password for the HA machine in the High Avail Password field. This will allow you to cut over to the HA machine without changing passwords. Note: You must purchase an HA license from Broderick Data Systems in order to receive an HA password.

FILEXFER3X/400™

Library Member Record Lengths

These following two fields specify the record length of S/36 Library members created when using the S/38 or AS/400 S36DWNMBR command.

Source Record Length

Specifies the record length to assign to S/36 source members if 36TYPE(SOURCE) is specified.

Proc Record Length

Specifies the record length to assign to S/36 procedure members if S36TYPE(PROC) is specified.

APPC Security Information

The APPC user id and password on this screen are used if the transfer commands (XFILE, etc.) specify *DFT in their APPCUSER and APPCPASS fields. This screen allows the administrator to specify User ID and password information in one location.

APPC user

Specifies the APPC user ID to pass to the remote system

*NONE: No User Id or password will be sent.

APPC password

Specifies the APPC password to send to the remote system.

*NONE: No password will be sent.

*USER: The AVI (Already Verified Indicator) Flag will be sent to the remote system.

Note: User profile BDSUSER is created with password BDSPASS when FileXfer is installed on the AS/400 or S/38. We recommend using Userid/password BDSUSER BDSPASS when communicating to an AS/400, and Userid/password *NONE *NONE when communicating to a S/38 or S/36.

BDS Access User ID and Password

Specifies the user ID and password needed to access the BDS Software Server. Contact BDS Administration for your user ID and password.

Default SNA Tgt ASP Group

Specifies the default for the Target ASP Group (TGTASPGRP) parameter on SNA transfer commands such as XFILE. For more information refer to the File Xfer User Guide, Appendix E, ASP Considerations. Specify the ASP Group Name or one of the following

*NONE: The File Xfer Pgms library is in the *SYSBAS ASP, so no ASP Group is needed.

APPENDIX A: TAILORING FILEXFER3X/400™

XFCTRL Parameters

At the command line enter SLIB BDSLIB then press Enter. At the command line enter XFCTRL then press Enter. The following screen should appear:

```
                          FileXFER/36
                       Tailoring Options
                                           S/36 serial:_____


                    Release:   03
                        Mod:   02
                        PTF:   9502


          Permanent Password:  F1F2  F3F4  F5F6
          Temporary Expiration:  F1F2  F3F4  F5F6
 AS/400 APPC Security User/Passw:  BDSUSER    BDSPASS (Name,  *NONE, *USER)


     ENTER Update Control and Exit          Cmd 7 Exit without update
                            Copyright 1988, 1993 Broderick Data Systems
```

The XFCTRL command has the following parameters:

Rel/Mod/PTF
Displays the current Release, Modification, and PTF level of FileXfer3X/400 installed on your system.

APPC Security User/Password

The APPC user id and password on this screen are used if the transfer commands (XFILE, etc.) specify *DFT in their APPCUSER and APPCPASS fields. This screen allows the administrator to specify User ID and password information in one location.

APPC user
Specifies the APPC user ID to pass to the remote system.

*NONE: No User Id or password will be sent.

APPC password
Specifies the APPC password to send to the remote system.

FILEXFER3X/400™

*NONE: No password will be sent.

*USER: The AVI (Already Verified Indicator) Flag will be sent to the remote system.

Note: User profile BDSUSER is created with password BDSPASS when FileXfer is installed on the AS/400 or S/38. We recommend using Userid/password BDSUSER BDSPASS when communicating to an AS/400, and Userid/password *NONE *NONE when communicating to a S/38 or S/36.

The FileXfer Server

The FileXfer Server task processes incoming transfer requests for TCP tasks on other systems. Access the Server Options screen by pressing F10:

```
                      FileXfer/400                               1/02/13
                    TCP Server Options                           13:21:31


              Server Port:  3650            0=None, 1-65535
             Address/Name: *ZERO


        User ID/Password: BDSUSER      BDSPASS        Name, *NONE
      Secure Socket Layer: N                  Y, N
       System Store Name: *SYSTEM


   System Store Password: _____
           Application ID: *NONE


            Listen Backlog:   50            1-2000



 CMD-3  Exit w/o Update      ENTER   Update    F10=ApplID
```

Server Port
Specifies the TCP port number the FileXfer Server will listen on. Remote Writers sending to this system must specify this port number on their Server Port parameter.

Address/Name:
Specifies the address or name to listen on:

*ZERO: All addresses that the AS/400 is capable of listening on will be processed.

APPENDIX A: TAILORING FILEXFER3X/400™

Userid/Password Parameter:

Specifies the User profile and Password the source system must send when TCP communications is established.

*NONE: No Userid or password is required.

Note: The User ID parameter does not need to match a user profile on the system.

Secure Socket Layer:

Specifies, for Remote Writers that do not define SSL, if the Secure Socket Layer (SSL) feature of TCP will be used. Specify Y or N.

Note: SSL requires additional setup on both the sending and receiving machines. Refer to Appendix D, "TCP Considerations" for more information.

System Store Name/Password:

Specifies, for SSL, the System store containing the Digital Certificate to use.

*SYSTEM: The default System Store contains the Digital Certificate.

Application ID:

Specifies, for SSL, the Application ID to use to specify the Digital Certificate.

*NONE: No Application ID is specified. The Digital Certificate to use is the default for the specified System Store.

Listen Backlog

Specifies the number of connection requests that can be queued up before the system starts rejecting incoming connection requests. Specify a number between 1 and 2000. Note that this number does not limit the number of connections that can be processed at a time; it limits the number that are waiting to be accepted and passed to a batch job by the server.

Creating Application ID's

To allow FileXfer to access a Digital Certificate, you may need to create an Application ID. This function is provided by FileXfer from the Server Options display. You may also create and delete Application IDs using other methods if desired. Access the Application ID screen by pressing F10:

FILEXFER3X/400™

```
                    FileXfer/400                               1/02/13
                  Manage Application ID                         13:21:31


   Press F6 to add the following Application ID, F9 to delete:


          Prefix:   BDS_BRODERICK_XFER40_


 Application ID:   SERVER_____


     Description:  Broderick Data Systems FileXfer/400_____


 F3=Exit   F12=Exit
```

Prefix:
To simplify the definition and edit process, FileXfer automatically attaches this value to the front of the ID you specify.

Application ID:
Specify the value that (appended to the prefix) will be the Application ID to create or delete.

Description
Specify Descriptive text.

Access the BDS Software Server

If **F14** is chosen, the screen showing BDS Software Server options is displayed. To access the BDS Software Server the AS/400 must be connected to the Internet. The following display will appear:

APPENDIX A: TAILORING FILEXFER3X/400™

```
                                              12/03/01    11:45:21
                       BDS Software Server Display


     Select one of the following:


      1. Check for updates
      2. Download Software Update
      3. Download Software Patch
      4. Upload Captured Problem Data


     Option:


   F3=Exit   F12=Exit
```

Some of the following options require a user ID and password. If you do not have one, contact BDS Administration. These options use the Internet to connect to a server at Broderick Data Systems. Therefore your AS/400 must be connected to the Internet. If behind a firewall, the firewall must allow outbound sessions through it.

Check for updates
Retrieves the latest available release of the prodcut. Displays the BDS and OS/400 prereqisites releases required to install the latest release of the product.

Download Software Update
Downloads the latest release of the product into save files on your system. The update procedure can then be done using these save files. The product may be active and running while you perform this download.

Download Software Patch
Downloads objects into a save file on your system. Usually you will use this option while working with BDS tech support.

Upload Captured Problem Data
Uploads a save file on your system (comtaining objects that you have saved) into a save file on the BDS server. Usually you will use this option while working with BDS tech support.

F3 (Return)
Press F3 to exit.

F12 (Return)
Press F12 to exit.

AS/400 SECURITY CONSIDERATIONS

APPC communications to an AS/400 allows the administrator many options concerning security. FileXfer incorporates some of these security options. In order to use them, additional communications setup may be necessary on all systems. Please note that this section only applies if you are sending to an AS/400. If sending to or retrieving from a S/36 or S/38, this section does not apply.

FileXfer supports SNA Application Program Security, which gives the administrator the ability to send User Profile information when the communications link between programs is established. The administrator has the following choices:

+ User profile and password passed
+ User profile and the AVI (Already Verified Indicator) flag passed
+ No user profile or password passed

To specify security parameters to FileXfer, use the APPCUSER and APPCPASS parameters on the Xfer command (XFILE cmd, S38UPLD proc, etc,). The default values for these parameters are specified on the "Tailoring Options" screen (BXFERSETUP cmd, XFCTRL proc). As shipped from BDS, FileXfer will send the User profile and password. For most operations, sending User profile and password is recommended. Before deciding which security method to use, the administrator should consider the following:

1) Going to a new release of OS/400 will erase any changes made to Subsystem QCMN. Thus BDS software may not work correctly after an IBM release update. For this reason, we do not recommend sending "No security user information".

2) Auditors may not allow a user profile and password to be accessed via unsecured screens on a remote system (S/36 XFCTRL proc, AS/400 and S/38 BXFERSETUP command, etc.) The additional setup needed for sending the AVI flag may be warranted.

3) The administrator may not wish to increase the security level on the S/36 or AS/400, so a user profile and the AVI flag can be sent.

4) When FileXfer/36 sends a user profile and the AVI flag, user profile QSYSOPR is sent.

Sending no user profile or password is easy to implement. The only additional setup required is to enter the following command on the target AS/400(s):

CHGCMNE SBSD(QCMN) DEV(*ALL) DFTUSER(QUSER)

Sending user profile and password is the easiest method to implement (no setup changes are necessary), if all systems are at the required system security level.

Passing User Profile and Password

To send a user profile and password, the following conditions must be met:

FILEXFER3X/400™

Target AS/400

1) System Security level must be 20 or 30 (DSPSYSVAL QSECURITY).

2) The passed User profile must exist on the target AS/400, and the correct password must be passed.

S/36

1) Password security or greater must be active.

S/38

1) No changes required.

Source AS/400

1) System Security level must be 20 or 30 (DSPSYSVAL QSECURITY).

Passing User Profile and AVI Flag

To send a user profile and the AVI flag, the following conditions must be met:

Target AS/400

1) If APPN(*NO) is specified on the APPC control unit, SECURELOC(*YES) must be specified on APPC device description(s) that communicate to the source system(s).

2) If APPN(*YES) is specified on the APPC control unit, A configuration list type *APPCRMT must exist, and have an entry for the remote location, with SECURE LOC = *YES specified. (WRKCFGL command).

S/36

1) Password security or greater must be active.

2) A Remote Location entry (SECEDIT COMM proc) with Require user password=Y must be configured. See Appendix C, Section "AS/400 to AS/400, S/36, and S/38 Example" for an example.

S/38

1) No changes required.

Source AS/400

1) Security level 20 or greater must be active.

Passing No User Profile or Password

To send no user profile or password, the following conditions must be met:

Target AS/400

1) The Subsystem QCMN communications entry DEVICE(*ALL) MODE(*ANY) must have a valid default user profile (i.e. QUSER).

AS/400 SECURITY CONSIDERATIONS

S/36

1) No changes required.

S/38

1) No changes required.

Source AS/400

1) No changes required.

ELECTRONIC MEDIA DISTRIBUTION

The user can distribute File Transfer3X/400 to remote systems electronically. Thus the user can install or update File Transfer3X/400 on similar remote systems (i.e. AS/400 to AS/400's). A working APPC/APPN link to the remote system is needed to do this. Below are the steps you must perform to transmit File Transfer3X/400 to remote systems. Please note that a thorough knowledge of the operating systems involved is suggested.

S/38 or AS/400 Machines

The S/38 and AS/400 media consists of 1 library:

XFER40

The steps to distribute File Transfer are:

Source System
1) Restore library XFER40 from the BDS media.

2) Create a save file SAVXFER.

3) Save library XFER40 into save file SAVXFER.

4) Delete the library XFER40.

5) Transmit the save file to the remote system(s).

Remote System(s)
1) Create and receive the transmitted save file, if necessary.

2) Proceed with the update or install instructions with the following:

When requested to restore the install or update objects into library QTEMP, use the save file option. Specify *SAVF for the device description. Enter save file SAVXFER.

When executing the install or update command (BXFERINS or BXFERUPD) use the save file option. Specify *SAVF for device description. Enter save file SAVXFER.

File Transfer will be installed or updated.

S/36 Machines

The S/36 media consists of 2 files:

FILEXFER3X/400™

XFERLIB
BDS.XFCT

Please note that the file BDS.XFCT is not used during the update process. Thus the user will not need to transmit BDS.XFCT if an update is being performed. The steps needed to transmit File Transfer/36 are:

Source system

1) Restore file XFERLIB from your media diskette.

2) If BDS.XFCT must be distributed (install), you may have the situation where you need to restore a different version of BDS.XFCT from diskette than you have on your disk. Please note BDS.XFCT has only 1 record and is maintained by the proc XFCTRL. You may wish to perform the following.

   Rename BDS.XFCT on disk
   Restore the BDS.XFCT from diskette
   Rename the restored BDS.XFCT to XMT.XFCT
   Rename the old BDS.XFCT back

3) Transmit the files created in steps 1) and 2) to the remote systems.

Remote System

1) Follow the install or update instructions. Skip the step instructing you to restore XFERLIB from diskette. You have already loaded it electronically.

2) For install processes, when the instructions ask you to restore BDS.XFCT, rename the transmitted file instead.

File Transfer/36 will be installed or updated.

APPENDIX D: TCP CONSIDERATIONS

This chapter shows the areas needed to use TCP to send data from one AS/400 to another.

Planning Guide

The following steps are recommended to set up TCP/IP processing on your AS/400.

Connect your AS/400 to the network. Contact your gateway for detailed information. Contact IBM and telecomm providers to acquire the required equipment if needed.

Install IBM Software. Refer to the Prerequisites section in Chapter 2, "Installation" for prerequisite IBM software.

Decide whether to use Secure Socket Layer. SSL is more secure but requires more setup and consumes more resources to transmit data.

Create/Buy/Install a Digital Certificate This step is only needed if you are running Secure Socket Layer. You can purchase a Digital Certificate or be your own CA and create/distribute/install your own Digital Certificate.

Assign Ports Determine which port each Receiving system Server will listen on.

Setup/Start the FileXfer Server Refer to Appendix A, "Tailoring FileXfer" section "The FileXfer Server Options".

The FileXfer Server

In order to receive entries from other AS/400 systems via TCP, a FileXfer Server job must be started. Prior to starting the server it must be configured. The following configuration options must be decided:

IP Addresses to listen on. Determine which IP address to listen on, or all.

Port for the server to listen on. See "TCP Port Usage" below.

Secure Socket layer. See "Secure Socket Layer" below.

User ID/Password. If set, all remote tasks sending to this system must provide matching information.

Refer to Appendix A, "Tailoring FileXfer" Section "FileXfer Server" for the Server setup options.

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Once set up, the Server must be started. We recommend the Server job be always running. Thus you should place the start command somewhere in your IPL startup stream. The STRXFSVR command has no parameters. The ENDXFSVR command has the following parameters:

WAITEND Parameter

Specifies if the command is to wait until the Server job has ended before continuing.

*NO: The command will return control to the caller immediately.

*YES: The command will wait until the Server job has ended before returning control to the caller.

WAITDLY Parameter

Specifies, if WAITEND(*YES) is specified, the amount of time in seconds to wait before reporting an error. Specify a number in the range of 1-32767.

TCP Port Usage

FileXfer/400 needs a TCP port to send from one system to another. Each Receiving system's Server job will listen on the specified port. As shipped from BDS, the receiving systems will listen on port 3650 (servers on different systems can have the same number).

FileXfer uses the IBM Service Table to reserve an unused port. You can use the WRKSRVTBLE command to view the Service Table. The service name used by FileXfer is:

    bds-xfer-tcp-server

Note: If the above service name does not appear in the service table, reenter the port values using the Tailoring Options display (BXFERSETUP, F-10).

Secure Socket Layer Considerations

FileXfer/400 can use SSL to encrypt transmitted data. The administrator must decide whether to use SSL or not. In general, if you are using the internet to communicate between AS/400s, we strongly recommend you use SSL. Otherwise, we recommend not using SSL.

Using SSL requires that a Digital Certificate be installed on both AS/400s. To set up and process Digital Certificates, additional (no charge) IBM software must be installed on the AS/400. See the Prereqs in

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Chapter 2 for more information.

SSL also adds overhead to the transmission. You will notice a reduction in throughput when using SSL.

Note: Setting up a Digital Certificate on the AS/400 is an involved process. We recommend you contact the IBM Support Center for assistance if you are new to this area of AS/400 operations.

You will install your Digital Certificate into a System Store. Each System Store can have a default certificate. If your Digital Certificate is not the default certificate for the System Store that you install it in, you will need to create an Application ID. Application IDs tell the application (FileXfer) which Digital Certificate within a System Store to use.

FileXfer provides a utility to create an Application ID. Refer to Appendix A "Tailoring FileXfer" section "Creating Application ID's". Once created, you must use IBM products such as Digital Certificate Manager to assign the Application ID to a System Store.

Setup Example

The following steps provide an example of implementing TCP using Remote SpoolPrint/400.

1) Connect your AS/400 to the network. In this example, our AS/400 is already configured to access the network. To see if your system is connected to the internet, from an AS/400 command line enter:

    PING *other.AS400.machine*

You should receive messages stating replies took xxx milliseconds. If not, your AS/400 is unable to connect to the other machines on the network. It may be behind a firewall or not set up properly. In this case you must have the network administrator give the AS/400 access to the other machines on the network.

Note: We have found many AS/400 administrators who are reluctant to connect their AS/400 to the Internet. We find this ironic because the AS/400 has arguably the best security features of any server on the market.

2) Install IBM Software. Refer to the Prerequisites in Chapter 2, "Installation" in this example we had TCP installed and ordered the following software from IBM:

    Digital Certificate Manager (Product Option 34)
    IBM HTTP Server for AS/400 (5769-DG1)
    Cryptographic Access Provider for AS/400 (5769-AC3)

Note: There is no charge for these products.

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To check to see if the prereqs are on your system, perform the following:
a. On the AS/400 bring up the license product menu:

   GO LICPGM

b. Select option 10, Display installed licensed programs.

c. Press F11 twice to display Product Options. Verify the existance of Digital certificate Manager, 57xxSS1 option 34.

Note: xx=22 in Version 5, 69 in Version 4.

d. Scroll through the list, and verify the existance of the other prerequisites:

57xxAC3	Crypto Access Provider 128-bit for AS/400
57xxDG1	IBM HTTP Server for AS/400
57xxTC1	TCP/IP Connectivity Utilities for AS/400

If an item is not in the list, you will need to contact IBM to order it.

3) Decide whether to use Secure Socket Layer. See above for more information.

4) Create Certificate (SSL only).   Creating a Digital Certificate is an involved process, with many options. We recommend you contact IBM Support Center to assist you. You will need a Digital Certificate on each system using SSL.

5) Create/Assign an Application ID (SSL Only). In this example, we are not making our Digital Certificate the System store's default. Thus we need to create an Application ID and assign our certificate to it.

a. From an AS/400 command line enter the following:

   BRODERICK/BXFERSETUP

From the "Setup Display" screen, press **F10** (Server options) and press **F10** (ApplID).

b. The Application ID screen will appear. You may change the name if you need to. Otherwise, press **F6** (Create). Press **F6** to confirm. Exit (**F3**) back to the command line.

c. From the Digital Certificate Manager Display, click "Work with Secure Applications". Click the button next to:

   BDS_BRODERICK_XFER_SERVER

Click "Work with System Certificate".

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d. The Certificate you created in step 3 should appear in the list of certificates. Click its radio box and click "Assign New Certificate". Click OK on the confirmation screen.

e. Again, Click the **BDS_BRODERICK_XFER40_SERVER** radio button and click "Work with Certificate Authority".

f. For each CA in the list that you are using, click its radio button and then click "Trust". The word "Yes" will appear in the Trusted column.

6) Assign a Port. In this example, we will use the Defaults. Contact your Network personnel to have them set up the firewalls at both sites to allow port 3650 to pass through the firewall.

7) Setup the FileXfer Server. On each system that will receive spool entries, configure the Server job. Refer to Appendix A "Tailoring FileXfer", section "FileXfer Server Options" for more information.

In our example we will monitor all IP addresses, use SSL, and use the default system store:

a. From an AS/400 command line enter the following:

    BRODERICK/BXFERSETUP

From the "Setup Display" screen, press **F10** (Server options).

b. The Server options screen will appear. Fill in the following parameters:

    SSL: Y
    System store password: *(your password)*
    Application ID: BDS_BRODERICK_XFER40_SERVER

Press **ENTER** twice to return to the command line.

c. Start the Server job. Enter the following command:

    BRODERICK/STRXFSVR

Note: You should place the above command in your IPL startup stream.

ASP Considerations

FileXfer3X/400 supports Basic and Independent Auxiliary Storage Pools (ASPs, or Disk Pools). FileXfer3X/400 supports multiple instances per LPAR. The administrator has several choices when deciding which ASP to install FileXfer3X/400 product libraries. This appendix will describe the issues involved in moving FileXfer3X/400 libraries to different ASPs, and installing multiple FileXfer3X/400 instances in an LPAR.

The following containers make up the FileXfer3X/400 product:

- Base Objects Library (**BDSBASE**) – Objects that must remain in the *SYSBAS IASP.
- Programs Library (**BRODERICK**) – Programming objects, temporary data and User Data objects (files, etc.).

The administrator should be familiar with ASPs before moving FileXfer3X/400 libraries to different ASP locations or implementing multiple FileXfer3X/400 instances. For more information on OS/400 ASP capabilities, visit the IBM Knowledge Center:

https://www.ibm.com/support/knowledgecenter

Use IBM's search function; search for "disk pools". There are also excellent IBM Redbooks available. Here is a list of some:

Independent ASPs A Guide to Moving Applications to IASPs   SG24-6802
IBM i 6.1 IASPs: A Guide to Quick Implementation of Independent ASPs   SG24-7811

Setup/System Considerations

When planning your ASP selection for your FileXfer3X/400 installation, consider the following:

- Moving FileXfer3X/400 objects to different ASPs is optional. The administrator should consider the advantages and disadvantages before moving. BDS recommends you don't move FileXfer3X/400 product libraries unless you see a clear advantage to moving them.

- Library **BDSBASE** must be in the *SYSBAS ASP (ASP 1 – 32). Multiple FileXfer3X/400 instances, along with other BDS products, will share the one **BDSBASE** library.

- Library **BRODERICK** can be in the *SYSBAS ASP or an Independent ASP.

- Check application ASP needs. Please note that the ASP Group setting allows only one non-*SYSBAS IASP to be accessed at a time by a user job. Consider an XFILE command where the target file is to be written in a library in an IASP. If FileXfer3X/400 libraries are in a different IASP, the FileXfer3X/400 target tasks will not be able to access the file. Only objects and spool entries that reside within the same ASP Group as FileXfer3X/400 (or the *SYSBAS ASP) can be accessed by FileXfer3X/400.

- ASP IPL startup delay. Some ASP devices may not automatically vary on during IPL. Even if the devices do automatically vary on during IPL, the time it takes for the ASP devices to become AVAILABLE can be significant, and libraries on the ASPs are not accessible until the ASP is available. If you place FileXfer3X/400 product libraries on ASPs other than ASP 1, you should modify your startup procedures to account for this delay. For example your IPL startup stream should submit a job to start FileXfer3X/400 processes instead of starting them directly. It should test for the existence of library BRODERICK (the tested lib should be in an ASP), and delay/loop until the lib is found. Then issue FileXfer3X/400 commands.

- Entire System Save. The IBM Save All function (option 21) does not save the contents of IASPs. An instance's library **BRODERICK** that exists on an IASP must be saved after the Save All function completes.

Operational Considerations

When running FileXfer3X/400 commands, consider the following:

- Set the ASP Group before running FileXfer3X/400 commands. There are several different ways to do this, including:

  o   The IBM SETASPGRP command.
  o   User Profile (via Job Description).
  o   Submit Job Command
  o   Job Description

Note: Do not modify the ASP Group parameters in BDS-supplied objects.

- FileXfer3X/400 asynchronous jobs (FileXfer server, etc.) will retain the ASP Group that was active when the start command was issued. Any jobs submitted by the task will also retain the same ASP Group.

- The SNA transfer commands (XFILE, XOBJ, XSAVF, R400FILE) contain an ASPGRP parameter, which specifies the ASPGRP to access for the target tasks running on the target system.

- To determine the ASP Group of a FileXfer3X/400 asynchronous job (or any job), run the WRKACTJOB command and display the job (option 5). Take option 2 (Display job definition attributes).

Moving Product Libraries to other ASPs

ASP Considerations

To move a FileXfer3X/400 instance's library to another ASP, be aware of the operational considerations listed above. Also, be aware of the following:

- All BDS products within the library(s) are moved during the move operations.

The procedure to move the FileXfer3X/400 library(s) is as follows:

- Stop all operations in that instance for all BDS products.
- Back up the library.
- Remove the library from all active jobs' library lists.
- Perform the following operations on the library: SAVLIB, DLTLIB, RSTLIB.
- Restart BDS product operations.

You can also use the **BDSMOVLIB** command, which automates the Save/Delete/Restore operations for you, and performs some checking/verification. See the "BDS Move Lib Utility" below for more information.

BDS Move Lib Utility

The **BDSMOVLIB** command will move Broderick Data Systems product libraries to another ASP. The Pgm objects library (**BRODERICK**), Data objects library (**BDSDATA**), the Base objects library (**BDSBASE**), or any combination can be moved. All Broderick Data Systems functions must be stopped. No object locks can be on any moved library, including the lock that occurs when the library is in a job's library list. The user should verify no job is locking the intended Libraries by using the **WRKOBJLCK** command. It is recommended that QSECOFR, or a user profile with *SECADM authority perform this command.

In order to move libraries, **SAVLIB** and **RSTLIB** commands are performed. The intermediate save media can be a save file or magnetic tapes (including virtual tape devices). It is recommended to use the Save File option unless disk space is a concern.

The **BDSMOVLIB** command and its associated objects reside in library **BRODERICK**. If you wish to move **BRODERICK**, you will need to make a copy of the following objects in another library (i.e. MYLIB), add that library to your library list (and remove **BRODERICK**) and run the **BDSMOVLIB** command from the new library:

```
BDSMOVLIB          *CMD
BDS13              *PGM
BDSHELP            *PNLGRP
```

Following is the screen and parameters of the **BDSMOVLIB** command.

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```
                    Move BDS Libs to other ASPs (BDSMOVLIB)

 Type choices, press Enter.


 Device . . . . . . . . . . . . . *SAVF     ____        Name, *SAVF
             + for more values      _____
 Volume Identifier  . . . . . . . *MOUNTED____        Character value, *MOUNTED
             + for more values      _____
 Base Lib (BDSBASE) ASP Number  . *SYS_____           1-32, *SYS, *NOMOVE
 Pgm Lib (BRODERICK) ASP Number . *SYS_____           1-32, *SYS, *NOMOVE
 Pgm Lib (BRODERICK) ASP Device . *SYSBAS  ___        Name, *SYSBAS
 Data Lib (BRODERICK) ASP Number  *SYS_____           1-32, *SYS, *NOMOVE
 Data Lib (BDSDATA) ASP Device  . *SYSBAS  ___        Name, *SYSBAS
 SAVF for lib objs in transit . . BDSTSAVF  __        Name, *LIBL
                                  QTEMP     __         *YES, *NO


 Bottom
 F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
 F24=More keys
```

Device (DEV) Parameter
Specifies the name of the device used to hold objects in transit during the move operations. Specify up to four devices. The device name must exist on the system.

Note: During the move operations, the specified media contains a full SAVLIB instance of the library being moved. In the event of a failure during the restore phase of the move, the specified media may be used to manually move the library. For this reason, if the **BDSMOVLIB** command is submitted to batch and DEV(*SAVF) is specified, a library other than **QTEMP** should be considered.

The possible values are:

*SAVF: The move operation is done using the save file specified by the SAVF for lib objs in transit.

device-name: Specify the name of the tape device(s) used for the move operation. Specify up to 4 devices.

Volume Identifier (VOL) Parameter
Specifies, for tape devices, the Volume(s) to check for.

The possible values are:

*MOUNTED: No volume-id checking is performed. The mounted volume is used.

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volume-id: Specify the name of the volumes(s) to be checked for during the move operation. Specify up to 5 volumes.

Note: If a library's data is expected to continue onto more than one tape, it is recommended to specify the actual volume IDs instead of *MOUNTED.

Base Lib (BDSBASE) ASP Number (BASASP) Parameter

Specifies the destination ASP Number for the Base objects library (**BDSBASE**). This value must be different than the Base Lib's existing ASP number.

The possible values are:

*SYS: The System ASP (ASP = 1) is the destination ASP.

*NOMOVE: The Base objects Lib is not moved.

number: Specify the destination User ASP number, from 1 to 32.

Pgms Lib (BRODERICK) ASP Number (PGMASP) Parameter

Specifies the destination ASP Number for the Pgm objects library (**BRODERICK**). Use this parameter instead of the PGMASPDEV parameter if you wish to specify a Basic ASP (1 - 32). This value must be different than the Pgm Lib's existing ASP number.

The possible values are:

*SYS: The System ASP (ASP = 1) is the destination ASP.

*NOMOVE: The Pgm objects Lib is not moved.

number: Specify the destination User ASP number, from 1 to 32.

Pgms Lib (BRODERICK) ASP Device (PGMASPDEV) Parameter

Specifies the destination ASP Device for the Pgm objects library (**BRODERICK**). Use this parameter instead of the PGMASP parameter if you wish to specify an Independent ASP (33 - 256).

The possible values are:

*SYSBAS: The value specified in the ASP Number parameter (PGMASP) is used.

name: Specify the ASP Device name. This name must exist and must be in an AVAILABLE status.

Data Lib (BDSDATA) ASP Number (DTAASP) Parameter

Specifies the destination ASP Number for the Data objects library (**BDSDATA**). Use this parameter instead of the DTAASPDEV parameter if you wish to specify a Basic ASP (1 - 32). This value must be different than the Data Lib's existing ASP number.

The possible values are:

*SYS: The System ASP (ASP = 1) is the destination ASP.

*NOMOVE: The Data objects Lib is not moved.

number: Specify the destination User ASP number, from 1 to 32.

Data Lib (BDSDATA) ASP Device (DTAASPDEV) Parameter
Specifies the destination ASP Device for the Data objects library (**BDSDATA**). Use this parameter instead of the DTAASP parameter if you wish to specify an Independent ASP (33 - 256).

The possible values are:

*SYSBAS: The value specified in the ASP Number parameter (DTAASP) is used.

name: Specify the ASP Device name. This name must exist and must be in an AVAILABLE status.

SAVF for lib objs in transit (SAVF) Parameter
Specifies the name and library of the save file that contains the objects in transit during move operations.

The possible values are:

BDSTSAVF: File BDSTSAVF will be used.

save-file-name: Specify the name of the save file to use when performing the move operations. If the save file does not exist, it will be created.

The possible Library values are:

QTEMP: The library **QTEMP** is used to locate the save file.

library-name: Specify the name of the library to be searched.

Running Multiple FileXfer3X/400 Instances in an LPAR

Multiple instances of FileXfer3X/400 can run within an LPAR. Each instance runs independently, though some objects are shared by all instances, including:

- Library **BDSBASE** and its objects
    - Subsystem BDS and its subcomponents.
    - The BDS User profile coordinator (BDSUSRPRF).

ASP Considerations

All instances can be active and running at the same time. Each instance must contain a copy of library **BRODERICK** in its own unique IASP.
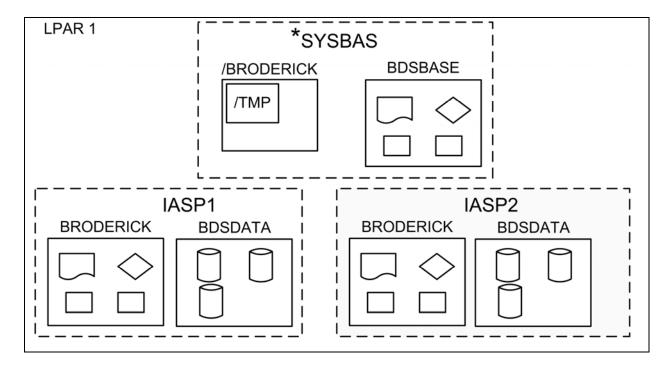
Figure 1-1: Multiple FileXfer3X/400 Instances

Note: FileXfer3X/400 does not use library BDSDATA or IFS directory /BRODERICK, but other BDS products in in the LPAR may.

When running multiple FileXfer3X/400 instances, consider the following:

- Library **BRODERICK** cannot reside in the ***SYSBASE IASP**. See "Moving Product Libraries to other ASPs" in this appendix for more information on moving library **BRODERICK** to an IASP.

- Library **BDSBASE** must remain in the *SYSBAS IASP, ASP (1 – 32).

- You must install and update each instance separately. For example, if you have FileXfer3X/400 instances installed in IASPs IASP1 and IASP2, you must run the update procedure twice.

- To update or install an instance of FileXfer3X/400, all instances in the LPAR must be stopped.

- For each instance, library **BRODERICK** must be backed up and restored as a separate entity. For example if you have 2 instances, you must back up both instances of library **BRODERICK** in order to be able to recover data if needed.

  Note: You can restore an instance's **BRODERICK** library into another IASP to create another

instance.

- If you are Mirroring our product, each instance must be mirrored as a separate entity. You must mirror ALL objects in **BRODERICK** in order for a recovery to be successful.

- Remote Writer names should be unique across the LPAR. For example you cannot have a Remote Writer named R1 in 2 different instances within the same LPAR running at the same time.

- TCP: Each FileXfer3X/400 instance that receives data from other source machines via TCP must have its own TCP server defined and running. Each TCP server must listen on a unique port. The command (**XTFILE**, etc.) definition on the source system refers to the desired instance on the target system by specifying the corresponding IP address and port number.

To work with an instance of FileXfer3X/400, you simply set your job's ASP Group. For example:

SETASPGRP IASP1
XFILE …
SETASPGRP IASP2
XFILE …

Release Compatibility Table

This chapter describes the procedures to determine if the new release of FileXfer3X/400 is compatible with existing instances of BDS software that are installed on this LPAR. To determine the existing software's release, run the corresponding command for each/all instances of BDS software installed on this LPAR.

Product	Command
Spool Organizer/400	**BRODERICK/BSOSETUP**
Remote SpoolPrint/400	**BRODERICK/BRSPLSETUP**
FileXfer/400	**BRODERICK/BXFERSETUP**
E-mail Utilities/400	**BRODERICK/BEMSETUP**
Spool PDF Overlay/400	**BRODERICK/BOVSETUP**

Note: If needed, set the ASP Group to the proper value (**SETASPGRP**) if needed before running the above commands.

The following table shows the other products' oldest release that is compatible with the new release of FileXfer3X/400/400:

Product	Release
Spool Organizer/400	5.7 0000
Remote SpoolPrint/400	6.2 0000
FileXfer/400	5.2 0000
E-mail Utilities/400	1.0 0000
Spool PDF Overlay/400	1.0 0000

Any installed BDS instance with a release that is earlier than the above values is not compatible with the new release and must be updated at the same time this FileXfer3X/400 instance is updated. Failure to update non-compatible BDS software instances could cause other BDS software to stop working after this FileXfer3X/400 install/update is performed.

You can update the BDS software instances in any order.

For example, if the **BRODERICK/BSOSETUP** command shows that Spool Organizer 5.6 1701 is installed on this LPAR, it must be updated along with updating FileXfer3X/400.

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