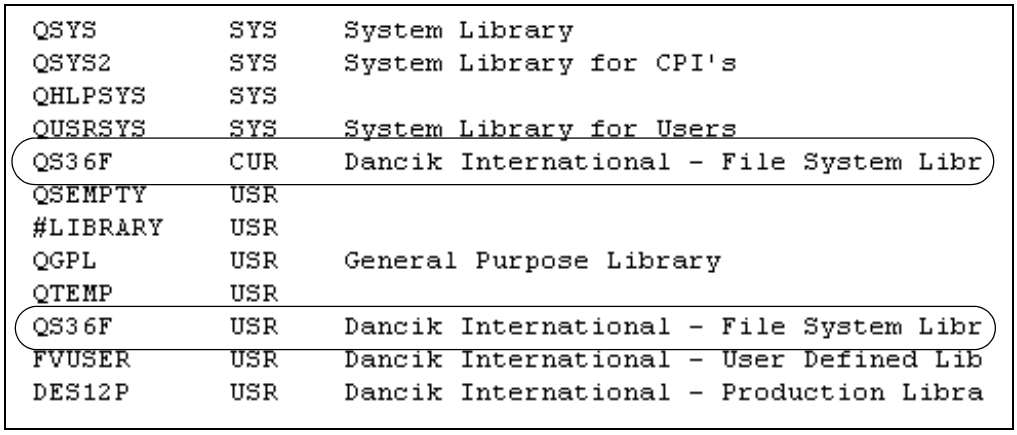
Environments on the iSERIES

Single Environment

The standard "out of the box" set-up for a customer's AS400 is to have a single environment. This means that all the companies run out that machine use the same data library (QS36F) and program library (DES12P).

To check the libraries on a system, enter the command **DSPLIBL**. The default data and program libraries are included in the listing.



```
QSYS         SYS    System Library
QSYS2        SYS    System Library for CPI's
QHLPSYS      SYS
QUSRSYS      SYS    System Library for Users
QS36F        CUR    Dancik International - File System Libr
QSEMPTY      USR
#LIBRARY     USR
QGPL         USR    General Purpose Library
QTEMP        USR
QS36F        USR    Dancik International - File System Libr
FVUSER       USR    Dancik International - User Defined Lib
DES12P       USR    Dancik International - Production Libra
```

On a single environment machine, every user's profile is pointed to the default libraries.

Multi-Environment

Multi-Environments are used in situations when a customer needs multiple sets of data. Examples are setting up a test environment, there are companies in countries, or when a company buys another one that has its own data and records.

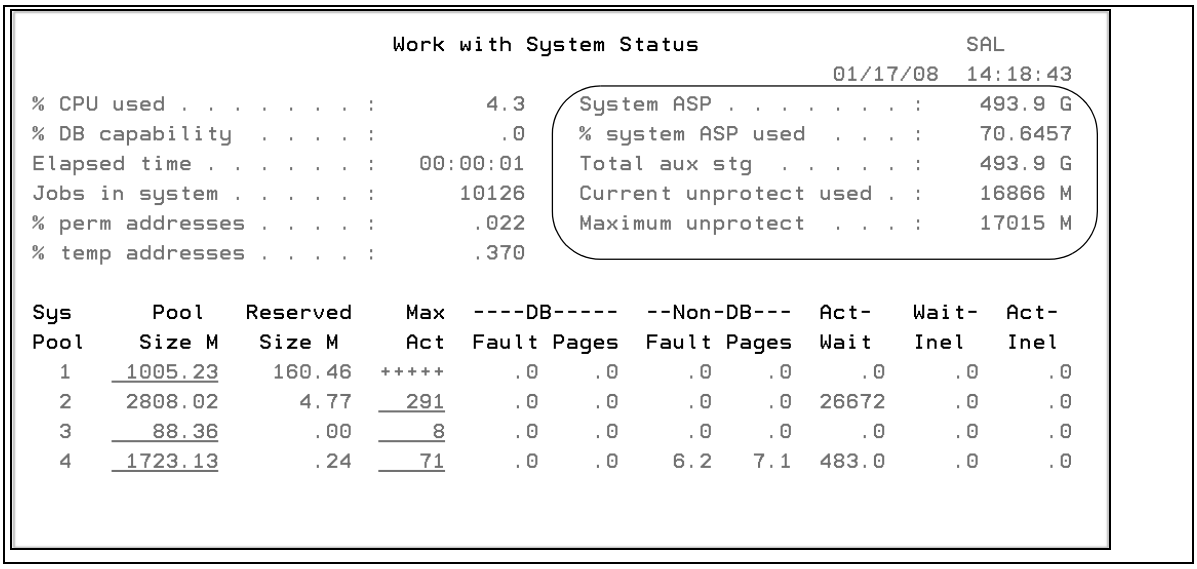
Note: *It is very important to perform these steps accurately without missing any settings. If they are not performed correctly, the system does not issue a warning nor does it end the creation of the environment. However, the data will be corrupted and unreliable and it might not be evident until much later when unexplainable results start showing up.*

Before you start

You should probably check the iSeries machine to see if it has enough storage space to hold new data and program libraries.

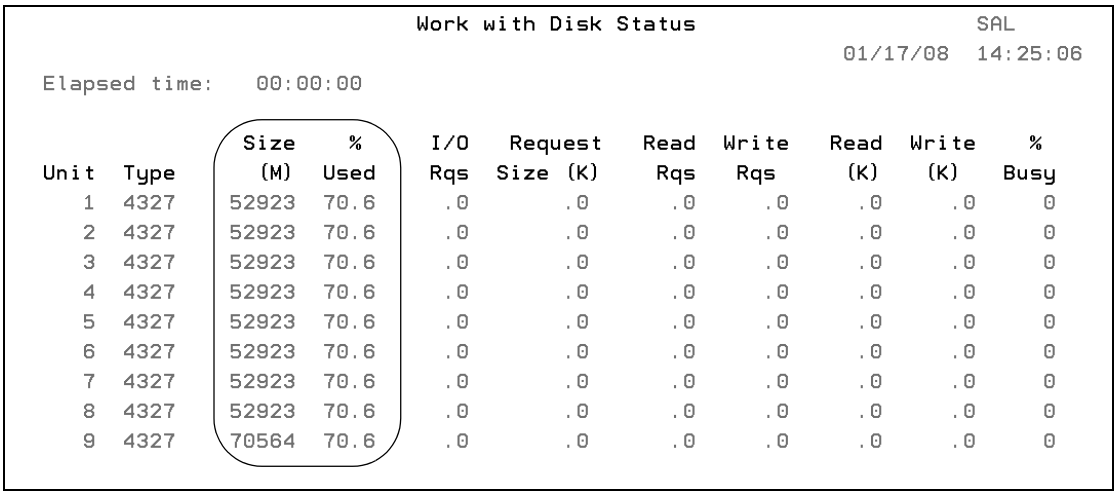
You can do this using either the **WRKSYSSTS** or **WRKDSKSTS** commands.

WRKSYSSTS



```
                              Work with System Status                    SAL
                                                          01/17/08  14:18:43
% CPU used . . . . . . . . :          4.3    System ASP . . . . . . . . :    493.9 G
% DB capability  . . . . . :           .0    % system ASP used  . . . . :    70.6457
Elapsed time . . . . . . . :     00:00:01    Total aux stg  . . . . . . :    493.9 G
Jobs in system . . . . . . :        10126    Current unprotect used . . :    16866 M
% perm addresses . . . . . :          .022   Maximum unprotect  . . . . :    17015 M
% temp addresses . . . . . :          .370

Sys       Pool    Reserved     Max  ----DB-----  --Non-DB---  Act-   Wait-  Act-
Pool     Size M   Size M       Act  Fault Pages  Fault Pages  Wait   Inel   Inel
  1     1005.23    160.46   +++++      .0    .0      .0    .0     .0     .0     .0
  2     2808.02      4.77     291      .0    .0      .0    .0 26672      .0     .0
  3       88.36       .00       8      .0    .0      .0    .0     .0     .0     .0
  4     1723.13       .24      71      .0    .0     6.2   7.1  483.0      .0     .0
```

WRKDSKSTS



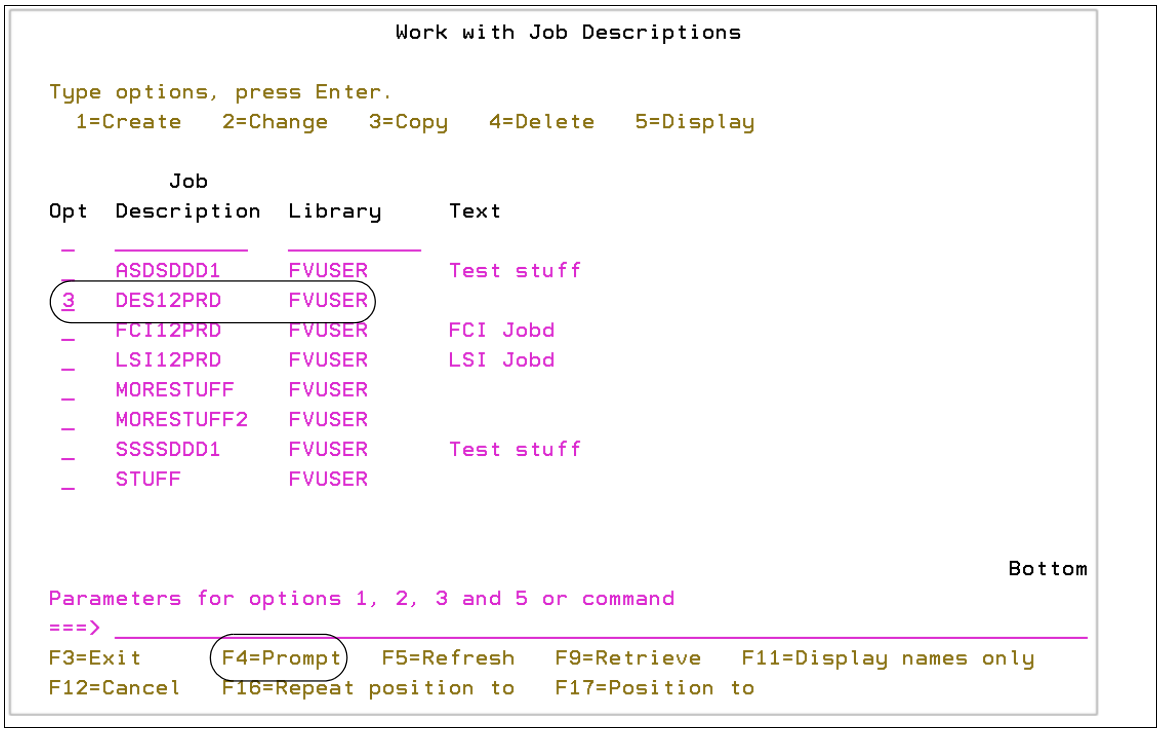
```
                              Work with Disk Status                      SAL
                                                          01/17/08  14:25:06
Elapsed time:   00:00:00

                    Size     %      I/O    Request    Read  Write    Read  Write     %
Unit  Type           (M)   Used     Rqs  Size (K)     Rqs   Rqs      (K)   (K)    Busy
   1  4327        52923   70.6      .0        .0      .0    .0       .0    .0       0
   2  4327        52923   70.6      .0        .0      .0    .0       .0    .0       0
   3  4327        52923   70.6      .0        .0      .0    .0       .0    .0       0
   4  4327        52923   70.6      .0        .0      .0    .0       .0    .0       0
   5  4327        52923   70.6      .0        .0      .0    .0       .0    .0       0
   6  4327        52923   70.6      .0        .0      .0    .0       .0    .0       0
   7  4327        52923   70.6      .0        .0      .0    .0       .0    .0       0
   8  4327        52923   70.6      .0        .0      .0    .0       .0    .0       0
   9  4327        70564   70.6      .0        .0      .0    .0       .0    .0       0
```

Setting up A Multi-environment System

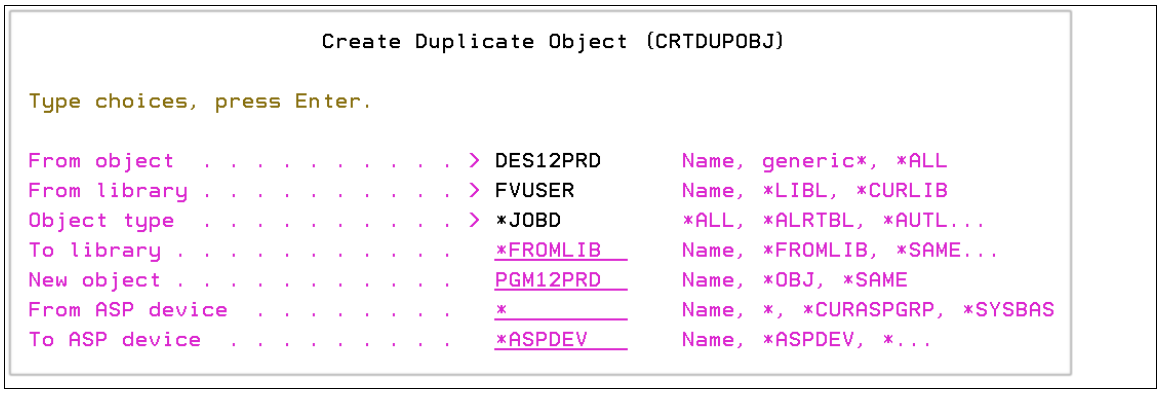
1. To create a multi-environment, new data and program libraries have to be created.
2. Determine the name of the new data library. Example - On Pental - we created PGMDTA.
3. Next, use the Create Lib command to create the new library - ex: **CRTLIB LIB(PGMDTA) TEXT('New Data Env Lib'**).
4. Then - copy the database from the existing default (QS36F) library into the newly created data lib (this step needs to be done by technical resource - i.e., developer).

5. Next we need to copy the program library (DES12PRD) job description to a new job description whose name is based on the new environment you are setting up.

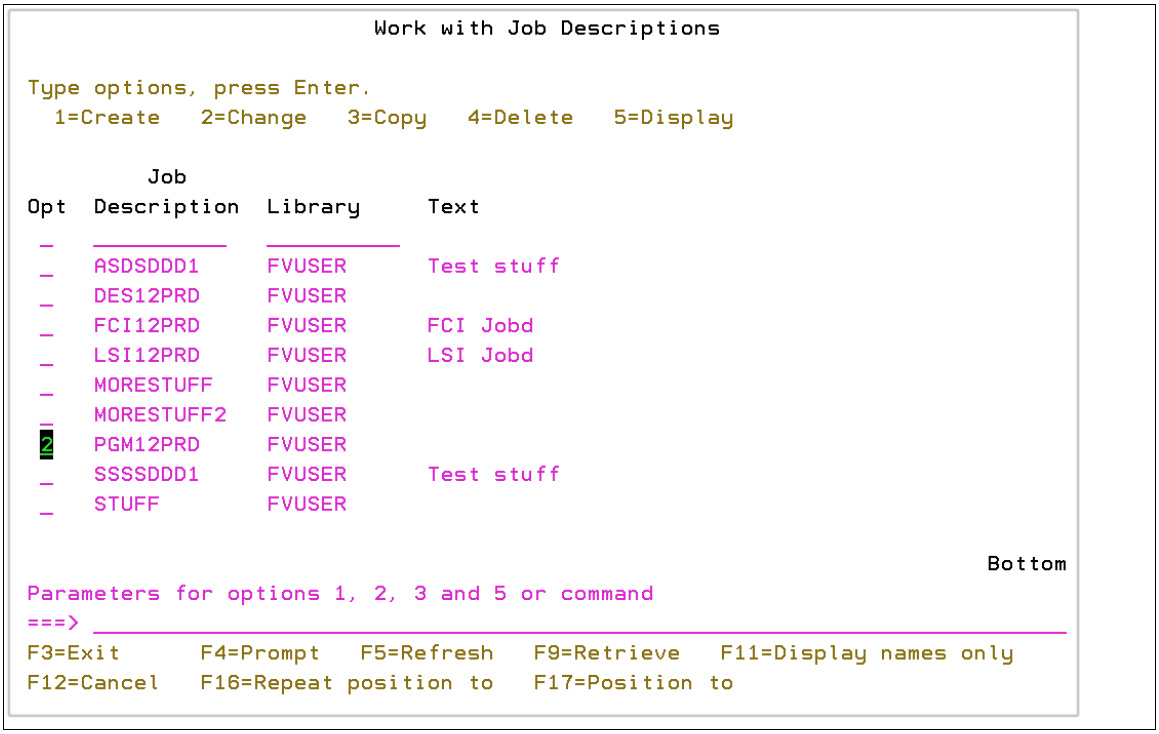
   - **WRKJOBD FVUSER/*ALL** to see list of job descriptions.
   - Use Opt **3** and then **F4** to prompt to copy the **DES12PRD** job description.



   - In the **New object** field, key in the name of the new job description - in this example **PGM12PRD**..



- On the job description just created, take **Opt 2** (change) and press **Enter.**



- This puts you into the change job description mode. Press **F10** for additional parms.
- In the **Accounting code** field, key in the name of the new data library created in step1 (**PGM-DTA**). This is needed so that all upgrades are processed against the data library, keeping the test data library up to date with the same upgrades that run in the production environment.

```
                    Change Job Description (CHGJOBD)

Type choices, press Enter.

Job description  . . . . . > PGM12PRD      Name
  Library  . . . . . . . . . >   FVUSER     Name, *LIBL, *CURLIB
Job queue  . . . . . . . . .   QBATCH       Name, *SAME
  Library  . . . . . . . . .     QGPL       Name, *LIBL, *CURLIB
Job priority (on JOBQ) . . . .  5           1-9, *SAME
Output priority (on OUTQ)  . . .  5          1-9, *SAME
Print device . . . . . . . . .   *USRPRF      Name, *SAME, *USRPRF...
Output queue . . . . . . . . .   *USRPRF      Name, *SAME, *USRPRF, *DEV...
  Library  . . . . . . . . .                 Name, *LIBL, *CURLIB
Text 'description' . . . . . .   *BLANK
_____

                         Additional Parameters

User . . . . . . . . . . . . . .   *RQD         Name, *SAME, *RQD
Accounting code  . . . . . . .   PGMDTA          '
                                                                    More...
F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys
```

- Press **Enter** a couple of times to get to the **Initial library list** fields. Change the library QS36F to be the library name created in step 1(**PGMDTA**).

```
                    Change Job Description (CHGJOBD)

Type choices, press Enter.

Initial library list . . . . . .   #LIBRARY     Name, *SAME, *SYSVAL, *NONE
                                   QSSP
                                   QGPL
                                   QTEMP
                                   PGMDTA
                                   FVUSER
                                   DES12P
                                   APL
                                   DESA02PO
                 + for more values DOD12P
Initial ASP group  . . . . . . .   *NONE        Name, *SAME, *NONE
Message logging:
  Level  . . . . . . . . . . . .   4            0-4, *SAME
  Severity . . . . . . . . . . .   00           0-99, *SAME
  Text . . . . . . . . . . . . .   *NOLIST      *SAME, *MSG, *SECLVL, *NOLIST
Log CL program commands  . . . .   *NO          *SAME, *NO, *YES
                                                                    More...
F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys
```

- When done press **Enter**.

6. Use the **WRKUSRPRF** to find an existing Dancik Application user profile (**WRKUSRPRF *ALL**)

7. Enter option **3** to copy an existing profile to the new profile.

```
                          Work with User Profiles

Type options, press Enter.
  1=Create   2=Change   3=Copy   4=Delete   5=Display
  12=Work with objects by owner

     User
Opt  Profile     Text
__   __________
__   GBQAA02     Gary Brannen  - A02 QA
3_   GBRANNEN    Gary Brannen - R12 Production
__   GBRAN12P    Gary Brannen  - R12 Production
__   GMCCLELL    Greg McClelland  - R12 Production
__   GRP02       Andy Parham  - R12 Production
__   GUEST       GUEST  - R12 PRODUCTION - Calls RELAYCUSTC
__   GUESTWWW    GUEST  - Worldwide QA Environment
__   GUEST2      Guests - A02 Demo Data
__   GUEST3      GUEST DEMO PROFILE in A02HCDTA lib
                                                                    More...
Parameters for options 1, 2, 3, 4 and 5 or command
===> ____________________________________________________________________
F3=Exit   F5=Refresh   F12=Cancel   F16=Repeat position to   F17=Position to
F21=Select assistance level         F24=More keys
```

8. Enter the new user profile name and change the current library to match the library created in step 1.

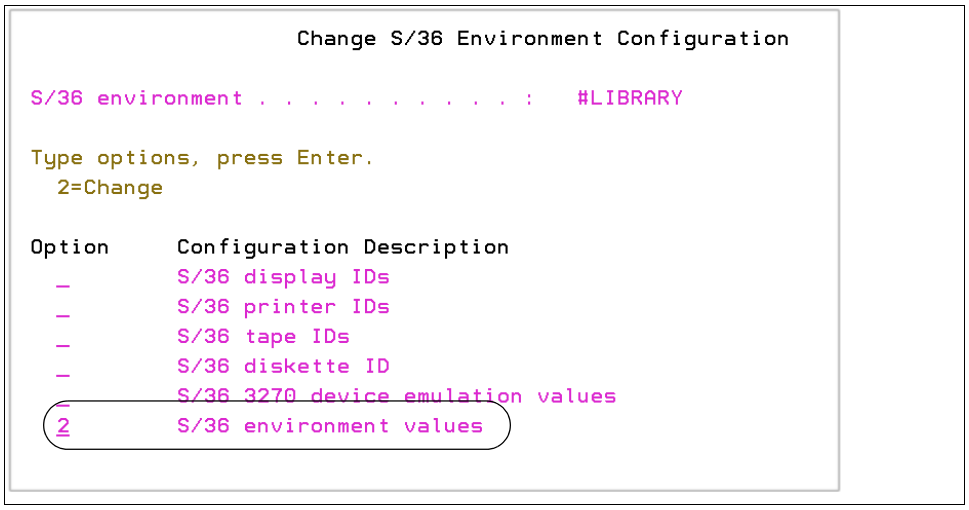
```
                      Create User Profile (CRTUSRPRF)

 Type choices, press Enter.

 User profile . . . . . > GBRANNEN2     Name
 User password  . . . . .   *USRPRF     Character value, *USRPRF...
 Set password to expired  . . . > *NO    *NO, *YES
 Status . . . . . > *ENABLED     *ENABLED, *DISABLED
 User class . . . . . > *SYSOPR     *USER, *SYSOPR, *PGMR...
 Assistance level . . . . . > *INTERMED     *SYSVAL, *BASIC, *INTERMED...
 Current library  . . . . . > PGMDTATA     Name, *CRTDFT
 Initial program to call  . . . > DODOPEN     Name, *NONE
   Library  . . . . . >   *LIBL     Name, *LIBL, *CURLIB
 Initial menu . . . . . > US     Name, *SIGNOFF
   Library  . . . . . >   *LIBL     Name, *LIBL, *CURLIB
 Limit capabilities . . . . . > *NO     *NO, *PARTIAL, *YES
 Text 'description' . . . . . > 'Gary Brannen - R12 Production'
_____
```

9. Scroll down and change the job description to match the job description created in step 5. Press **Enter** to create.

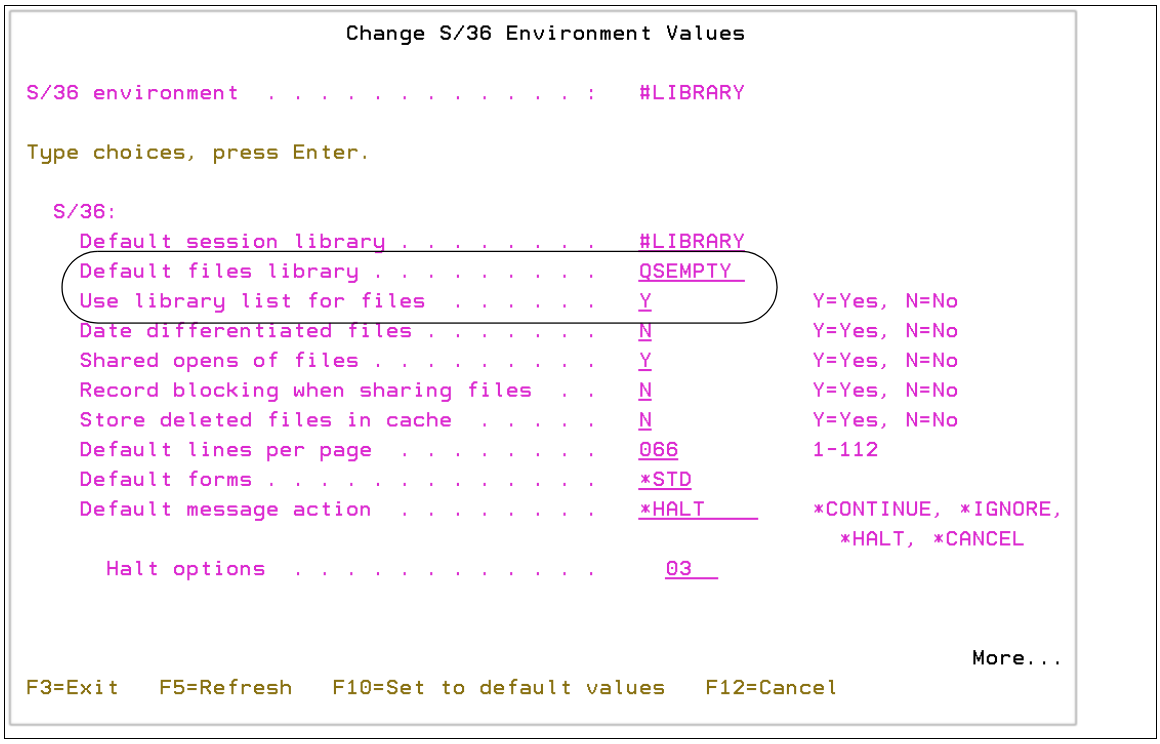
10. Create a new library called **QSEMPTY** using the command **CRTLIB LIB (QSEMPTY) TEXT('New Data Env Lib'**). This will become the new default System 36 Files library. The Default files

library is set to QSEMPTY so that the default on the BLDFILE for the S/36 environment will be set to that, and if the Procedure that builds files is not set correctly, then the file will show up in the QSEMPTY library.

11. Next, we need to change the iSeries System 36 environment tables to accommodate the new multi-environment setup. Issue the command CHGS36. We will be changing the S/36 environment values so place a **2** beside the **S/36 Environment Values**.



12. Change the **Default files library** from **QS36F** to **QSEMPTY**. Also make sure that the option to **Use library list for files** is "**Y**"



13. Press **Enter** to make changes and you are finished.