z/OS Basic Skills: Introduction to ISPF

Unit 3: Using the ISPF utilities
Module 1: Using the ISPF library utility

Introduction

The ISPF utilities provide a variety of functions for library, data set, and catalog maintenance. In this module, *Using the ISPF library utility*, we'll explore a set of utilities that allow you to operate on members of a specific data set.

The library utility is intended primarily for maintaining partitioned data sets, but several of the functions also apply to sequential data sets.

Time to complete: 20 – 30 minutes

```
 Menu  Utilities  Compilers  Options  Status  Help
                        ISPF Primary Option Menu
Option ===> 3_

0  Settings      Terminal and user parameters        User ID . : SMCHUGH
1  View          Display source data or listings      Time. . . : 15:04
2  Edit          Create or change source data         Terminal. : 3278
3  Utilities     Perform utility functions            Screen. . : 1
4  Foreground    Interactive language processing      Language. : ENGLISH
5  Batch         Submit job for language processing   Appl ID . : PDF
6  Command       Enter TSO or Workstation commands    TSO logon : IKJACCT
7  Dialog Test   Perform dialog testing               TSO prefix: SMCHUGH
9  IBM Products  IBM program development products      System ID : SC76
10 SCLM          SW Configuration Library Manager     MVS acct. : ACCNT#
11 Workplace     ISPF Object/Action Workplace         Release . : ISPF 5.7



        Enter X to Terminate using log/list defaults



 F1=Help      F2=Split     F3=Exit      F7=Backward  F8=Forward   F9=Swap
 F10=Actions  F12=Cancel
MA    a                                                            04/015
```

Objectives

Upon completion of this module, you should be able to:

- Access and use the ISPF library utility
- Select library utility options
- State which options operate on the whole data set and which options operate on data set members.

Accessing the Utility Selection Panel

When you select option 3 on the Primary Options Menu, the Utility Selection Panel appears. This panel typically gives you access to many different utility options. In the series of modules about ISPF utilities, we explore some of the most commonly used utilities:

- The library utilities
- The data set utilities
- The move/copy utility
- The dslist utility
- The compare and search utilities

```
  Menu   Help

                         Utility Selection Panel
Option ===> _
                                                              More:    •
1  Library      Compress or print data set.  Print index listing.  Print,
                    rename, delete, browse, edit or view members
2  Data Set     Allocate, rename, delete, catalog, uncatalog, or display
                    information of an entire data set
3  Move/Copy    Move, or copy members or data sets
4  Dslist       Print or display (to process) list of data set names.
                    Print or display VTOC information
5  Reset        Reset statistics for members of ISPF library
6  Hardcopy     Initiate hardcopy output
7  Transfer     Download ISPF Client/Server or Transfer data set
8  Outlist      Display, delete, or print held job output
9  Commands     Create/change an application command table
11 Format       Format definition for formatted data Edit/Browse
12 SuperC       Compare data sets                          (Standard Dialog)
13 SuperCE      Compare data sets Extended                 (Extended Dialog)
14 Search-For   Search data sets for strings of data        (Standard Dialog)
15 Search-ForE  Search data sets for strings of data Extended (Extended Dialog)
 F1=Help     F2=Split    F3=Exit     F7=Backward  F8=Forward   F9=Swap
F10=Actions  F12=Cancel
MA     a                                                            04/014
```

Starting the **ISPF library utility**

To access the library utility, select Option 1 on the Utility Selection Panel (shown here) and press the Enter key*. Alternatively, you can jump directly to the Library Utility Panel from the Primary Options Menu by entering 3.1 on the Primary Options Menu and pressing the Enter key*.

* The default Enter key for a Personal Communications (PCOMM) terminal emulator session is the right Ctrl key. If you are using a different terminal emulator, or your PCOMM keyboard has been customized, you may have a different Enter key.

```
 Menu  Help
───────────────────────────────────────────────────────────────
                         Utility Selection Panel
Option ===> 1
                                                          More:    +
1  Library      Compress or print data set.  Print index listing.  Print,
                  rename, delete, browse, edit or view members
2  Data Set     Allocate, rename, delete, catalog, uncatalog, or display
                  information of an entire data set
3  Move/Copy    Move, or copy members or data sets
4  Dslist       Print or display (to process) list of data set names.
                  Print or display VTOC information
5  Reset        Reset statistics for members of ISPF library
6  Hardcopy     Initiate hardcopy output
7  Transfer     Download ISPF Client/Server or Transfer data set
8  Outlist      Display, delete, or print held job output
9  Commands     Create/change an application command table
11 Format       Format definition for formatted data Edit/Browse
12 SuperC       Compare data sets                        (Standard Dialog)
13 SuperCE      Compare data sets Extended               (Extended Dialog)
14 Search-For   Search data sets for strings of data      (Standard Dialog)
15 Search-ForE  Search data sets for strings of data Extended (Extended Dialog)
 F1=Help     F2=Split    F3=Exit     F7=Backward F8=Forward  F9=Swap
F10=Actions  F12=Cancel
MA   a                                                        04/015
```

Exploring the ISPF Library Utility panel

The Library Utility panel, shown here, has several sections. Like most ISPF panels, this one has an action bar at the top. The options you can select on this panel are divided into two categories:

• Data set options function on an entire library or data set.

• Member options act on data set members.

The library section is similar to the library section on the View Entry Panel or the Edit Entry Panel, with the exception that it gives you the options of renaming a member, confirming the deletion of a member, and accessing an enhanced member list.

The other data set section should also be familiar to you from other panels.

```
Menu   RefList   Utilities   Help

                          Library Utility
Option ===>  _
                    Data set options                       More:       +
blank Display member list      I Data set information    B Browse member
   C Compress data set         S Short data set information D Delete member
   X Print index listing       E Edit member   Member options R Rename member
   L Print entire data set     V View member             P Print member

                              Enter "/" to select option
ISPF Library:    Library section    /  Confirm Member Delete
   Project . . . SMCHUGH            _  Enhanced Member List
   Group . . . . TEST        . . . _____  . . . _____  . . . _____
   Type  . . . . COBOL
   Member  . . . _____      (If B, D, E, P, R, V, or blank selected)
   New name  . . _____      (If R selected)

Other Partitioned or Sequential Data Set:  Other data set section
   Data Set Name . . . . _____
   Volume Serial . . . . _____    (If not cataloged)

 F1=Help     F2=Split    F3=Exit      F7=Backward  F8=Forward   F9=Swap
F10=Actions  F12=Cancel
MA   a                                                           04/014
```

Exploring the ISPF Library Utility panel continued

The password section appears at the bottom of the panel (you may need to use F8 to scroll forward to see the bottom of the panel). Some data sets may be protected by a password, so that only authorized people have access to them. This is the field where you enter the password.

```
 Menu   RefList  Utilities  Help

                            Library Utility
Option ===> _____

                                                        More:   -
    C Compress data set       S Short data set information    D Delete member
    X Print index listing     E Edit member                   R Rename member
    L Print entire data set   V View member                   P Print member

                            Enter "/" to select option
ISPF Library:                      /   Confirm Member Delete
   Project . . . SMCHUGH           _   Enhanced Member List
   Group . . . . TEST     . . . _____ . . . _____ . . . _____
   Type  . . . . COBOL
   Member  . . . _____      (If B, D, E, P, R, V, or blank selected)
   New name  . . _____      (If R selected)

Other Partitioned or Sequential Data Set:
   Data Set Name . . . _____
   Volume Serial . . . _____       (If not cataloged)
                        Password section
Data Set Password . .  _____      (If password protected)
 F1=Help      F2=Split     F3=Exit      F7=Backward  F8=Forward    F9=Swap
F10=Actions  F12=Cancel
MA   a                                                            04/014
```

Library utility options for the whole library

You can use the following options on an entire data set:

• C – compress a data set to recover space occupied by deleted or updated members

• X – print an index list that shows general data set information and member names for a PDS.

• L – print the entire data set formats the contents of a source data set for printing and records the output in an ISPF list data set.

• I – display information about a data set on a direct access device

• S – display the same information about a sequential data set as the I option. For a PDS, the S option displays less information.

An example of data set information

Here is an example of the type of data set information ISPF displays when you enter the I option on the Library Utility panel.

For a PDS, the S option would not display the number of maximum or used directory blocks, or the number of members.

```
                            Data Set Information
Command ===> _____

Data Set Name  . . . : SMCHUGH.TEST.COBOL

General Data                          Current Allocation
 Volume serial . . . . : BH6ST2        Allocated blocks  . : 102
 Device type . . . . . : 3390          Allocated extents . : 1
 Organization  . . . : PO              Maximum dir. blocks : 10
 Record format . . . : FB
 Record length . . . : 80
 Block size  . . . . : 27920          Current Utilization
 1st extent blocks . : 102             Used blocks . . . . : 98
 Secondary blocks  . : 20              Used extents  . . . : 1
                                       Used dir. blocks  . : 6
 Creation date . . . : 2006/05/11      Number of members . : 59
 Referenced date . . : 2007/02/16
 Expiration date . . : ***None***




 F1=Help      F2=Split     F3=Exit      F7=Backward  F8=Forward    F9=Swap
 F12=Cancel
MA    a                                                            02/015
```

Library utility options for specific members

You can use the following options on a data set member:

- E – edit the member
- V – view the member
- B – browse the member
- D – delete the member
- R – rename the member
- P – print the member

```
   Menu  RefList  Utilities  Help
                          Library Utility
Option ===> _
                                                      More:     +
blank Display member list    I Data set information    B Browse member
   C Compress data set        S Short data set information  D Delete member
   X Print index listing      E Edit member             R Rename member
   L Print entire data set    V View member             P Print member

                         Enter "/" to select option
ISPF Library:              / Confirm Member Delete
   Project . . . SMCHUGH    _ Enhanced Member List
   Group . . . . TEST     . . . _____ . . . _____ . . . _____
   Type  . . . . COBOL
   Member  . . . _____   (If B, D, E, P, R, V, or blank selected)
   New name  . . _____   (If R selected)

Other Partitioned or Sequential Data Set:
   Data Set Name . . . _____
   Volume Serial . . . _____   (If not cataloged)

 F1=Help    F2=Split    F3=Exit     F7=Backward  F8=Forward   F9=Swap
 F10=Actions  F12=Cancel
MA    a                                                       04/014
```

Using the **library utility - simulation**

To work with a specific data set member:

1. Enter the option code on the Option line.

2. Click on the Member field and type in the member name. For example, here we have typed a B for browse on the Option line and typed IGYIVP in the member field.

3. Press the Enter (right Ctrl) key to open the member in a browse session.

To try a simulation of using the library utility, press the Launch button.

```
 Menu   RefList  Utilities  Help
                              Library Utility
Option ===> B
                                                          More:    +
 blank Display member list     I Data set information     B Browse member
     C Compress data set       S Short data set information D Delete member
     X Print index listing     E Edit member              R Rename member
     L Print entire data set   V View member              P Print member

                              Enter "/" to select option
 ISPF Library:                  /  Confirm Member Delete
    Project . . .  SMCHUGH      _  Enhanced Member List
    Group . . . .  TEST    . . .         . . .         . . .
    Type  . . . .  COBOL
    Member  . . .  IGYIVP      (If B, D, E, P, R, V, or blank selected)
    New name  . .              (If R selected)

 Other Partitioned or Sequential Data Set:
    Data Set Name . . .
    Volume Serial . . .          (If not cataloged)

  F1=Help      F2=Split    F3=Exit      F7=Backward  F8=Forward  F9=Swap
 F10=Actions  F12=Cancel
 MA    a                                                          16/025
```

Summary

In this module, *Using the ISPF library utility*, you have learned:

- How to access the library utility
- Which options operate on entire data sets and which option operate on specific members
- How to specify options on the library utility panel
- How to specify options on the library list panel.