



# **User's Guide and Reference**

**Release 5.8**



### **Notice**

Isogon Galaxy, SoftAudit, Vista, and Spotlight are trademarks or registered trademarks of Isogon Corporation.

Other trademarks are the property of their respective owners.

Copyright © 1993-2005 Isogon Corporation. All Rights Reserved. Licensed materials.

The SoftAudit Knowledge Base is the proprietary information of Isogon Corporation and is provided for the exclusive use by organizations authorized by Isogon Corporation, and solely for use in conjunction with the SoftAudit product. It has been encoded, and contains information that will allow the detection of misappropriation.

The SoftAudit family of products contains patented technology protected by U.S. Patents 5,499,340 and 5,590,056.

### **US Government Users Restricted Rights**

Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013 or any other successor clause. Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19(c)(1,2) or any other successor clause.

### **Printed in the United States of America**

User's Guide and Reference, Release 5.8

---

# CONTENTS

## 1. About This Manual

Assumptions .....	1-1
Organization of This Guide .....	1-1
Other Information Resources .....	1-1
Text Conventions In This Guide .....	1-2
Contacting Isogon .....	1-2

## 2. An Overview of SPIFFY

What Is SPIFFY .....	2-1
Features and Benefits .....	2-1
What's New in Release 5.8 .....	2-2

## 3. Using SPIFFY

Object Orientation .....	3-1
Extended Point-and-Shoot .....	3-4
Hotbars .....	3-5
Activate Hotbars .....	3-5
Define Hotbars .....	3-5
Point-and-Shoot Parameters .....	3-7
Add Point-and-Shoot Commands .....	3-8
Action Fields .....	3-9
Function-Oriented Action Bar .....	3-10
The Object List (OLIST) .....	3-11
Manage OLISTs .....	3-13
Additional Objects Supported by OLIST .....	3-14
The Point-and-Shoot Interface of OLIST .....	3-15
View Main and Line Commands (Assist) .....	3-16
The Enhanced Member Selection List (MSL) .....	3-17
The Point-and-Shoot Interface of MSL .....	3-18
Drill-Down Navigation .....	3-19
Enhanced Data Set List (DSLIST) .....	3-20
New Options on the DSLIST Entry Panel .....	3-20
Customizable User Interface .....	3-23
The Enhanced Handling of BROWSE, EDIT, and VIEW Commands .....	3-24
Shared and Exclusive VIEW .....	3-25
BROWSE, EDIT, and VIEW Enhancements .....	3-26
Enhanced CUT and PASTE .....	3-26
STATUS Command .....	3-26
Enhanced FIND and CHANGE Support .....	3-27
Data Set History Facility (@H) .....	3-28
Access Data Sets by DDName .....	3-30
Enhanced TSO Command Support .....	3-31
The SPIFFY Print Engine .....	3-33
Print Items from SPIFFY .....	3-33
Use the Print Engine .....	3-33
Special Formatting of Source Data .....	3-34
ISPF Dialog Development Enhancements .....	3-35

---

SCLM Integration .....	3-36
Call SPIFFY Functions from Applications .....	3-37
Call OLIST From an Application .....	3-37
Call MSL From an Application .....	3-39
Call DSLIST (ISPF Option 3.4) From an Application .....	3-40
<b>4. Reference</b>	
Command Types .....	4-1
GENERAL COMMANDS .....	4-3
EDIT/VIEW/BROWSE COMMANDS .....	4-18
MSL COMMANDS .....	4-28
OLIST COMMANDS .....	4-95
TSO Command Shell .....	4-163
TSO Shell Options .....	4-163
Invoking the TSO Command Shell .....	4-163
TSO Shell Commands .....	4-163
Invoking a Command .....	4-164
Adding Entries to Permanent Command List .....	4-165
Modifying a Command .....	4-165
<b>5. Appendixes</b>	
Appendix A: Controlling SPIFFY Processing (The SET Command) .....	5-1
Member Selection List Options .....	5-2
Appendix B: Patterns .....	5-10
Appendix C: MSL Feedback Messages .....	5-12
Appendix D: MSL Keywords, and Default Sorting Order .....	5-14
Text File Library Panel .....	5-14
Load Library Panel .....	5-14
Appendix E: Invoking MSL from an Application or CLIST .....	5-16
Appendix F: Invoking OLIST from an Application or CLIST .....	5-18
Appendix G: Invoking User Commands from MSL .....	5-21
Appendix H: Invoking User Commands from OLIST .....	5-22
Appendix I: Calling Enhanced EDIT, VIEW, or BROWSE from Dialogs .....	5-23
Appendix J: Adding Your Own Commands to MSL .....	5-24
Appendix K: Adding Your Own Point-and-Shoot General Commands .....	5-26
Appendix L: Panel Extension Language .....	5-27
Statement Syntax .....	5-29
When PEL Statements Are Evaluated .....	5-29
Assignments .....	5-30
Conditional Statements .....	5-31
ISPF Version Testing .....	5-31
Environment Testing .....	5-32
SPIFFY Set Options Testing .....	5-33
Unconditional Branching .....	5-34
Including External Members .....	5-34
PEL Requirements .....	5-34
PEL Quick Reference .....	5-35
Appendix M: Persistent Table Library .....	5-36
Allocating a Library .....	5-36
Backing Up the Table Library .....	5-37

---

# 1. ABOUT THIS MANUAL

This guide gives you an overview of the features and capabilities of SPIFFY. The reference section provides the command information you need to implement SPIFFY.

## ASSUMPTIONS

This guide assumes that you are familiar with the basic ISPF functions. Subjects that are discussed in an ISPF manual are explained briefly in this guide. For detailed information about ISPF, see the appropriate IBM documentation.

## ORGANIZATION OF THIS GUIDE

This guide is divided into the following chapters:

Chapter 1 - *About This Manual* - provides information about the guide, such as the text conventions and contact information.

Chapter 2 - *An Overview of SPIFFY* - describes the features and capabilities of SPIFFY and introduces the new features in the current release.

Chapter 3 - *Using SPIFFY* - explains how to use SPIFFY.

Chapter 4 - *Reference* - documents all the SPIFFY commands for your reference.

Chapter 5 - *Appendixes* - describes the options to customize SPIFFY for your particular environment, or using SPIFFY while running other applications.

## OTHER INFORMATION RESOURCES

In addition to this guide, you can use the online tutorials, Help panels, Assist windows, and the structured Action Bar.

To invoke the SPIFFY tutorial, enter SPFHELP or SPFE on any ISPF panel.

To invoke the Online Help, press the HELP key (usually PF1) on any SPIFFY panel.

To display the Assist window, which is available in both the Member List and Object List, type ASSIST on the command line of the SPIFFY Member List.

## TEXT CONVENTIONS IN THIS GUIDE

This guide uses the following conventions when referring to syntax:

UPPERCASE TYPE	Indicates commands or syntax that you must enter exactly as shown, e.g., <b>CUT</b> , <b>PASTE</b> .
Lowercase type	Indicates a variable that you must substitute with an appropriate value.
. . . (horizontal ellipsis)	Indicates that you can enter a parameter multiple times.
. (vertical ellipsis)	Indicates that there are (or could be) intervening or additional commands.

## CONTACTING ISOGON

Isogon welcomes any comments, questions, and suggestions you have about Isogon products and manuals. You can contact Isogon at:

### Corporate Headquarters

Isogon Corporation  
330 Seventh Avenue  
New York, NY 10001  
USA  
Tel: (212) 376-3200  
FAX: (212) 376-3280

### Web Site

[http:// www.isogon.com](http://www.isogon.com)

### Customer Support

Product Support URL: <http://www.isogon.com/support.htm>  
Tel: (212) 376-3260  
Tel: (888) 792-4498  
FAX: (212) 376-3297  
E-mail: [support@isogon.com](mailto:support@isogon.com)

### International

Outside North America, contact Isogon International at:  
Tel: +44 1293 422255  
FAX: +44 1293 422254  
E-mail: [intlsupport@isogon.com](mailto:intlsupport@isogon.com)

---

## 2. AN OVERVIEW OF SPIFFY

This chapter presents a general description of SPIFFY. It discusses the features, functions, and facilities that SPIFFY provides to enhance ISPF.

### WHAT IS SPIFFY

SPIFFY (SPF/Extended) is an enhancement to TSO/ISPF that improves its productivity and performance. SPIFFY integrates seamlessly into the most frequently used ISPF functions, including BROWSE, EDIT, VIEW, and DSLIST. SPIFFY extends the functions provided by ISPF for standard data sets to other objects, including VSAM files, Librarian/Panvalet libraries, UNIX System Services (USS) files, PC files, DB2 tables, as well as other object classes. Along with this support, SPIFFY provides a powerful object browser called OLIST that has the look, feel, and functionality of DSLIST.

### FEATURES AND BENEFITS

SPIFFY combines separately provided ISPF utility functions and new SPIFFY features into the Member List and the OLIST/DSLIST. The resulting Member, data set, and Object Lists become powerful platforms where you can perform many tasks without navigating to other utilities.

SPIFFY extends the ISPF Action Bar with options that provide access to new functionality so you will not have to learn new commands or syntax.

SPIFFY provides extensive search capabilities that are fast and intuitive. You can easily search for volumes, data sets, members, and text within members. SPIFFY also furnishes automatic drill-down system navigation to pinpoint volumes, data sets, and members.

In addition to the ISPF point-and-shoot capabilities, SPIFFY has facilities that prompt actions upon cursor selection:

- Hotbars (user-defined fields that execute commands)
- Field-sensitive areas in Member Selection Lists and Object Lists
- Automatic recognition of a data set name on any ISPF panel as a parameter to BROWSE, EDIT, VIEW, or parameters within any TSO command

SPIFFY provides integrated and enhanced SCLM support within the standard member and data set lists. SCLM is a source library management component of ISPF that provides change control, multiple source versions, auditing, a built-in make facility, and automatic check-in/sign-out using standard libraries (PDS, PDSE).

All SPIFFY functions are totally integrated. SPIFFY can perform almost any activity within ISPF, or internally invoke the function that can perform the task.

After SPIFFY is installed on your system, the ISPF Primary Option Menu is changed only slightly, as shown in this example:

```

Menu Utilities Compilers Options Status Help
-----
                                OS/390 Primary Option Menu          SPIFFY VERSION 5.8
Option ==>
-----
                                More:      +
0 Settings      Terminal and user parameters      User ID . . : INTT055
1 Browse        Display source data or listings          Time. . . . : 15:03
U View          Display/Change Source Data              Terminal. . : 3278
2 Edit          Create or change source data            Screen. . . : 1
3 Utilities     Perform utility functions              Language. . : ENGLISH
4 Foreground    Interactive language processing        Appl ID . . : ISR
5 Batch         Submit job for language processing       TSO logon . : IKJIS0GN
6 Command       Enter TSO or Workstation commands       TSO prefix: INTT055
7 Dialog Test   Perform dialog testing                 System ID . : SYSB
8 LM Facility   Library administrator functions        MUS acct. . : ACCT#
9 IBM Products  IBM program development products       Release . . : ISPF 5.2
10 SCLM         SW Configuration Library Manager
11 Workplace    ISPF Object/Action Workplace
12 OS/390 System OS/390 system programmer applications
13 OS/390 User  OS/390 user applications
0 OLIST         Object/Dataset List
S SDSF          SDSF

Enter X to Terminate using log/list defaults
    
```

The main menu does not look much different. If you are already familiar with ISPF, you can become productive immediately.

When you start using the enhanced features of SPIFFY to perform standard BROWSE, EDIT, VIEW functions, as well as most of the ISPF capabilities, you will find almost every ISPF capability has been enhanced and new capabilities added.

## WHAT'S NEW IN RELEASE 5.8

SPIFFY is enhanced and upgraded in Release 5.8 with the following new features:

- A dynamically allocated Persistent Table Library is created to serve as a repository for SPIFFY persistent objects.
- SPIFFY supports a maximum of 200 CUT/PASTE clipboards. You can name the clipboards as numbers or names. You can copy, edit, browse, save, restore, and rename the clipboards.
- The SPIFFY TSO command shell (IPITSO) allows up to 999 entries of History Command List and 999 entries of Permanent Command List. You can edit, browse, save, and restore from a persistent table library.
- OLIST administration is enhanced with the following features:
  - You can edit and save the SPIFFY Object History List (OLIST @H)
  - OLIST @LISTSYS supports PARMLIB key word to list z/OS PARMLIB libraries
  - From the main command, you can select a range of line entries <from#>-<to#> to process the command.
  - To avoid displaying certain entries, you can exclude a range of entries by using the /XX line command at the beginning and end of the entry range.
  - You can use **SAVE** command to save any temporary list as a permanent list.



- The SPIFFY MSL group copy and move by pattern functions are enhanced to ensure the preservation of alias association.
- The SPIFFY catalog search is simplified and restricted to three levels:
  - Unlimited access to the SPIFFY catalog
  - No “wild card” in the first character (e.g., A\*)
  - No “wild cards” in the high level qualifier.
- ISPF Compatibility:
  - SPIFFY Release 5.8 supports z/OS 1.6
  - The functionality of “Preserve VB Record Length on EDIT” is enhanced to provide the user with full control of the blank truncation process. A warning message is provided to remind you of your current status of preservation before any truncation occurs.
- The SPIFFY load modules are reorganized, separating between below-16MB line resident modules and above-16MB line resident modules. Following ISPF’s conventions, SPIFFY programs are installed into two libraries:
  - LPA eligible
  - non-LPA
- SPIFFY PRINT engine supports datasets with logical record length of up to 256 bytes.
- Accumulated maintenance has been “sourced” and included.



---

## 3. USING SPIFFY

This chapter is intended to help you get started using SPIFFY. It describes the features and functionality of SPIFFY and explains how to implement its fields, tool bars, and options.

### OBJECT ORIENTATION

By extending the data-set objects used by ISPF to other object classes, SPIFFY lets you specify the object to be processed and the action that is performed (EDIT, BROWSE, etc.). The facility appropriate to the object class for the action you have requested is invoked automatically. With this object-oriented metaphor, you need not be concerned with object classes and the corresponding utility for each. SPIFFY relates objects to applications similarly to the way a PC performs OLE (Object Linking and Embedding).

OLE is the process by which a specified object (e.g., a VSAM file) is internally registered to a method (e.g., FileManager) that performs a task the user requests. Usually, it is sufficient to “click” on the object to take the appropriate action. It is up to the system to resolve the class of object, the desired action, and what program or product should perform the requested function. Consider the following example:

1. You are using OLIST (the Object List) to display a list of files. The OLIST default command is B (for browse). The OLE registration performed during SPIFFY installation indicates that your site has IBM’s FileManager VSAM browser/editor.
2. Use your mouse to click (point-and-shoot) on the line showing the name of a VSAM file.
3. Enter one of the commands: EDIT, VIEW, BROWSE, or program a PF key to represent the command. SPIFFY automatically recognizes that the data set is a VSAM file and invokes the FileManager browser.

Under SPIFFY, the same actions for a VSAM file in OLIST can be performed in DSLIST. DSLIST does not support all objects, e.g., DB2 or PC file names, whereas OLIST supports all objects.

SPIFFY attempts to classify objects automatically. For example, it would recognize that a data set is a VSAM file rather than a PDSE library. Some object types cannot be automatically recognized, so SPIFFY uses a special prefix character to designate the object class. In the case of DB2, table names are prefixed by a hyphen. The special prefix character is not considered part of the object name.

The following objects are supported by every SPIFFY function:

Object Class	Object Identification	Supported Product	Example
Sequential, PDS Data Sets	Standard data set syntax	None needed, built-in support using standard ISPF facilities.	ACCOUNTS.PAYABLE.COBOL PAYROL.NORTEAST.TRANS
VSAM Files	Standard data set syntax	FileMgr, FileAid, Data-Xpert, MacKinney VSAM utility, and other 3 <sup>rd</sup> party products, a sample browser, and installation written interfaces.	ACCOUNTS.MASTER.DATA
Panvalet or Librarian files	Standard data set syntax	Panvalet-ISPF, Librarian ELIPS, and installation written interfaces.	TAXES.MASTER.SOURCE
DB2 Tables	A leading hyphen (not part of the table name)	RC-UPDATE, PRO-EDIT, PRO-ALTER, CDB-EDIT, FileAid-DB2, and installation written interfaces	-ACCOUNTS.PAYABLE.NORTH
DD NAMES	@DD. Followed by a DDNAME	Depends on allocated DDNAME object class.	@DD.STEPLIB @DD.ISPPLIB.#2
SCLM Hierarchies	Leading less-than sign	None needed, built-in support.	<PROJECT.DEVGROUP.TYPE
DSLIS or OLIS T Entries	Data set level with wildcards (% or * included in the name)	None needed, built-in support.	SYS1.*LIB CICS.A%C.COBOL
UNIX System Services (USS) Files	Leading open parenthesis (not part of the name)	Automatically supported for MVS system that supports OpenEdition.	)ROOT/TEST/ACCOUNTS-PAY/ APC
PC File Names	Name enclosed in double quotes	Requires ISPF Version 4.2 Workstation connection.	"C:\WINDOWS\SYSTEM\SPFE5. TXT"
User Defined	Indicated by greater-than sign	User-defined process.	>MY-OBJECT_is/HERE

Using these objects is similar to specifying a standard data set. For example, to BROWSE the Member List of the library allocated to the second concatenation of the STEPLIB DD, you would enter the following command (on any ISPF panel):

**BROWSE @DD.STEPLIB.#2**

*Note: A common example of combined object support is to specify a catalog level in option 2 (EDIT) to obtain a data set list matching the specified catalog level. Then, select a data set from the data set list. If it is a VSAM file, for example, SPIFFY will place you in the VSAM editor. You have now used both the catalog level object and a VSAM object, without having to navigate out of the EDIT panel to DSLIST or to your VSAM editor utility.*

## EXTENDED POINT-AND-SHOOT

SPIFFY extends the point-and-shoot capabilities of ISPF to allow more cursor activated functions. Like ISPF's point-and-shoot, you can use the cursor to click on fields, press the Enter key, and have SPIFFY take the appropriate action. If you use an emulation program, e.g., IBM Personal Communications, you can use the mouse to both position the cursor on a field and send the Enter key. With a workstation and mouse, the SPIFFY extended point-and-shoot capability makes ISPF behave more like a PC.

In addition to the ISPF point-and-shoot fields, SPIFFY supports three new point-and-shoot facilities:

Hotbars	User-definable point-and-shoot fields that appear on selected panels. These fields provide an easy way to enter frequently used commands without having to dedicate a PF key for that purpose. You can reveal or hide the Hotbar line.
Point-and-Shoot Parameters	Any data set name included on any ISPF panel is automatically available as a point-and-shoot field for the BROWSE, EDIT, VIEW, and TSO commands. This facility makes it easy to use displayed information as input parameters for common functions.
Action Fields	These fields are similar to the ISPF point-and-shoot fields, but are not marked by special highlighting. (If the Action Fields were highlighted, most of the panel would be covered by highlighting.) The Action Fields appear on the Member List and Object List panels. The section describing the Object List (OLIST) and Member Selection List (MSL) will discuss each of these fields.

The following sections describe each of these facilities.

## HOTBARS

The Hotbar is an optional line you can define to contain commands for each panel. Hotbars can be activated on the Member list, Object list, and BROWSE, EDIT, VIEW Entry Panels. The Hotbar includes the Hotbar: tag on the left, followed by up to eight commands.

## ACTIVATE HOTBARS

Activate Hotbars through the SET panel.

From any Command Line (except when you are in OLIST or MSL), enter one of the following: SPIFFY SET, SPIFF SET, or SPFE SET. When you are in OLIST or MSL, enter SET. The SETTING SPIFFY DEFAULTS panel is displayed.

Select the INTERFACE option. The User Interface Options panel is displayed:

```

IPISET18 -----User Interface Options-----
COMMAND ==>

+-----+
| Note: Changes specified on this screen may not affect all of the |
| panels that are currently displayed in nested applications.     |
+-----+

Verify or specify the following options: (Enter Y for Yes, N for No):

Use Leader Dots (instead of arrows). . . . Y
Use Scrollable Panels. . . . . N
Activate HOTBARS . . . . . Y
Activate Action Bars . . . . . Y
  IF Action Bars are active:
    Display Action Bars in Browse, Edit, View . . . . Y
    Display Action Bars in Member Selection List. . . Y
    Display Action Bars in the object list. . . . . Y
    Display Action Bars in DSLIST . . . . . Y

```

To the right of Activate HOTBARS, enter a Y, and press Enter. Now, on each of your panels, the Hotbar is available.

## DEFINE HOTBARS

Once the Hotbar is activated, it appears with commands as shown in the following examples. If commands are not defined on the Hotbar, the **Hotbar:** tag changes to **Hotbar?**. The Hotbar line will still occupy a panel line. If you do not plan to use the Hotbar, you can deactivate it and gain the extra panel line by setting Activate HOTBARS to N using the **SET** command.

You can enter any valid command on the Hotbar. To specify the Hotbar commands, click the **Hotbar:** or **Hotbar?** tag or place your cursor under the **Hotbar:/Hotbar?** Tag and press Enter. The tag changes to **HOTBAR=** and the line allows input of up to eight commands.

When commands are not defined on the Hotbar, the **Hotbar:** tag changes to **Hotbar?**. The Hotbar line still occupies a panel line.

---

```

SPF/E OLIST (B) ----- Objects List ----- Row 1 to 8 of 282
Command ==> _____ SCROLL ==> CSR
Hotbar?
Open list ==> LEDGER1 (or BLANK for reference list)

```

---

If you do not plan to use the Hotbar, you can deactivate it and gain an extra panel line by using Activate HOTBARS to N.

---

```

SPF/E OLIST (B) ----- Objects List ----- Row 1 to 8 of 282
Command ==> _____ SCROLL ==> CSR
Open list ==> LEDGER1 ( or BLANK for reference list)

```

---

You can enter any valid command on the Hotbar. To specify the Hotbar commands, click the **Hotbar:** or **Hotbar?** tag. The tag changes to **HOTBAR=** and the line allows input of up to eight commands:

---

```

SPF/E OLIST (B) ----- Objects List ----- Row 1 to 8 of 282
Command ==> _____ SCROLL ==> CSR
HOTBAR= VALIDATE FILLVOL CLRVL UPDATE RFIND CAN SAVE _____
Open list ==> LEDGER1 (or BLANK for reference list)

```

---

The underscores indicate where the fields are located. You can use the tab key to switch from one field to another.

## Suggested Hotbar Settings

The following shows the commonly used Hotbar commands for OLIST; MSL; and EDIT, VIEW and BROWSE Entry Panels respectively. You may want to define your own Hotbars in the same manner.

### OLIST

---

```

SPF/E OLIST (B) ----- Objects List ----- Row 1 to 8 of 282
Command ==> _____ SCROLL ==> CSR
HOTBAR= CUT _____ PASTE _____ UPDATE _____ PPRINT _____ RFIND _____ EXCLUDE _____ SET _____ FLIP _____
Open list ==> LEDGER1 (or BLANK for reference list)

```

---

### MSL

---

```

SPF/E-EDIT L1 ----- PAYROLL.JONES.COBOL -----ROW 00001 OF 00006
COMMAND ==> _____ SCROLL ==> CSR
HOTBAR= TOTALS _____ RESET _____ TAILOR _____ INFO _____ RFIND _____ GLOBAL _____ SET _____ FLIP _____
*FILTER*EXCLUDE*SORT* 5 HIDDEN LIB2=DEV LIB3=TEST LIB4=PROD
NAME RENAME LIB VV.MM CREATED CHANGED SIZE INIT MOD USERID

```

---

### BROWSE, EDIT and VIEW Entry Panels

---

```

Menu Reflist Refmode Utilities SCIM Settings Test Help Exit
-----
SPF/E-L1 _____ VIEW - ENTRY PANEL
COMMAND ==> _____
HOTBAR: REFLISTD REFLISTL @L _____ @H _____ SORT-CHA GLOBAL _____ SET _____ FLIP _____

```

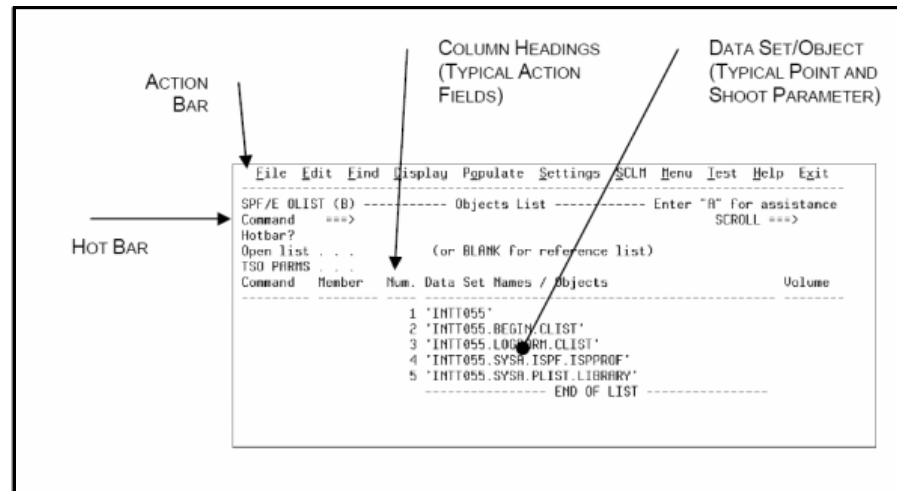
---



## POINT-AND-SHOOT PARAMETERS

SPIFFY supports the following ISPF point-and-shoot fields: Action Bars, menu options, and other panel defined point-and-shoot fields.

The following OLIST panel illustrates some of the extended point-and-shoot fields:



Many ISPF panels contain data set names. SPIFFY automatically treats these as input parameters to the BROWSE, EDIT, and VIEW commands. Additionally, the SPIFFY TSO shell lets you use a slash as a symbolic placeholder for a Point-and-Shoot Parameter within the parameter buffer of a TSO command.

For example, when you BROWSE JCL using a spool viewer (SDSF, IOF, or a similar product), you may want to inspect a data set referred to in the JCL. You can type BROWSE on the command line, place the cursor on the data set name on the spool viewer panel, and press the Enter key. If you predefine a PF key as BROWSE, EDIT, or VIEW, you can place the cursor on the data set name and press the PF key directly.

*Tip: The Point-and-Shoot Parameters can be of any supported object class. For example, you can point at a VSAM data set and invoke the VSAM editor on top of the spool browser.*

The SPIFFY TSO shell will substitute a slash in the TSO command buffer with the name of a data set you pointed to. This is similar to how BROWSE, EDIT, and VIEW accept Point-and-Shoot Parameters. For example, you can enter “TSO LISTDS / LABEL” on the command line to display the VTOC entry for a cataloged data set, placing the cursor on a data set and pressing the Enter key. If you place the cursor on a data set named ‘JONES.TEST.JCL’, SPIFFY will issue the command “LISTDS ‘JONES.TEST.JCL’ LABEL”.

SPIFFY attempts to determine the name of the data set you point to, whether it is quoted or not. For unquoted data sets, SPIFFY will check a data set by the cataloged name. If the name is cataloged, SPIFFY assumes that the data set is fully qualified. If the data set is not in the catalog, SPIFFY will check if the data set prefixed by your current TSO prefix is cataloged. If the TSO prefixed data set is in the catalog, SPIFFY will use this data set. Occasionally, SPIFFY will not be able to match a data set to the pointed string, or you will not point to a data set. In these cases BROWSE, EDIT, and

VIEW will display a prompt panel, and the TSO shell will leave the slash unsubstituted.

You may want to specify the TSO command with a leading question mark when using the TSO shell. This is an indication that you want to see the substituted command buffer before executing the command. You may change the command before issuing it, or press the END key to discard the command.

## ADD POINT-AND-SHOOT COMMANDS

The SPIFFY TSO shell allows point-and-shoot substitution to occur within entered commands. For example, you may enter **TSO LISTDS / LABEL** on the command line, placing the cursor on a data set name that appears. If the cursor was positioned over 'SYS1.LINKLIB', SPIFFY issues the command

```
LISTDS 'SYS1.LINKLIB' LABEL.
```

Using this capability, you can define your own point-and-shoot command. For example, if you create a CLIST (or REXX exec) that accepts a data set as a parameter, you can define it in the ISPF command table (to be called by the SPIFFY TSO shell). For example, if your command is COMPILE, the ISPF command table definition (as entered in option 3.9) is:

Verb	T	Action
COMPILE	5	SELECT SUSPEND PGM(IPITSO) PARM(-,%COMPILE /)

You could then enter COMPILE on the command line, move the cursor on top of a data set name, and press the enter key. If you define PF23 as "COMPILE", you only have to position the cursor on the data set name and press PF23.

Note that if you do not point to the data set name, SPIFFY will pass the slash instead. Your CLIST or REXX exec should inspect the passed parameter, and if it is a slash, issue an error message or prompt the user for input.

Typical uses of this method are the TSO transmit command, and the SPIFFY interface to the QUICKREF product (see QUICKREF later in this publication).

## ACTION FIELDS

Action Fields are similar to the ISPF point-and-shoot fields although SPIFFY does not highlight these fields to avoid panel clutter. It is recommended that you review the sections describing the Action Fields in OLIST (the Object List) and MSL (the Member Selection List) sections in this manual.

## FUNCTION-ORIENTED ACTION BAR

The Action Bar (shown below) is the area at the top of an ISPF panel that contains actions available on that panel. SPIFFY enhances the ISPF Action Bar by including additional pull-down options. If you are a more experienced user, you can hide the Action Bar to conserve panel space.

For the major ISPF functions, Action Bars are organized to look like tWindows or OS/2. The Action Bar reflects commands for the specific panel you are looking at. For example, the Action Bar on an OLIST panel looks like this:

```
File Edit Find Display Populate Settings SCLM Menu Test Help Exit
-----
SPF/E OLIST (B) ----- Objects List ----- Row 1 to 4 of 5
```

If you select the File option, a pull-down menu is displayed as follows:

```
File Edit Find Display Populate Settings SCLM Menu Test Help Exit
-----
- 1. Open ...
  2. Save
  3. Save as ...
  4. Export ...
  5. Cancel
  6. -----
  7. Print file ...
  8. Print OLIST
  9. Release grouped printouts
 10. Purge grouped printouts
 11. -----
 12. Print options
 13. Exit

List ----- Row 1 to 4 of 5
      Scroll ==> CSR

CMDparm CUT eXclude EXPORT FILLVOL FILTER
LISTG LISTH LISTI LISTU Locate MEMFin MLISt
as RESet RFIND SAVE SET SHOWcmd SORT UPDate
lect line
C(atalog), COMP(ress), COPY, D(elete),
I(nfo), J(submit), LISTC, LISTU, M(ove),
ct), SUB(mit), U(ncatalog), U(iew),
ommand,
/R(epeat line), /S(show), /X(exclude)
or reference list)
```

When you choose a pull-down item with an ellipsis (. . .), a pop-up window is displayed. For example, selecting Export... displays the Export OLIST pop-up window:

```
File Edit Find Display Populate Settings SCLM Menu Test Help Exit
-----
- Export Object List (INTT055) -----
S
C Command ==> _____
H
M Current LIST:INTT055
  Export to dataset. . . _____
L
  Replace . . . N (N=No, Y=Yes - replace existing member)
  F1=HELP   F2=SPLIT   F3=END     F4=RETURN  F5=RFIND
  F6=RCHANGE F7=UP       F8=DOWN   F9=SWAP   F10=LEFT
--
SPF/E 5
ST
te
```

The pop-up window prompts you to enter required information and to confirm any requested action.

The SPIFFY Action Bar and the pop-up windows let you access advanced functions without having to learn command names or parameters.

## THE OBJECT LIST (OLIST)

OLIST is the SPIFFY Object List. It is similar to DSLIST (option 3.4), but has some additional. In its simplest form, OLIST will contain only data sets, be used instead of DSLIST to gain access to new commands, and display the list faster than DSLIST. The two main types of Object Lists are temporary OLISTs and permanent OLISTs.

Temporary OLISTs are invoked from the DSLIST Entry Panel (where you can select between DSLIST and OLIST), or when you specify a data set with wildcards when you invoke BROWSE, EDIT, or VIEW.

*Tip:* If you enter OLIST with no parameters, the last OLIST that you invoked is displayed.

Similar to DSLIST, the list of data sets is built ad-hoc to match a generic data set specification (DSNAME with wildcards). This list is created from the catalog, a disk volume, or other sources.

Permanent OLISTs differ from temporary OLISTs in the following ways:

- They are given a name and an optional description.
- They are automatically saved across sessions.
- They can be recalled at any time from any panel.

You invoke this type of OLIST

- from the DSLIST Entry Panel
- from a special option on the main menu
- by entering the OLIST command on the command line of any panel.

You can maintain as many OLISTs as you wish, switch among OLISTs instantly, and configure OLISTs to be shared among multiple users. You would typically use different OLISTs for different projects or products you maintain and support. As you can place different object classes in OLISTs, you will find it useful to recall an OLIST you have not accessed in some time and see every object you need for a particular project.

A typical OLIST panel is illustrated below:

Command	Member	Num.	Data Set Names / Objects	Volume
		1	'INTT055.APARS.XMI'	
		2	'INTT055.BEGIN.CLIST'	
		3	'INTT055.CLIB.XMI'	
		4	'INTT055.JCL.XMI'	
		5	'INTT055.LOAD.XMI'	
		6	'INTT055.LOGPARM.CLIST'	
		7	'INTT055.LPA.XMI'	
		8	'INTT055.MLIB.XMI'	
		9	'INTT055.PLIB.XMI'	
		10	'INTT055.PLIST.LIBRARY'	
		11	'INTT055.SLIB.XMI'	
		12	'INTT055.SPFL0G1.LIST'	
		13	'INTT055.SYSA.ISPF.ISPPROF'	
		14	'INTT055.SYSA.PLIST.LIBRARY'	
		15	'INTT055.SYSB.ISPF.ISPPROF'	

Both permanent and temporary OLISTS provide powerful features:

- You can populate the OLIST from the catalog, disk volume, allocated data sets, migrated data sets, GDG data sets, system lists, and multiple volumes.
- You can type in object names.
- Every object class visible in OLISTS is supported by SPIFFY. In native ISPF DSLIST, some object classes are not shown (for example, PC file names), and of the shown objects classes, some are not supported (for example, VSAM files).
- The multiple object class support SPIFFY provides lets you keep the names of objects in the OLIST and perform actions on these objects. The multiple object class support makes it convenient to organize work around projects and use OLIST as the launch pad for your work.
- OLISTS can be annotated with comments for reference purposes.
- OLISTS can be edited in full-screen. Every change you make on the panel is preserved, and you can even invoke the ISPF editor to edit the OLIST.
- Information contained in OLISTS can be exported to other data sets. OLISTS support the enhanced CUT and PASTE capabilities to allow passing information across OLISTS and into an edited file.
- OLISTS provide powerful search capabilities. You can search for data sets across multiple disks, for members across multiple libraries, and for text within data sets.
- An OLIST can include the same data set name more than once, each with a different member name, member name pattern, or volume. Typically, these are used to provide different views or ways of accessing the same object.
- OLISTS support system managed storage (SMS). SMS may dynamically move data sets across volumes since permanent OLISTS are preserved across sessions. OLISTS provide convenient ways to clear and refill the volume associated with a data set. A special command synchronizes information in the OLIST against the catalog.
- OLISTS can contain entries with generic data set names (names with wildcards). You can issue the DSLIST command separately on each entry. As permanent OLISTS are preserved across sessions, these entries provide a convenient method to invoke DSLIST on commonly used levels. You can also drill-down to these generic names, getting a real-time OLIST view.
- OLISTS provide an enhanced user interface which features:
  - An Action Bar that is organized to provide easy access to powerful commands.
  - The OLIST entries are numbered to allow selection of objects by numbers or by point-and-shoot.
  - OLIST lines that can be excluded without showing separator lines.
  - Many useful Action Fields (point-and shoot extensions).

## MANAGE OLISTS

To manage your OLISTS at the Main Command line, enter:

**OLIST \*.**

The panel named Saved Objects Selection list is displayed:

```
SPF/E----- Saved objects Selection list ----- Row 1 to 5 of 5
Command  ==>
Default OLIST:INTT055
Main commands:S=Select an OLIST, L=Locate OLIST, SORT, VALIDATE the list
Line commands:D=Delete, DYN=Dynamic OLIST, EXP=Export, N=Next default, R=Rename
Create a new OLIST by typing over an existing name.

Your object lists reside in 'INTT055.SYSB.PLIST.LIBRARY'
```

CMD NAME	DESCRIPTION	ENTRIES CREATED	UPDATED
COMMON		9 04/01/23	
DOCS		5 04/01/23	
INTT055		5 04/01/23	
INTT055		8 04/01/23	04/01/23 16:18
SOURCE		5 04/01/23	
----- END OF LIST -----			

This panel is where you can manage your OLISTS. The Main Line and Line command options available to you are displayed in the panel.

The VALIDATE command lets you automatically organize the list by removing any OLISTS from the reference list that have not been saved. When you enter VALIDATE (with no parameter), the next panel displayed is the list of updated OLISTS, showing only the OLISTS that have been saved:

```
SPF/E----- Saved objects Selection list ----- Row 1 to 1 of 1
Command  ==>
Default OLIST:INTT055
Main commands:S=Select an OLIST, L=Locate OLIST, SORT, VALIDATE the list
Line commands:D=Delete, DYN=Dynamic OLIST, EXP=Export, N=Next default, R=Rename
Create a new OLIST by typing over an existing name.

Your object lists reside in 'INTT055.SYSB.PLIST.LIBRARY'
```

CMD NAME	DESCRIPTION	ENTRIES CREATED	UPDATED
INTT055		8 04/01/23	04/01/23 16:18
----- END OF LIST -----			

IPIP939 4 object lists removed from the reference list

F1=HFIP RCHANGE

## ADDITIONAL OBJECTS SUPPORTED BY OLIST

OLISTs support all the object classes supported by SPIFFY. In addition to the objects listed on Page 2, OLIST supports the following:

Object Class	Object Identification	Example
Comments	Leading exclamation mark	! This is a comment
Dynamic OLIST (Invokes a Nested OLIST)	Leading LISTx command	:LISTC sys1.*mac* :LISTV VOL001 ACCOUNTS.*COBOL* :LISTA ISPLIB :LISTS LINKLIST :LISTS LPALIB
ISPF Hierarchies	Leading equal sign	=PROJECT GROUP1 GROUP2 GROUP3 TYPE
Immediate TSO Commands	Leading plus sign	+LISTDS 'USER12.TEST.DATA' LABEL +RECEIVE +ISPEXEC SELECT PGM(MYPROG) PARM(A) +%MYTEST DSN(/2) TODSN(/3) Note: A slash followed by a number indicates a substitution reference of another OLIST line.
Prompt TSO Commands	Leading question mark	?LISTDS 'USER12.TEST.DATA' LABEL ?RECEIVE ?ISPEXEC SELECT PGM(MYPROG) PARM(A) ?%MYTEST DSN(/2) TODSN(/3) Note: A slash followed by a number indicates a substitution reference of another OLIST line.



## THE POINT-AND-SHOOT INTERFACE OF OLIST

OLISTs support the extended Point-and-Shoot Interface: Action Bars, Hotbar, and Action Fields. The following panel illustrates a typical OLIST, with input fields. The callouts describe what happens when the corresponding cursor-sensitive field is clicked.

The screenshot shows the SPIFFY OLIST interface for 'General Ledger Project Objects'. The interface includes a menu bar (File, Edit, Find, Display, Populate, Settings, UTIL, Menu, Test, Help, Exit), a command line, a hotbar with buttons (CUT, PASTE, UPDATE, CANCEL, RFIND, FILTER, EXCLUDE, PLIP), and a table of objects. Callouts describe the functions of various fields and buttons.

Command	Member	Num.	Data Set Names / Objects	*FILTER*	*EXCLUDE*	Class
	*PAY*	1	'ACCOUNT.PAYABLE.MASTER.DATA'			VEAH
		3	'LEDGER.JONES.COBOL'			PDSE
		6	'ACCOUNTS.TRANSACTION.FILE(-2)'			EDG
		7	:LISTGDS 'ACCOUNTS.TRANSACTION.FILE'			OLIST
		8	!----- OLD PROJECTS FILES			
		9	-LEDGER.PAYABLES			DB2
	*TAX*	10	'LEDGER.CICQ.MASTER.DATA'			VEAH
		11	'LEDGER.CICQ.COBOL'			PDG
		12	!----- NEW OPEN EDITION STUFF			
		13	) JONES/LEDGER/NEW/PAYROL.COB			OE
		14	) TEAM/LEDGER/DATA/MASTER.FIL			OE
		15	!			
		17	+%RNTST PAYROL			CMD
			LEDGER.GENERAL.DATA.DATE(2000)			
		18	"C:\LEDGER\PAYROL.INI"			PC

Callouts and their descriptions:

- File:** Toggles between showing or hiding the list of available commands
- Edit:** Changes the current default, in turn, among B(ROWSE), E(EDIT), and V(IEW)
- Find:** Provides a pop-up window to change the OLIST description. The description is saved across sessions
- Display:** Performs the selected command
- Populate:** a. When the column is Class: Toggles the column to Volume; b. When the column is Volume: Fills the column with the volume for each OLIST object
- Settings:** Toggles the display to show either the Volume or the Class column
- UTIL:** Request to edit the Hotbar. In edit mode, any Main command can be used as a Hotbar command
- Menu:** Sorts the members listed
- Test:** Sorts all Data Set Names/Objects in ascending order
- Help:** Selects the Data Set/Object, using the default action (BROWSE, EDIT, VIEW) selected
- Exit:** Reveals excluded OLIST lines
- Hotbar:** Removes current filtering

## VIEW MAIN AND LINE COMMANDS (ASSIST)

You can display the available OLIST Main and Line commands by clicking the “Command” Action Field or by entering the ASSIST command (Assist or A). You can also use the SET command to display all SPIFFY options, including the OLIST Assist. Whatever you set is remembered across sessions. The following is an OLIST panel with the commands displayed:

```

File Edit Find Display Populate Settings SCLM Menu Test Help Exit
-----
SPF/E OLIST (B) ----- Objects List ----- Row 1 to 4 of 5
Command ==> _                               Scroll ==>
Hotbar?
Main commands: Assist CANCEL CLRUOL CHDparm CUT eXclude EXPORT FILLUOL FILTER
Find FindText FLIP LISTA LISTC LISTG LISTH LISTI LISTU Locate MEMFin MLIST
OPEN PASTE POPulate PPRINT RELeas RESet RFIND SAUE SET SHOWcmd SORT UPDate
UTIL VALIDate or a number to select line
Line commands: A(allocate), B(rowse), C(atalog), COMP(ress), COPY, D(etele),
DSLIST, E(dit), EXPDIR, F(ree), I(nfo), J(submit), LISTC, LISTU, M(ove),
PLIST, P(rint), R(ename), S(elect), SUB(mit), U(ncatalog), U(iew),
Y(expdir), Z(compress), a TSO command,
/D(etele line), /I(nsert line), /R(epeat line), /S(show), /X(exclude)
Open list . . . (or BLANK for reference list)
TSO PARMS . . .
Command Member Num. Data Set Names / Objects Volume
-----
1 'INTT055'
2 'INTT055.BEGIN.CLIST'
3 'INTT055.LOGPARAM.CLIST'
4 'INTT055.SYSA.ISPF.ISPPROF'

```

One advantage of using Assist is that all the OLIST commands are viewed. You do not have to memorize the Main and Line commands.

All Main commands are Action Fields (point-and-shoot fields). If you click any Main command, you invoke the selected command. For example, if you click SORT (listed on the Main commands line), you will sort the currently displayed OLIST.

If you want the Main and Line commands to disappear, do one of the following:

- Click Command again and click Assist on the Main commands line.
- Enter ASSIST on the command line.

---

# THE ENHANCED MEMBER SELECTION LIST (MSL)

When you work with standard (PDS and PDSE) libraries, SPIFFY provides a Member Selection List (MSL) that supports nearly every function on one or more selected members. You no longer need to navigate from panel to panel of ISPF to accomplish a variety of tasks on a single library. MSL is automatically invoked by BROWSE, EDIT, VIEW, DSLIST, and OLIST. MSL is an enhanced version of ISPF's Member List and supports the commands supported by different ISPF Member List utilities.

MSL provides several useful features:

- Tailor the display. Several commands let you tailor the Member List. When you tailor the MSL, it includes only the members you want in the order you want them. For example, you can:
  - FILTER on one or several ISPF statistic fields (including load module statistics) using wildcards.
  - EXCLUDE members by member name.
  - FLIP between the excluded and included member display.
  - Use GLOBAL FIND to exclude members that do not contain the searched text.
  - Tag members, and use the tagging for filtering.
  - SORT on one or several ISPF statistic fields (including load module attributes) in either ascending or descending order, using patterns.
- Combine multiple utilities into a single common interface Member List. Whether the Member List is started by BROWSE, EDIT, or VIEW, all of the MSL commands are available (BROWSE, COPY, DELETE, EDIT, MOVE, RENAME, VIEW, STATS-RESET, SUBMIT, and TSO commands, among others).
- Text searching capabilities. You can locate members by context and perform global find operations. The results can be used to locate members, to filter the Member List for only members containing specific text, and to display found text along the member names.
- GLOBAL EDIT. MSL also provides built-in GLOBAL EDIT which supports multiple commands using standard edit syntax. You can even create complex macros. Changes can be performed automatically, or you can request a prompt panel before changes are saved. Using the concatenation hierarchy, you can SAVE changes in a separate library, leaving the original members intact.
- Provides immediate access to other libraries via library switching from within the Member List. You can change to another library by changing the first, middle, or

last qualifier (level) of the library. You can switch to another volume, or pick a library from the list of the recently referenced data sets.

- Preview windows display member contents within a window on the Member List. You can preview specific members or automatically preview located members or members containing searches for text.
- Provide integrated SCLM support (automatic check-out, lock management, promotion, and other SCLM functions).
- Reduce the number of I/O operations. Many built-in functions substitute utilities that would require invocation of separate utilities.
- Issue multiple line commands and commands on multiple members using extended patterns. For example, you can move all members ending in ACCT to library 2 by issuing the main command:  
**M \*ACCT 2**

## THE POINT-AND-SHOOT INTERFACE OF MSL

The following figure shows a typical MSL panel. The callouts describe what happens when the corresponding cursor-sensitive field is clicked:

The screenshot shows the MSL panel with the following callouts:

- Function you invoked (BROWSE, EDIT or VIEW)
- Nesting level
- Tailoring Messages
- Name of Library 1
- Number of members not currently in displayed list
- Feedback about completed processing of members
- Column heading of primary sort field is highlighted
- Second-level qualifier of other libraries in the hierarchy (concatenation)

File Display Library SCLM Settings Menu Utilities Test Help Exit											
SPF/E EDIT LI --- PAYROLL.JONES.COBOL ---										--ROW 00001 OF 00372	
COMMAND ==>										SCROLL ==> CSR	
HOTBAR: SET		TOTALS		RESET		DSH		RFIND		TAILOR	
*FILTER*EXCLUDE*SORT		518 HIDDEN		LIB2=INT		LIB3=TEST		LIB4=RELEASE		SCLMPARM	
NAME	RENAME	LIB	VV.MM	CREATED	CHANGED	SIZE	INIT	MOD	USERID		
- ACCTSTAT		2	01.00	92/01/17	92/01/17 09:41	7	7	0	KEVIN		
- WORKER12	-VIEWED	1	03.00	90/08/01	90/08/01 07:08	79	75	0	KEVIN		
- PAYROL1		3	01.00	91/11/18	91/11/18 11:32	406	312	0	JONES		
- ACCT	-SAVED	1	01.02	91/11/18	91/12/15 15:36	438	38	0	JONES		
- ACCTMAIN		2	01.02	91/11/18	91/12/05 15:37	406	406	0	KEVIN		

## DRILL-DOWN NAVIGATION

SPIFFY lets you access resources without having to know the exact name of those resources. For example, in the BROWSE, EDIT, and VIEW prompt panels, instead of entering the data set name, you can enter a generic name (a name with wildcards). SPIFFY automatically opens a temporary OLIST where you can select the data set to process.

Similarly, on the same panel that you can specify a VOLSER, you can specify wildcards. SPIFFY will display a Volume Selection List and let you select the volume to use.

You can specify a volume mask in OLIST that will display the Volume Selection List. A volume mask specified with a catalog level entry (a data set that has a wildcard in it), will open a temporary OLIST with all data sets matching the pattern which resides on the volumes that match the volume mask.

You can specify volume patterns in the DSLIST (option 3.4) Entry Panel. As DSLIST provides volume specific functions (like VTOC display), being able to chose a volume from a list is a great convenience.

*Tip: The ability to specify wildcards on both the data set and the volume fields provides the means to search for a data set. If you are uncertain of the exact data set name or where it resides, you can enter an asterisk followed by a part of the name and another asterisk. In the volume field, you can enter an asterisk. SPIFFY will search for all data sets matching the pattern on all the disks accessible to you depending on existing security settings.*

## ENHANCED DATA SET LIST (DSLISIT)

SPIFFY enhances the DSLISIT (option 3.4) to provide access to the standard DSLISIT display as well as the Object Lists (OLISIT) and other enhancements.

### NEW OPTIONS ON THE DSLISIT ENTRY PANEL

The DSLISIT Entry Panel is shown here:

```

Menu  Reflist Refmode Special-lists Utilities Settings Test Help Exit
SPF/E ----- Data Set List Utility -----
Command ==> _____
blank - Display dataset list                P - Print data set list
  TP - Temporary Object List                PU - Print VTOC information
  PL - Permanent Object List                U  - Display VTOC information
  GDG - Display Generation Datasets          XU - Extended VTOC & space summary

Enter an option or select it by placing cursor on the option code
Specify parameters below:
Object List . . . _____ (* For selection list, = For INTT055)
Dsname Level . . . _____ More?. . . N
Volume serial . . . _____ (Leave BLANK for catalog scan,
                               volsers or pattern for VTOC scan)

Data set list options:
Initial View . . . 1 : 1. Volume 2. Space 3. Attrib 4. Total

Enter "/" to select option: / Confirm Delete
                          / Additional Dataset Qualifiers

When the data set list is displayed, enter the "/" line command for a list of
the available line commands. TSO commands, CLISITs, or REXX execs are supported.

```

There are several enhancements:

- An XV (Extended VTOC & space summary) command displays detailed information about a volume, along with a space usage graphical bar. You can type over the volume serial to switch to another volume, and immediately see the graphical bar and the detailed information change.
- The GDG (Display Generation Datasets) command opens a temporary OLISIT listing all the existing generations of a GDG base, showing both the relative generation number and the physical data set name. You can use all the OLISIT commands on these data sets, including pattern matching. See "Appendix B: Patterns" for instructions on how to apply pattern matching.
- The More? prompt following the Dsname Level input field will open a pop-up window allowing you to specify multiple DSNAME levels and VOLSERS. SPIFFY will respond by opening a temporary OLISIT containing the data sets that match the multiple criteria you specify. It is typically used to create a list of different catalog levels.
- The Action Bar contains a new option: Special-lists. When selected, SPIFFY will present options that let you open OLISITs containing data sets from special sources, like the allocated data sets, the migrated data sets, and other sources.
- Extended VTOC Display & Space Summary

The XV command displays extended VTOC information. If you specify all volumes by entering \* for volume serial, a Space Summary Volume Selection list is displayed:

```

SPF/E ----- SPACE SUMMARY VOLUME SELECTION LIST ----- Row 1 of 159
COMMAND ==>                                     SCROLL ==> CSR
Main commands: DOWN, END, L=Locate, S=Select, UP
Line commands: TP=Temporary Object List, DS=DSLIS, S=UTOC information

LEVEL . . .                                     (For TP, DS commands)

CMD VOLUME TYPE      % FREE   FREE SPACE   LARGEST EXTENT
      SPACE          CYLS   TRKS   CYLS   TRKS SMS DYN ATTRIBUTES
ABRBK 3390          96     3209 48142   3209 48141 PRIVATE SHARE
ABR001 3390          99     3315 49726   3311 49665 PRIVATE SHARE
ABR002 3390          99     3321 49816   3321 49815 PRIVATE SHARE
ADMIN1 3390          15      507  7610     507  7610 PRIVATE SHARE
CATA01 3390          16      517  7816     325  4875 PRIVATE SHARE
CATZ14 3390          50    1659 24921     876 13148 PRIVATE SHARE
CLIEN1 3390           0         2    97         1    15 PRIVATE SHARE
CLIEN2 3390           0         6   132         3    45 PRIVATE SHARE
CLIEN3 3390           3      299 4533         67  1005 PRIVATE SHARE
CLIEN4 3390           3      290 4405         80  1200 PRIVATE SHARE
CLIEN5 3390           2     166 2525        122 1830 PRIVATE SHARE
CLIEN6 3390           8      269 4038         200 3003 PRIVATE SHARE
CLIEN7 3390          15     500 7505         500 7500 PRIVATE SHARE
CLIEN8 3390          12     405 6080         184 2760 PRIVATE SHARE

```

You can use pattern matching wild cards to narrow down the initial list.

## Space Summary Volume Selection List

If you use the XV command and use a wildcard pattern mask to specify a volume (VOLSER with wildcards), SPIFFY displays a Space Summary Volume Selection List:

```

SPF/E ----- SPACE SUMMARY VOLUME SELECTION LIST - Row 1 to 13 of 122
COMMAND ==> _                                     SCROLL ==>
Main commands: DOWN, END, L=Locate, S=Select, UP
Line commands: TP=Temporary Object List, DS=DSLIS, S=UTOC information
IPIM635 IO ERRORS ON VOLUME DSK317
LEVEL . . .                                     (For TP, DS commands)

CMD VOLUME TYPE      % FREE   FREE SPACE   LARGEST EXTENT
      SPACE          CYLS   TRKS   CYLS   TRKS SMS DYN ATTRIBUTES
ADMIN1 3390          40    1339 20093   1339 20092 PRIVATE SHARE
CATA01 3390          16      517  7816     325  4875 PRIVATE SHARE
CATZ14 3390          50    1659 24921     876 13148 PRIVATE SHARE
CPC2A1 3390          51    1684 25342   1684 25260 PRIVATE SHARE
DMPA01 3390           1      22   395         11  179 PRIVATE SHARE
DSK307                                     NON-MUS -OS U
DSK317                                     *error* IO ER
D9ECAT                                     NON-MUS -OS U
D9EHFS 3390          75    2486 37303   2431 36470 PRIVATE SHARE
D9ESY1 3390          67    2240 33620   2240 33609 PRIVATE SHARE
HFSZ41 3390          33    1099 16490     800 12000 PRIVATE SHARE
HFSZA1 3390          19      641  9616         641  9615 PRIVATE SHARE
ISC100 3390          83    2767 41725   2473 37100 PRIVATE SHARE

```

You can select specific volumes for extended VTOC information (using the S line command), open a DSLIST (the DS line command) or open a temporary OLIST (the TP line command) of data sets matching the data set level appearing on top of the panel for the selected volume.

The Space Summary Volume Selection List is a convenient platform to open data set lists (DSLIS or OLIST) for similar levels on different volumes.

If you specify a particular volume by entering a volume name at Volume Serial (VOLSER) or by Point-and-Shoot from the Space Summary Volume Selection list, the Extended VTOC Information for Volume Admin panel is displayed:

```

SPF/E EXTENDED UTOC INFORMATION FOR VOLUME ADMIN1
COMMAND ==> _

VOLUME . . .      (Change for another volume)

----- VOLUME DATA ----- UTOC DATA ----- FREE SPACE DATA -----
TRACKS:          50070 TRACKS:           64          TRACKS      CYLS
ZUSED:           60    ZUSED:            6          SIZE:      20093  1339
TRKS/CYLS:       15    FREE DSCBS:      3013  LARGEST:   20092  1339
UNIT TYPE:       3390  UTOC EXTENTS:    1          FREE EXTENTS:  2
CYLINDERS:       3338  DSCBS/TRK:       50
TRACK LEN:       58786 INDEX UTOC:  ACTIVE
UCB ADDR.:       034E VIRs:             303
SHARED:          YES
ATTRIBUTES:     PRIVATE
OPEN FILES:      17
DEFRAG IX:       0

SPACE: 0...v...50...v...60...v...70...v...80...v...90...v...100Z
USAGE:                               60Z

```

You can type over the volume name to select a different volume.

## The GDG Display

SPIFFY treats a Generation Data Group (GDG) the same as any other dataset (VSAM, LLIB, etc.) so you can use any SPIFFY capability, including all OLIST and MSL capabilities and pattern matching. See “Appendix B: Patterns” for instructions on how to apply pattern matching.

## The Special Lists

When you select the Special-lists option on the Action Bar SPIFFY provides a pull-down menu with the following options:

```

Menu Reflist Refmode Special-lists Utilities Settings Test Help Exit
SPF/E -----
IPIUDL@ ==>
blank - Display dataset
TP - Temporary Objec
PL - Permanent Objec
GDG - Display Generat

Enter an option or sele
Specify parameters belo
Object List. . . .
Dsname Level . . . *
Volume serial. . .

1. Multiple Levels...
2. Search Dataset...
3. Allocated DDNAMEs...
4. History (referenced files)
5. HSM archived files ...
6. GDG (generation datasets) ...
7. LPALIB libraries ...
8. LINKLIST libraries ...

list
rmation
formation
space summary
e
= for INTT055)
More?. . . N

(Leave BLANK for catalog scan,
volser or pattern for UTOC scan)

```

The available choices provide access to OLISTs populated from different sources. These lists are often used to diagnose problems and to find accessed resources. For example, on the OLIST created from data sets allocated to the ISPLIB DDNAME (the ISPF panel library), you can issue the MEMFIND command to find where ISPF locates a panel within the concatenated list. Similarly, you can create an OLIST of migrated data sets of a specific catalog level, cut the list, start an edit session, paste the data set names into the edit area, and create JCL to recall all of them at once. If you disable the DSLIST Action Bar, SPIFFY will place the special list options on the panel as additional commands.



## CUSTOMIZABLE USER INTERFACE

You can customize the SPIFFY user interface to fit your needs. For example, you can hide the Action Bar to gain two more lines to display information. You can also hide the Hotbar line to gain another line. On SPIFFY panels, you can choose leader dots or arrows as the standard prefix for input fields. You can select the leading character in the Member Selection List line command area, along with other interface options.

To use the SET command from any Command Line (except when you are in OLIST or MSL), enter one of the following: SPIFFY SET, SPIFF SET, or SPFE SET. In OLIST or MSL, enter SET. The SETTING SPIFFY DEFAULTS panel is displayed.

Options you set via the SET commands are remembered across sessions. When you invoke the SET command the following panel is displayed:

```

IPISET00 -----Setting SPIFFY Defaults-----
COMMAND ==> _
Select options by number, name, with cursor selection, or with line commands:
SPIFFY is running under ISPF version 5.0

- A - ALL       - Select all the below displayed options
- M - MSL      - Member Selection List options
- P - OLIST    - Object list options
- G - GLOBAL   - Global edit and Findtext options
- R - PRINT    - Print options
- D - DSLIST   - DSLIST options
- T - TSO      - TSO shell options
- E - EDIT     - Edit, Browse and View options
- I - INTERFACE - Specify user interface options
- S - SCLM    - SCLM options
- N - DIAGNOSE - Diagnose ISPF errors

Make your selection and press the ENTER key or press the END key to exit

```

You can select any of the options, or the ALL option to inspect all options. As an example, the following panel is displayed when you select the INTERFACE options:

```

IPISET18 -----User Interface Options-----
COMMAND ==>

+-----+
| Note: Changes specified on this screen may not affect all of the |
| panels that are currently displayed in nested applications.     |
+-----+

Verify or specify the following options: (Enter Y for Yes, N for No):

Use Leader Dots (instead of arrows). . . . Y
Use Scrollable Panels. . . . . N
Activate HOTBARS . . . . . Y
Activate Action Bars . . . . . Y
  IF Action Bars are active:
    Display Action Bars in Browse, Edit, View . . . Y
    Display Action Bars in Member Selection List. . . Y
    Display Action Bars in the object list. . . . Y
    Display Action Bars in DSLIST . . . . . Y

```

Refer to "Appendix A: Controlling SPIFFY Processing (The SET Command)" for more details about the SPIFFY Set options.

## THE ENHANCED HANDLING OF BROWSE, EDIT, AND VIEW COMMANDS

You can invoke BROWSE, EDIT, and VIEW commands at any time, from any panel. If you are already in MSL BROWSE, EDIT, and VIEW, these commands will initiate a nested level indicated in the left-hand corner of the top line of the panel. When you finish the current level, you will return to the previous level, exactly where you were, so that you never lose your place in your work.

You can define PF keys as BROWSE, EDIT, or VIEW because they are general commands that are invoked by pressing the key. If the cursor is on the command line, the appropriate Entry Panel will be displayed.

The BROWSE, EDIT, and VIEW commands accept the name of the data set or object to process, bypassing the Entry Panel.

Using the Point-and-Shoot Interface, you can place the cursor on the name of an object anywhere on any panel, and invoke BROWSE, EDIT, or VIEW on the object simply by pressing the PF key you have defined. This lets you “zoom in” on an object and “zoom out” again at will. For example, if you’re browsing a member containing JCL that references a data set by name, you can edit that data set by moving the cursor to that name and pressing a PF key defined as EDIT.

*Tip:* **BROWSE, EDIT, and VIEW will accept different SPIFFY objects. For example, by entering EDIT 'TEST.\*.COBOL', you will display an OLIST for data sets that match the specified pattern (with EDIT being the default action for the OLIST). Similarly, you can enter BROWSE 'TAXES.TEST.MASTER' (which we will assume here to be a VSAM file) and have your VSAM file editor process the selected file automatically.**

The BROWSE, EDIT, and VIEW enhanced Entry Panels are similar in design. An enhanced VIEW Entry Panel is shown below:

```

Menu Reflist Refmode Utilities SCLM Settings Test Help Exit
-----
SPF/E-L1          VIEW - ENTRY PANEL
COMMAND ==> _____
HOTBAR?

ISPF LIBRARY:
Project . . . . . Alternate SCLM project . . . . .
Group . . . . .
Type . . . . .
Member . . . . . (Blank or pattern for selection list)
Other data set, VSAM File, @H, or @L for 'SOFTAUD.U312SHIP.JCL':
DSN/Cat. level . . . . .
Volume serial . . . . . (Optional VOLSER or pattern for selection list)
Password . . . . . (If password protected)
Default process . . . . . U (B=Browse, U=Uview, E=Edit, BF, EF, UF, or ?)
Execute TAILOR . . . . . H (Y=Yes ,N=no, D=define commands)
EDIT/VIEW parameters:
SCLM LOCK . . . . . YES (Yes, No)
Initial Macro . . . . . Confirm Cancel/Move/Replace . . . . . H (Y, N)
Profile Name . . . . . Action Bar in Edit/View . . . . . Y (Y, N)
Format Name . . . . . Highlight coloring in Edit/View . . . . . Y (Y, N)
Exclusive access of viewed file . . . . . Y (Y, N)
Preserve UB record length => H Mixed Mode (NLS DBCS char. set) . . . . . H (Y, N)

```

There are several enhancements on this panel:

- Specify data sets and other objects in the fields under the “Other data set, . . .” line. You can use @L for the last referenced dataset, or @H for a list of referenced data sets.
- Specify wildcards in the volume field. SPIFFY will display a Volume Selection List where you can select the volume to access.
- Specify wildcards in the data set field, requesting an OLIST.
- Change the default action (among BROWSE, EDIT, and VIEW) to override the default implied when you invoked this panel, or you can explicitly invoke a data browser/editor (for example, VSAM browser/editor) on non-VSAM files using the BF, EF, or VF options.
- Hide or reveal the Action Bar lines in BROWSE, EDIT, or VIEW without affecting other panels. You can control other user-interface aspects including support of language-sensitive coloring in EDIT, display of cancel confirmation panels, and other options.
- Specify MSL tailoring (filters, sorting, etc.) to be performed before the Member List is displayed.
- Enter any MSL commands on the command line which will execute automatically when the Member List is displayed. For example, by entering L ACT1 you can position member ACT1 on the top of the Member List display.

## SHARED AND EXCLUSIVE VIEW

ISPF Version 4 introduced the VIEW function that provided edit-like capabilities without the ability to SAVE the member. As you view a file, other users can also access the file, and modify it. The viewed version may not reflect the updated file. In SPIFFY you now have two options: Shared VIEW and exclusive VIEW.

Shared View is ISPF’s basic View function. It allows several users to work with the same file at the same time. Shared View does not ENQ on the file being viewed. Though this View disables the SAVE command, a user can still save via the REPLACE command by using the same name of the member being viewed as a parameter to the REPLACE command. The viewed member may not reflect the real member since other users may edit and change it while it is being viewed.

Shared VIEW does not pull down members edited from the ISPF concatenation list (PROJECT, GROUP, TYPE) in the same way EDIT does. If a member exists in the second library in the concatenated member list (indicated by 2 under the LIB column), it will be viewed under LIB 2 while in EDIT it will be ENQed and saved under the first library in the concatenation (LIB 1).

Exclusive VIEW will not allow other users to either EDIT or use exclusive VIEW on the viewed file (shared VIEW and BROWSE are still permitted). Exclusive VIEW also has a controlled save capability. When you use controlled save, a prompt panel is displayed, prompting you to override the default mode of discarding changes. Exclusive VIEW provides functionality similar to shared VIEW, but with enhanced integrity.

Your installation may configure SPIFFY to support both VIEW modes, or enforce one of the two VIEW modes.

## BROWSE, EDIT, AND VIEW ENHANCEMENTS

SPIFFY enhances EDIT and VIEW with several functions. For example, SPIFFY automatically recognizes out-of-space conditions when trying to SAVE a member. SPIFFY will display a confirmation panel, and upon approval will proceed to expand the library directory or compress the library as appropriate. Additionally, SPIFFY will detect redundant SAVE requests and bypass them.

SPIFFY also enhances several EDIT and VIEW commands.

*Note: If you want to invoke the alternate application for BROWSE, EDIT, or VIEW that was specified during setup, use BF, EF, or VF (instead of B, E, or V).*

## ENHANCED CUT AND PASTE

When customizing SPIFFY, you can specify whether you want SPIFFY CUT/PASTE or ISPF CUT/PASTE. The SPIFFY CUT and PASTE commands provide these additional benefits:

- Supports up to 200 CUT/PASTE clipboards. Clipboards can be named or numbered. These clipboards can be edited, browsed, copied, saved, restored, and renamed.
- Ability to CUT excluded and non-excluded lines. You can CUT context-sensitive lines by combining the EXCLUDE and FIND commands with the CUT command.
- To match the PASTE command features in Release 5.7, the CUT command now supports the STatus keyword to display the entries to be cut. You can select the lines you need to cut.
- You can paste lines from different sources:
  - Previously cut lines.
  - Lines from another member.
  - Captured output of TSO commands.
  - Member names of a specified directory.
  - Contents of a previously cut OLIST.
- Before pasting, you can display the lines to be pasted, and select the lines you want to process. For example, when pasting the contents of another member, you can first display the lines of that member and select which lines you want to paste. This is more convenient than the regular COPY command where you have to remember line numbers.

You can paste lines from the different sources of CUT directly to the printer.

## STATUS COMMAND

The STATUS command, available in EDIT and VIEW, provides information about the member directory entry and whether the member was saved. The information is displayed as message lines in the edit workspace.

If the member is numbered and has ISPF statistics, STATUS can display the lines changed at a particular modification level. SPIFFY also provides SCLM statistics and accounting information for SCLM-controlled members.

## ENHANCED FIND AND CHANGE SUPPORT

RFIND and RCHANGE are remembered across different libraries and across BROWSE, EDIT, and VIEW. For integrity, the first time RCHANGE is performed in a member, SPIFFY will place the command on the command line to allow rejection, modification, or execution of the change command.

SPIFFY propagates the text search command issued within the MSL into the BROWSE, EDIT, and VIEW. For example, after the following command within MSL:

```
FINDTEXT "DATE"
```

The RFOUND command in BROWSE positions the cursor on the first "DATE" string.

## DATA SET HISTORY FACILITY (@H)

When an input field requires a data set name, you can call up a panel displaying a selection list of the last 100 data sets you referenced. To do this, enter the symbol @H in place of the data set name. @H is similar to the ISPF REFLIST function, but provides these advantages:

- Simpler access. Enter @H instead of the data set and select the data set to use from the history list. There is no need for Action Bar or command input.
- The list is automatically stored in reversed-access order so that recently referenced data sets are on top. The date and access time are shown.
- You can type over a data set to change your selection, or add or change member names.
- The list will preserve member names specified along with data set names.
- You can open an OLIST containing the history list by entering the command:  
**OLIST @H**

Thereafter, you can issue all the OLIST commands on the data sets listed.

- Ddirectly invoke BROWSE, EDIT, or VIEW with the @H parameter, requesting display of the reference list rather than the standard Entry Panel.
- On any panel, directly specify the last data set referenced (that is, the first item on the Data Set History List) using the symbol @L (for “last”). You can use this symbol in any input field requiring a data set name, or in a command, like this:  
**EDIT @L**

You enter the @H symbol like this:

```

Menu RefList Utilities Help
-----
Data Set Utility
Option ==> _____

A Allocate new data set          C Catalog data set
R Rename entire data set        U Uncatalog data set
D Delete entire data set        S Short data set information
blank Data set information      V VSAM Utilities

ISPF Library:
Project . . . PAYROLL
Group . . . JONES
Type . . . . COBOL

Other Partitioned, Sequential or VSAM Data Set:
Data Set Name . . . @H
Volume Serial . . . _____ (If not cataloged, required for option "C")
Data Set Password . . . _____ (If password protected)

This tells SPIFFY
to display a list of
the last 100 ac-
cessed data sets

```

By default, the items are listed in descending access order. If a pattern or a member name was specified, that information is included in the item.

To select an item, type S next to it and press Enter, or simply put your cursor on the item and press Enter. Processing continues exactly as if you had typed the information in the input field.

You can also modify the name of the data set while selecting it, changing the entire data set name, or possibly adding or changing the member name.

*Tip: If you know the name of the last accessed data set, you can use @L instead of @H to select the last referenced data set, bypassing the history selection list.*

## ACCESS DATA SETS BY DDNAME

In a way similar to how you select a data set from the history list by using the @H symbol, you can specify a data set by an allocated DDNAME. For example, on the ISPF library utility (option 3.1), you can specify the data set as the current ISPLLIB like this:

---

```
DATA SET NAME ==> @DD.ISPPLIB_____
```

---

Specify a particular entry in the concatenation, like this:

---

```
DATA SET NAME ==> @DD.ISPPLIB.#2_____
```

---

With the SPIFFY general commands BROWSE, EDIT, and VIEW, you can specify a member, like this:

```
BROWSE @DD.JCLLIB(JCL01)
```

or a pattern, like this:

```
VIEW @DD.ACCTIN.#3(PAY*)
```



# ENHANCED TSO COMMAND SUPPORT

SPIFFY provides enhanced support of TSO commands (including a TSO Command Shell), the ability to repeat a previously executed command, and the ability to use point-and-shoot with TSO commands. Your installation can activate the SPIFFY TSO shell instead of or along with the ISPF command shell. For simplicity, the discussion in this section will assume that the SPIFFY TSO shell replaces the ISPF command shell.

## Accessing the SPIFFY TSO Shell

To access the TSO shell, use option 6 (COMMAND) from the ISPF main menu or enter "TSO" on the command line. The displayed panel has two areas:

- The command area where you enter your commands.
- The history command list area which lists up to 999 commands issued, or the permanent command list area which allows up to 999 entered commands. You can use the permanent area for any command that is frequently issued.

The history and permanent lists are numbered. Instead of entering a command, you can enter its number on the command area. All history command lists and permanent command lists can be edited, browsed, saved, and restored from a persistent table library.

## Recalling a Command

To recall a command, enter a question mark followed by its number, or place the cursor on a line and click "ENTER" to bring up that command to the main Command. You can also edit that command from the main Command before you execute it. Once the command is edited, the new command is listed in the Command History List.

## Capabilities of the SPIFFY TSO Shell

The SPIFFY TSO shell offers these advantages:

- Support for ISPEXEC dialog manager commands. SPIFFY will execute these commands, and display dialog error messages if any are produced.
- Control over the location of the output line of TSO commands.
- The ability to substitute a data set pointed to by the cursor into the command buffer. (See "Point-and-Shoot Parameters" on page 3-7).

The TSO Command Shell panel looks like this:

```

SPF/E                TSO COMMAND SHELL                Row 1 to 13 of 999
*** PERMANENT command list edited. ***
Command ==>

Enter: TSO command, CLIST, REXX EXEC, or ISPEXEC statement.    Scroll => CSR
      /IS standard ISPF/TSO, /H history
      /EH edit history, /EP edit permanent, /SAU save, /RES restore
      <c><entry number> where <c> is ? or / or omitted.

----- PERMANENT COMMAND LIST -----
 1 | ***** My Daily Jobs ***** ->
 2 | SUBMIT JCL(MORNING) /x08:30 AMx/ ->
 3 | SUBMIT JCL(LUNCH) /x12:00 PMx/ ->
 4 | SUBMIT JCL(ENDOFDAY) /x16:59 PMx/ ->
 5 | x----- ->
 6 | x ->
 7 | SEND 'Please call me at X9876. Maria.',USER(INTT055) ->
 8 | x ->
 9 | ALLOC DA(/) UOOL(SPF01) LRECL(80) BLK(0) RECF(F B) UNIT(SYSALLDA) ->
10 | x ->
11 | LISTCAT ENTRY(SYS1.x) /x LIST CATALOG x/ ->
12 | ->
13 | ->

```

If you choose to show History Command List by entering **/H** on the command line, TSO Command Shell panel will be displayed as follows:

```

SPF/E                TSO COMMAND SHELL                Row 1 of 9
Command ==>

Enter: TSO command, CLIST, REXX EXEC, or ISPEXEC statement.    Scroll => CSR
      /IS standard ISPF/TSO, /P permanent
      /EH edit history, /EP edit permanent, /SAU save, /RES restore
      <c><entry number> where <c> is ? or / or omitted.

----- HISTORY COMMAND LIST -----
 1 | SUB SPFE.CNTL($$$$CT) ->
 2 | SUB SPFE.CNTL($$$$COMP) ->
 3 | SUB SPFE.CNTL($$$$CR) ->
 4 | T$SID ->
 5 | send 'DD(IPIDFLTC) DUMMY For LISTC *',user(INTT009) ->
 6 | send 'DD(IPIDFLTC) DUMMY For LISTC *',user(INTT025) ->
 7 | send 'DD(IPIDFLTC) DUMMY For LISTC *' user(INTT025) ->
 8 | listds / ->
 9 | *** The above commands copied from your initial PROFILE *** ->
----- END OF COMMAND LIST -----

```

The TSO Command Shell allows you to reissue any of the commands on the list from any panel by number. For convenience, you can reissue the last TSO command simply by entering the command

**TSO =**

SPIFFY also provides special point-and-shoot support for TSO commands and CLISTS. When entering such a command, you can designate the data set name with a slash (“/”) and point to the data set name with your cursor. For example, on any ISPF panel with the cursor on the name ACCOUNTS.A.REPORT, the command

**TSO ALLOC FILE(A) DA(/) OLD**

is equivalent to

**TSO ALLOC FILE(A) DA('ACCOUNTS.A.REPORT') OLD**

If you are not pointing to a data set name, SPIFFY will pass the slash to the command.

# THE SPIFFY PRINT ENGINE

SPIFFY provides many ways to print members, data sets, text within the edit workspace, or the Object List itself. This section describes how to print items with SPIFFY, how to control the output destination, how to group different print requests together, and how to get the results faster.

Whatever you print through a SPIFFY function can be directed to the ISPF list data set (as ISPF normally does), or to the SPIFFY print engine. The SPIFFY print engine is significantly faster than ISPF's printing function, and it bypasses the ISPF list data set (writing directly to the spool).

## PRINT ITEMS FROM SPIFFY

From OLIST and MSL, print data sets and members using the P line command. To print several members at a time, you can tailor the Member List (use the FILTER, EXCLUDE, and FLIP commands) and invoke the P line command, followed by a mask defining the members to print (an asterisk would print every members in the tailored list).

The CUT PRINT command in EDIT and VIEW lets you print selected lines from the edit workspace even without saving these lines. You can use the PASTE command to capture and print other information (for example, the captured output of TSO commands, Member List directories, and selected lines from another member).

The list of data sets in an OLIST and the list of members in MSL can also be printed. The File pull-down option on the MSL and OLIST Action Bars contains the appropriate PRINT options.

## USE THE PRINT ENGINE

The SPIFFY print engine prints directly into the system spool without an intermediate data set. SPIFFY provides several parameters that control how the printout is spooled: class, destination, form, FCB, and others. You can specify how many copies to create, and whether to keep it in the hold queue (for future release, rerouting, or cancellation).

The SPIFFY print engine lets you chose between accumulating all print requests as a single printout, or print each request separately.

To control the print options, use the SET command (in MSL or OLIST). When you select the print option, the following panel is displayed:

```

SPF/E -----Print options-----
COMMAND ==> _

Suppress page formatting . . . . N (N=No, Y=Yes - file is already formatted)
Print changed lines in bold. . . . N (N=No, Y=Yes)
Highlight program elements . . . . Y (N=No, Y=Yes - emphasize recognized items)
Process mode . . . . . G (I=print immediately)
                                     (G=Group requests for later printing)
                                     (L=print direct to the ISPF LIST data set)

For process modes I and G:

CLASS . . . . . A (Sysout class)
DESTINATION ID. . . . . (or remote station id)
WRITER name . . . . . (Output WRITER)
Number of copies. . . . . 1 (How many?)
Lines per page. . . . . 60 (page size)
Keep in HOLD queue. . . . . N (Y=Yes, N=No)
FORM number . . . . .
FCB name. . . . .

NOTE: Under process modes I and G, your USERID will be on the separator page.

Press ENTER for options menu, END to exit, CANCEL for installation defaults.

```

Accumulating different print requests is called “grouping”. Grouped output will automatically be released for printing when your ISPF session terminates (or is canceled), when you issue the **RELEASE** command (in MSL or OLIST), or when you set new print options that are incompatible with the existing print options (for example, change destinations). Enter the following command to purge grouped print requests before they are released.

**RELEASE PURGE**

Grouped printing is a convenient method of producing printouts that contain members from different data sets, edited lines (see **CUT PRINT**), and data set lists (print the OLIST).

## SPECIAL FORMATTING OF SOURCE DATA

SPIFFY can provide special formatting that highlights specific elements within printed members. Automatic highlighting is provided for JCL and COBOL members.

For members with ISPF statistics, you can request that SPIFFY highlight lines modified in the last modification level.

---

# ISPF DIALOG DEVELOPMENT ENHANCEMENTS

SPIFFY enhances the process of developing ISPF dialogs. With SPIFFY, ISPF dialog developers can:

- Refresh specific panels before display without having to run in Dialog Test mode. Avoiding Dialog Test mode significantly improves the performance of ISPF.
- Display panels from within the member list.
- Invoke dialog services from within the member list. Feedback messages provide dialog error information on the screen.
- Invoke dialog services from the SPIFFY TSO shell and invoke dialog services from any panel.
- Place dialog services calls within the OLIST (Object Lists).
- Enforce the display of panel identifiers throughout the ISPF session (on all split screens).
- SPIFFY provides a panel extension language (PEL) that provides several enhancements to the ISPF panel language, including the ability to incorporate common panel sections from within a single member. Using PEL, you can place sections that appear in many different panels in a common member and use a PEL statement to refer to it. This facility saves time, development efforts, reduces the chances of errors, and simplifies future maintenance. For more information about PEL see the Appendixes.

To refresh specific panels, select the TEST option on the MSL or OLIST Action Bar, or enter SPFE DTEST on any ISPF panel. A pop-up window will provide you with the ability to specify the panel name to refresh, or a prefix of panels to refresh throughout the current ISPF session. SPIFFY will continuously refresh the specified panels only on the current session. Once the ISPF session is terminated, change the panel refreshing option and standard panel processing will resume.

*Tip: When editing a panel, it is convenient to place it in “refresh” mode as explained above. During editing, you can save the panel and use the TSO shell to display it. For example, if you are editing the member “ACCTMAIN”, and the member is accessible through ISPLIB, you can issue the command “TSO ISPEXEC DISPLAY PANEL(ACCTMAIN)” to display the panel. You can even put the command in the permanent list (for example, entry number 10), and thereafter type TSO 10.*

## SCLM INTEGRATION

SPIFFY provides integrated and enhanced SCLM support. SCLM, a free component of ISPF, is IBM's strategic library manager and software change management product. SCLM uses standard libraries (PDS, PDSE) and provides automatic check-out, a built-in make facility, maintenance of multiple versions, auditing, and control. SPIFFY and SCLM provides the easiest and best method to implement a change management system using standard libraries and standard ISPF facilities.

Without SPIFFY, SCLM forces you into a separate option on the main menu (the SCLM option). This deprives programmers of many useful ISPF utilities and functions.

SPIFFY provides integrated SCLM support to the standard DSLIST, MSL, and OLIST. The benefits of SCLM are added to all the existing ISPF and SPIFFY functions.

SPIFFY also provides additional SCLM benefits:

- Automatic association between SCLM libraries and parameters required to use these libraries (alternate project ID, parser language, authorization codes, change codes, etc.).
- Automatic lock management when members are selected for editing.
- Special identifier within the Member List for parsed and unparsed members.
- Special commands to lock, parse, unlock, promote, and build members directly from the Member List.
- Better error handling. Messages are placed near the member name, hierarchy validation allows temporary overrides, and the ability to leave members in suspended state (uncompleted unparsed members)

# CALL SPIFFY FUNCTIONS FROM APPLICATIONS

SPIFFY provides several interfaces that make it easy to take advantage of its facilities in installation-developed applications.

## CALL OLIST FROM AN APPLICATION

You can invoke OLIST from an application or CLIST. You can invoke the OLIST selection list, a new or existing permanent OLIST, or a temporary OLIST, with the default process (Edit, Browse, or View) of your choice. For example, to invoke a temporary OLIST of all data sets matching the level USER2.TEST, you can issue a command like this:

```
ISPEXEC SELECT PGM(IPIPLST) PARM('USE2.TEST.*')
NEWAPPL(ISR) PASSLIB
```

The parameters passed to the IPIPLST program are the same parameters you can pass to the OLIST general command. For example, to obtain a temporary OLIST with the libraries allocated to STEPLIB you can enter the command:

```
OLIST @DD STEPLIB
```

Similarly you can invoke the same OLIST from a REXX exec with the statement:

```
ISPEXEC SELECT PGM(IPIPLST) PARM('@DD STEPLIB')
NEWAPPL(ISR) PASSLIB
```

The following are acceptable OLIST parameters:

Parameter	Description
=	Invoke the default (last) referenced permanent OLIST
*	Display the OLIST reference list
level volmask	Opens a temporary list showing cataloged datasets matching the level specified (with wildcards). If a volume wildcard is specified, only data sets cataloged to the specified volume(s) will be listed. Examples:           OLIST TAXES.YEAREND.* OLIST SYS1.* SYSR01 OLIST SYS1.* *  Unless a volume mask is specified, the volume column in the list is not filled. To have the volume field filled, specify "*" as the volume mask (see the last example above).
Name	Invoke a previously saved OLIST. OLIST names follow the naming conventions of member names.
name level	Invoke permanent OLIST named "name". If it does not yet exist, populate it with catalog level "level". Example: OLIST CICS SYS1.CICS*
@DD ddname or @LISTA	Opens a temporary OLIST displaying allocated data sets. If a ddname is specified, only libraries allocated to the specified ddname are listed.
@H	Opens a temporary OLIST showing the history list (the list of last 100 data sets referenced by the user).

Parameter	Description
@LISTB	Opens a temporary list of Generation-Data-Groups by base name pattern. Example:           OLIST @LISTB GB* OLIST@LISTGRP GB*
@LISTC	Opens a temporary list of Cataloged entries (objects). Example:           OLIST @LISTC SYS*
@LISTC volmask pattern	Opens a temporary list of data sets catalogued to volumes matching the specified volume mask. Example:           OLIST @LISTC SYS1.* SYSRES
@LISTG or @LISTGDG	Opens a temporary list of Generation-Data-Sets by DSN pattern. Example:           OLIST @LISTG S* OLIST @LISTGDG S*
@LISTG gdgbase pattern	Opens a temporary list of generation data sets matching the exact GDG base specified. The OLIST shows both the exact data set name as appears in the VTOC and the relative generation number from the catalog. Example:           OLIST @LISTGDG ACCOUNTS.TRANSACT
@LISTM or @LISTARC	Opens a temporary list of archived files by DSN pattern. Requires a catalog level parameter and the first character cannot be a wildcard. Example:           OLIST @LISTM I* OLIST @LISTM MYTAPE* OLIST @LISTARC
@LISTM DS pattern or @LISTARC DS pattern	Opens a temporary OLIST with the list of migrated (or archived) data sets matching the specified catalog level. Both commands are similar and are offered for installations with HSM, ASM2, or DMS systems. Examples:           OLIST @LISTM SYS1.A*LIB OLIST @LISTARC SYS2.*
@LISTP	Opens a temporary list of all Page-Space files by DSN pattern Example:           OLIST @LISTP * OLIST @LISTPAG *
@LISTS	Opens a temporary list displaying all System Libraries used by current user. Includes all System Libraries for Link Pack Area, Current Link List, and APF List. Example:           OLIST @LISTS ALL OLIST @LISTS
@LISTS	Opens a temporary OLIST displaying system data sets depending on the parameters. Examples:           OLIST @LISTS ALL OLIST @LISTS APF OLIST @LISTS LINK OLIST @LISTS LINK ALL OLIST @LISTS LINK CURR OLIST @LISTS LINK IPL OLIST @LISTS LINK J=PROD* OLIST @LISTS LINK L=MRO* OLIST @LISTS LINK U=INT* OLIST @LISTS LINK S=JES* OLIST @LISTS LPA OLIST @LISTS PARMLIB



Parameter	Description
@LISTT	Opens a temporary list of Tape Files by DSN pattern. Requires a catalog level parameter and the first character cannot be a wildcard. Example:           OLIST @LISTT I* OLIST @LISTT MYTAPE*
@LISTV	Opens a temporary list of files cataloged by VOLSER pattern and DSN pattern. You must supply a volume name and pattern. Example:           OLIST @LISTV USER* I*SPF*
@LISTV volmask pattern	Opens a temporary OLIST based on the VTOC entries matching the specified volumes and the specified data set level. Wildcards are allowed in both parameters, practically offering a data-set search capability. Example:           OLIST @LISTV SYS* SYS1.*MACLIB
@LISTW or @LISTVS	Opens a temporary OLIST of VSAM Clusters by DSN pattern. Example:           OLIST @LISTW VS* OLIST @LISTVS MYVSAM*FILE%1

## CALL MSL FROM AN APPLICATION

You can invoke the SPIFFY enhanced Member Selection List (or EDIT, BROWSE, or VIEW) from an application or CLIST. The SPIFFY interface supports CUT and PASTE, provides the enhanced Member Selection List services, and provides transparent access to PANVALET libraries, LIBRARIAN libraries, DSLIST, VSAM editors or browsers, and DB2 editors or browsers. For example, to view member A1 in the library MY.DATA, you can issue the CLIST command

```
ISPEXEC SELECT PGM(IPIMSL) PARM(V,MY.DATA(A1))
NEWAPPL(ISR) PASSLIB
```

The IPIMSL parameters are similar to the parameters specified with the BROWSE, EDIT, and VIEW general commands. The parameters (which should be separated with commas) are:

The default action (V for view, B for browse, E for edit).

The second is the object name (data set name). If none is specified, SPIFFY performs a cursor position check and uses the data set name pointed by the cursor (point-and-shoot). To prevent a point-and-shoot call, specify "<PROMPT>" instead of the object name (in this case SPIFFY displays a browse/edit/view prompt screen).

The third parameter is optional and is the volume (for data set objects). If the parameter is omitted, the catalog is used. If a volume pattern is specified, a volume selection is displayed before processing continues.

The last parameter is optional and is intended for invoking applications, and can be specified as Y or N. If "Y" is specified, SPIFFY returns to the calling application with return code of 8 if errors occurred (for example, the data set was not found).

Otherwise, SPIFFY displays a prompt screen with an error message, providing the user with the opportunity to change some options and retry.

## CALL DSLIST (ISPF OPTION 3.4) FROM AN APPLICATION

With SPIFFY installed, you can invoke DSLIST for a particular data set level (as accepted by DSLIST). The format of the call is as follows:

```
SELECT PGM(IPIUDL) PARM(-,[DSLEVEL][,VOLUME[, [COMMAND]])  
NEWAPPL(ISR) PASSLIB
```

Where DSLEVEL is a data set level, VOLUME is a volume serial number, and COMMAND is **V** for VTOC summary information, **P** to print the selected data set, and **PV** to print VTOC summary information. For example, to display all data sets starting with 'SYS1' on all volumes, you can issue a command like this (from a program or CLIST):

```
ISPEXEC SELECT PGM(IPIUDL) PARM(-,'SYS1') NEWAPPL(ISR)  
PASSLIB
```

To restrict the DSLIST to the volume CICS01, you can issue the command like this:

```
ISPEXEC SELECT PGM(IPIUDL) PARM(-,*,CICS01) NEWAPPL(ISR)  
PASSLIB
```

To print the VTOC for all data sets with the first level SYS1 on all volumes, you can issue the command

```
ISPEXEC SELECT PGM(IPIUDL) PARM(-,'SYS1.*',,PV)  
NEWAPPL(ISR) PASSLIB
```

---

# 4. REFERENCE

This large chapter contains syntax summaries and keyword definitions for all commands supported by SPIFFY.

## COMMAND TYPES

The following sections summarize and define the command types.

### General Commands

Enter general commands in the command field of any panel. General commands invoke a new function, while the previous function is waiting in the background. When the new function terminates, the previous one resumes control. Any combination of the general commands **BROWSE**, **EDIT**, and **VIEW** can be nested in this way up to nine levels deep (per split). All other general commands can be invoked an unlimited number of times. ISPF provides several general commands (such as **HELP**, **KEYS**, and **LIST**). SPIFFY adds several more general commands (**EDIT**, **BROWSE**, **VIEW**, **OLIST**, **TSO**, **SPFEHELP**, **SET**, **QUIT**, and **RELEASE**).

To avoid conflict with other commands with the same name, **SET** and **RELEASE** are available only on panels under SPIFFY control.

### Edit, View, and Browse Commands

You can enter these commands in **BROWSE**, **EDIT**, or **VIEW** in addition to those provided by ISPF. The new **EDIT**/**VIEW** commands are **COMPRESS**, **EXPDIR**, **CUT**, **PASTE**, **QUIT**, and **STATUS**. The **SAVE** command is listed and enhanced. The newly supported **BROWSE** commands are **CANCEL** and **SUBMIT**.

### MSL Commands

MSL commands are commands that can be entered only while a member selection list is on display. There are two types of MSL commands: MSL Main commands and MSL Line commands.

Unless otherwise indicated, all MSL commands can be entered as both main commands and line commands. When entered as a line command, use its one-letter form. (For example, **COPY** must be entered as **C** when used as a line command.) However, only commands whose syntax show the optional operand pattern can be entered using a pattern, and only when entered as a main command.

### OLIST Commands

OLIST commands can be entered only while a personal data set list is on display. There are three types of OLIST commands:

#### OLIST Main commands

OLIST main commands can be entered only on the command line of an OLIST.

## OLIST Line commands

OLIST line commands can be entered in the command field of the OLIST. (OLIST line commands can be entered on the command line followed by an item number.) OLIST line commands act on the items named.

## OLIST Editing line commands

OLIST editing line commands can only be entered in the command field of the OLIST. OLIST editing line commands act on the lines of the OLIST, not the items named in the OLIST. Editing line commands begin with a slash (“/”), but are alphabetized without regard to the slash.

Commands available in the SPIFFY EDIT session of an OLIST (invoked using the OLIST main command UPDATE) are not listed separately, since they are the standard EDIT commands as enhanced by SPIFFY.

The commands are organized by categories of General, EDIT/VIEW, MSL, and OLIST in alphabetical order. Leading nonalphabetic characters (such as the “/” in “/D”) are ignored. Commands consisting only of nonalphabetic characters (such as “=”) are listed before alphabetic commands.

The format of the syntax is as follows:

- Text in UPPER CASE (such as “**BROWSE**”) must be entered exactly as shown.
- Text in mixed UPPER and lower case (such as “**FILter**”) indicates an operand that can be abbreviated. The UPPER CASE text is required, and the lower case text is optional. (For example, “**FILter**” can be abbreviated as “**FIL**”.)
- Text in lower case (such as “pattern”), possibly containing hyphens (such as “member-name”), represents information you enter.
- An element in brackets (such as “[member-name]”) is optional. When several elements are listed vertically, only one may be selected.
- When several elements are listed vertically in braces such as:

---

```
[ member - name ]
  pattern
```

---

one element is required.

- An underlined element is the default if no value is specified.

For example, here’s the syntax specification for the command **LIB**. Notice that the element **l** is underlined. This signifies that if you enter no command, the action for **l** will be in effect:

---

```
LIB [ l library - number ] [ library - name ]
    +
    + library - number
```

---

## GENERAL COMMANDS

Main Command	Line Command	Remarks
“BROWSE”	N/A	Invokes a new nested “BROWSE” session, or opens a new MSL with the default meaning of SELECT and S set to BROWSE
“EDIT”	N/A	Invokes a new nested “EDIT” session, or opens a new MSL with the default meaning of SELECT and S set to EDIT
“OLIST”	N/A	Invokes an Objects List, or a list of referenced Objects Lists.
QUIT	N/A	Terminates processing of pending members under MSL and/or pending objects under OLIST.
“SET”	N/A	Causes SPIFFY Options panel to be displayed.
“SPFEHelp”	N/A	When invoked from a SPIFFY panel, causes SPIFFY Help to be displayed.
SPFE	N/A	See “ <b>SPFEHelp</b> ”
SPIFFY	N/A	See “ <b>SPFEHelp</b> ”
SPIFF	N/A	See “ <b>SPFEHelp</b> ”
“TSO”	N/A	“ <b>TSO</b> ” general command can be used to execute ISPEXEC statements and invoke the TSO Command Shell
“VIEW”	N/A	Invokes a new nested “VIEW” session, or opens a new MSL with the default meaning of SELECT and S set to VIEW

## BROWSE

The **BROWSE** command invokes a new nested BROWSE session, or opens a new MSL with the default meaning of **SELECT** and **S** set to BROWSE. **BROWSE** is used to display sequential data sets and members of libraries (partitioned data sets). Data cannot be changed. Note that **VIEW** provides the same functionality, but with the power of **EDIT**.

Depending on how SPIFFY is installed at your site, **BROWSE** may also process VSAM files, Librarian or Panvalet files, DB2 tables, and installation-defined objects.

### Format

---

```

BROWSE [ curr - lib - member - name
        curr - lib - pattern
        dname [ member - name ] [vol]
              pattern ]

```

---

### Operands

curr-lib-member-name	The name of a member in the current library, or the last library processed (or, if the screen has been split, the last library processed in this split).
curr-lib-pattern	A member name pattern using the wildcard characters “%” and “*” to match the name or names of one or more members in the current library, or in the last library processed (or, if the screen has been split, the last library processed in this split).
dsname	The name of the object you wish to browse, either fully qualified or unqualified.
member-name	The name of a member in the library specified.
pattern	A member name pattern using the wildcard characters “%” and “*” to match the name or names of one or more members in the library specified.
vol	The volume serial number. If specified, SPIFFY looks for the data set only on the specified volume. Otherwise, it consults the catalog to locate the data set.

*Note: If this operand is specified, it must follow the preceding operand by exactly one space.*

### Usage Notes

If the data set specified is a library and you have not specified a particular member (that is, you have specified only the library name, or have specified a pattern), a member selection list is displayed.

---

An unqualified two-level data set name must be entered with a leading period to distinguish it from a member name. (If your TSO profile is set to NOPREFIX, a name entered with a leading period refers to a single-level data set name.)

*Note: "BROWSE" cannot be abbreviated. The MSL line command B, which can be entered as a main command, invokes a BROWSE session on one or more members in the current library.*

*Example:*

```
BROWSE
BROWSE PAYROLM
BROWSE PAY*
BROWSE 'PAYROLL.JONES.COBOL'
BROWSE 'PAYROLL.JONES.COBOL' PROD02
BROWSE 'PAYROLL.JONES.COBOL(PAYROLM)'
BROWSE 'PAYROLL.JONES.COBOL(PAY*)'
BROWSE DEV.COBOL(PAY*)
BROWSE DEV.COBOL(PAY*) TEST01
BROWSE .TESTLIST
```

## EDIT

The **EDIT** command invokes a new nested EDIT session, or opens a new MSL with the default meaning of **SELECT** and **S** set to **EDIT**.

Depending on how SPIFFY is installed at your site, **EDIT** may also process VSAM files, Librarian or Panvalet files, DB2 tables, and installation-defined objects.

### Format

---

```

EDIT [ curr - lib - member - name
      curr - lib - pattern
      dname [ member - name ] [vol]
            pattern ]

```

---

### Operands

curr-lib-member-name	The name of a member in the current library, or the last library processed (or, if the screen has been split, the last library processed in this split).
curr-lib-pattern	A member name pattern using the wildcard characters “%” and “*” to match the name or names of one or more members in the current library, or in the last library processed (or, if the screen has been split, the last library processed in this split).
dsname	The name of the object you wish to browse, either fully qualified or unqualified.
member-name	The name of a member in the library specified.
pattern	A member name pattern using the wildcard characters “%” and “*” to match the name or names of one or more members in the library specified.
vol	The volume serial number. If specified, SPIFFY looks for the data set only on the specified volume. Otherwise, it consults the catalog to locate the data set.

*Note: If this operand is specified, it must follow the preceding operand by exactly one space.*

### Usage Notes

If the data set specified is a library and you have not specified a particular member (that is, you have specified only the library name, or have specified a pattern), a member selection list is displayed. An unqualified two-level data set name must be entered with a leading period to distinguish it from a member name. (If your TSO profile is set to NOPREFIX, a name entered with a leading period refers to a single-level data set name.)



---

*Note: “**EDIT**” cannot be abbreviated. The MSL line command **E**, which can be entered as a main command, invokes an EDIT session on one or more members in the current library.*

*Example:*

```
EDIT
EDIT ACCTMAIN
EDIT ACCT*
EDIT 'PAYROLL.JONES.PANELS'
EDIT 'PAYROLL.JONES.PANELS' PROD02
EDIT 'PAYROLL.JONES.PANELS(INPUT1) '
EDIT 'PAYROLL.JONES.PANELS(INPUT* '
EDIT JONES.PANELS(INPUT1)
EDIT DEV.COBOL(PAY*)
EDIT DEV.COBOL(PAY*) TEST01
EDIT .TESTLIST
```

## OLIST

The **OLIST** command invokes an Objects List, or a list of referenced objects lists.

### Format

---

```
OLIST [ [name] [ pattern ] ]
      *
```

---

### Operands

**name**            The name of an OLIST to be displayed or created. The name of an OLIST can be from one to eight characters; it must conform to the syntax of a member name.

**pattern**        A dataset-name using the wildcard characters “%” and “\*”.

**\***                Requests the list of referenced objects lists.

### Usage Notes

Processing depends on the form of the command, as shown below. (In the table below, “newlist” is an OLIST that does not already exist; “oldlist” is an OLIST that already exists. “level” and “pattern” are as defined above.)

Form of Command	Processing
OLIST	
OLIST *	The default OLIST is displayed. (See below for a discussion of the default OLIST.)
OLIST oldlist	Displays the list of referenced objects lists.
OLIST newlist	The OLIST “oldlist” is displayed.
OLIST pattern	A new OLIST with the name “newlist” is created. “newlist” is checked to see if it matches a first-level qualifier. If so, the OLIST is filled with all catalog entries that have “newlist” as their first-level qualifier. If not, the OLIST is prefilled with the names of the ISPF libraries on the EDIT entry panel and DSLIST entry panel.
OLIST newlist pattern	A temporary OLIST is displayed listing all data sets in the catalog matching “pattern”.
OLIST newlist.pattern	A new OLIST with the name “newlist” is created listing all data sets in the catalog matching “level”.
OLIST oldlist level	A new OLIST with the name “newlist” is created listing all data sets in the catalog matching “.pattern”.
OLIST oldlist.pattern	The OLIST “oldlist” is displayed. “level” is ignored.
OLIST =	The OLIST “oldlist” is displayed. “.pattern” is ignored.

Form of Command	Processing
OLIST patt volmask	Invoke the default (last) referenced permanent OLIST.
OLIST @LISTC patt	Invoke a temporary list showing cataloged datasets matching the level specified (with wildcards). If a volume wildcard is specified, only data sets catalogued to the specified volume(s) will be listed. Unless a volume mask is specified, the volume column in the list is not filled. To have the volume field filled, specify "*" as the volume mask (see OLIST * on previous page).
volmask	Invokes a temporary OLIST populated with data sets catalogued to volumes matching the specified volume mask.
OLIST @LISTV volmask patt.	Opens a temporary OLIST based on the VTOC entries matching the specified volumes and the specified data set level. Wildcards are allowed in both parameters, practically offering a data-set search capability
OLIST @LISTM patt or OLIST @LISTARC patt	Opens a temporary OLIST with the list of migrated (or archived) data sets matching the specified catalog level. Both commands are similar and are offered for installations with HSM, ASM2, or DMS systems.
OLIST @LISTGDG gdgbase	Opens a temporary list of generation data sets matching the exact GDG base specified. The OLIST shows both the exact data set name as it appears in the VTOC and the relative generation number from the catalog.
OLIST @LISTS listtype	Opens a temporary OLIST displaying system data sets. The listtype parameter may be used to restrict the display to one of the three list types available: LPALIB, LINKLIST, and APFLIST.
OLIST @DD ddname	Invoke a temporary OLIST displaying allocated data sets. If a ddname is specified, only libraries allocated to the specified ddname are listed.
OLIST @H	Display a temporary OLIST showing the history list (the list of last 100 data sets referenced by the user).

Your default **OLIST** is the last permanent **OLIST** displayed. The first time **OLIST** is invoked, or if you have deleted the **OLIST** last used as the default, your default is an **OLIST** with the name set to your **USERID**. Processing is the same as if you specified the name explicitly: your **USERID** is checked to see if it matches a first-level qualifier; if so, the **OLIST** is filled with all catalog entries that have your **USERID** as their first-level qualifier; if not, the **OLIST** is prefilled with the names of the ISPF libraries on your **BROWSE**, **EDIT**, and **VIEW**, and **DSL** Entry Panels.

You can also explicitly set the **OLIST** that will be displayed when **OLIST** is next invoked without any specifications. To do so, use the line command **NXT** on the **OLIST** selection list panel.

To display a temporary OLIST of all data sets in the catalog matching a first-level qualifier, rather than to display an existing OLIST of the same name or to create a new (permanent) OLIST of that name, enter it with a period and an asterisk, like this:

```
OLIST ACCOUNTS.*
```

rather than

```
OLIST ACCOUNTS
```

*Note: To create a permanent OLIST with a name different from the first-level qualifier, specify the name followed by the first-level qualifier, like this:*

```
OLIST ACCTS ACCOUNTS
```

*Example:*

OLIST	OLIST *
OLIST LEDGER1	OLIST LEDGER1 TEST
OLIST LEDGER1 ACCOUNTS.TEST	OLIST ACCOUNTS.%PAY*.COB*
OLIST LEDGER1 ACCOUNTS.%PAY*.COB*	OLIST TAXES.YEAREND.*
OLIST SYS1.* SYSR01	OLIST SYS1.* *
OLIST @LISTC SYS1.* *	OLIST @LISTV SYS* SYS1.*MACLIB
OLIST @LISTM SYS1.A*LIB	OLIST @LISTARC SYS2.*
OLIST @LISTGDG ACCOUNTS.TRANSACTION	OLIST @LISTS LPALIB
OLIST @LISTS APFLIST	OLIST @LISTS LINKLIST
OLIST @LISTS ALL	

---

## QUIT

The **QUIT** command is used to terminate processing of pending members under MSL and/or pending objects under OLIST.

Pending members are members that have not yet been processed by GLOBAL, by an MSL line command entered as a main command with a pattern, or by MSL when multiple line commands have been entered. Pending objects are OLIST entries that have not yet been processed by an OLIST line command entered as a main command with a range of OLIST entries.

### Format

---

```
QUIT
```

---

### Operands

scope	Pending members and/or object under MSL, or OLIST, or ALL. ALL is the default.
action	STOP (stop QUIT), or OK. OK is the default.

### Usage Notes

**QUIT** is a main command only. It cannot be used as a line command.

*Example:*

```
QUIT  
QUIT 5  
QUIT 2-10  
QUIT 2-10 ,STOP
```

## SET

The **SET** command displays the SPIFFY Options panels. The panels control various SPIFFY process options, including OLIST options, MSL options, output (print) options, and GLOBAL processing options.

You can also use the commands **SPFE SET**, **SPIFFY SET**, **SPIFF SET**

### Format

---

```
SET [ A  
      M  
      P  
      G  
      R  
      D  
      T  
      E  
      I  
      S  
      N ]
```

---

### Operands

A	Select all the below displayed options
M	Member Selection List (MSL) options
P	Object list (OLIST) options.
G	Global edit and Findtext options
R	Print options
D	DSLISL options
T	TSO shell options
E	Edit, Browse and View options
I	Specify user interface options
S	SCLM options
N	Diagnose ISPF errors

### Usage Notes

**SET** is a main command available under **BROWSE**, **EDIT**, and **VIEW** (and their respective member selection lists), and **OLIST**; it cannot be used as a line command.

If no operand is specified, the first of the SPIFFY Options panels is displayed. Subsequent panels are displayed by pressing the Enter key. If an operand is specified, only the specified SET panel is displayed.

---

Pressing the END key returns to the panel from which SET was invoked.

*Example:*

SET	SET OLIST	SPFE SET
SET MSL	SET OUTPUT	SPIFFY SET
SET PRINT	SET GLOBAL	SPIFF SET
SET PL	SET M	SPFE SET MSL
SET O	SET PR	SPIFF SET PRINT
SET G	SPFE SET M	SPIFF SET G

## SPFEHELP

If Help is invoked while in an OLIST or MSL, the Help will be SPIFFY specific. However, when invoked outside of OLIST or MSL, the standard ISPF is invoked. To display SPIFFY Help, you must enter it as SPFEHelp, SPIFFY Help, or SPIFF help.

### Format

---

SPFEHelp

---

### Operands

SPFEHelp has no operands.

*Example:*

**SPFEHELP**  
**SPFE**  
**SPIFFY**  
**SPIFF**



## TSO

As well as processing **TSO** commands, CLISTS, and REXX EXECs as under native ISPF, the **TSO** general command can be used to execute ISPEXEC statements and to invoke the TSO Command Shell.

### Format

---

```
TSO [?] [ =
          n
          tso - command
          ispeexec - statement ]
```

---

### Operands

?	Display the TSO Command Shell panel.
=	Re-execute (or display) the last command entered.
n	Re-execute (or display) the nth command on the TSO Command Shell list.
tso-command	A TSO command, CLIST, or REXX EXEC to execute (or display).
ispeexec-statement	An ISPEXEC statement to execute (or display).

### Usage Notes

When **TSO** is entered with a question mark, the TSO Command Shell panel is displayed. Otherwise, the command specified is executed immediately. If a question mark is entered with another operand, the specified command is displayed on the command line of the TSO Command Shell panel. The other operand must follow the question mark without any intervening spaces. An integer indicates a command on the history or permanent list of the TSO Command Shell panel; an equals sign (“=”) indicates the last command executed. A slash (“/”) within the command string indicates the data set name the cursor is on.

*Example:*

```
TSO          TSO DOWNLOAD 'PAYROLL.JONES.CNTL(ACCT1) '
TSO ?       TSO ?DOWNLOAD 'PAYROLL.JONES.CNTL(ACCT1) '
TSO =       TSO ALLOC FILE(A) DA('ACCT.TEST') OLD
TSO ?3     TSO ALLOC FILE(A) DA(/) OLD
TSO ?=     TSO ISPEXEC SELECT PANEL(MY@PRIM)
```

## VIEW

The **VIEW** command invokes a new nested VIEW session, or opens a new MSL with the default meaning of SELECT and S set to VIEW. The **VIEW** command is used to display sequential data sets and members of partitioned data sets. The displayed data can be changed, but not saved, unless specifically authorized on a confirmation panel. **VIEW** provides a BROWSE-like facility with the power of **EDIT**. **VIEW** cannot display load module format data sets, but automatically invokes **BROWSE** to do so.

Depending on how SPIFFY is installed at your site, **VIEW** may also process VSAM files, Librarian or Panvalet files, DB2 tables, and installation-defined objects.

### Format

---

```
VIEW [ curr - lib - member - name
      curr - lib - pattern
      dname [ member - name ] [vol]
            pattern ]
```

---

### Operands

curr-lib-member-name	The name of a member in the current library, or the last library processed (or, if the screen has been split, the last library processed in this split).
curr-lib-pattern	A member name pattern using the wildcard characters “%” and “*” to match the name or names of one or more members in the current library, or in the last library processed (or, if the screen has been split, the last library processed in this split).
dsname	The name of the object you wish to browse, either fully qualified or unqualified.
member-name	The name of a member in the library specified.
pattern	A member name pattern using the wildcard characters “%” and “*” to match the name or names of one or more members in the library specified.
vol	The volume serial number. If specified, SPIFFY looks for the data set only on the specified volume. Otherwise, it consults the catalog to locate the data set.

*Note: If this operand is specified, it must follow the preceding operand by exactly one space.*

### Usage Notes

If the data set specified is a library and you have not specified a particular member (that is, you have specified only the library name, or have specified a pattern), a member selection list is displayed.

---

An unqualified two-level data set name must be entered with a leading period to distinguish it from a member name. (If your TSO profile is set to NOPREFIX, a name entered with a leading period refers to a single-level data set name.)

*Note: 'VIEW' cannot be abbreviated. The MSL line command V, which can be entered as a main command, invokes a VIEW session on one or more members in the current library.*

*Example:*

```
VIEW
VIEW ACCTSTAT
VIEW ACCT*
VIEW 'PAYROLL.PROD.COBOL'
VIEW 'PAYROLL.PROD.COBOL' PROD02
VIEW 'PAYROLL.PROD.COBOL(ACCT1)'
VIEW 'PAYROLL.PROD.COBOL(ACCT*)'
VIEW DEV.COBOL(PAY*)
VIEW DEV.COBOL(PAY*) TEST01
VIEW .TESTLIST
```

---

## EDIT/VIEW/BROWSE COMMANDS

Main Command	Line Command	Remarks
COMPRESS		This subcommand is used to compress the library currently in EDIT or VIEW. This is not to be confused with the MSL COMPRESS command, which is used to compress any library in the hierarchy.
CUT		This subcommand lets you copy or move lines from the currently edited member to clipboard.
EXPDIR		This command is used to expand the directory of the library being edited, thereby allowing more members.
PASTE		The PASTE command can insert lines that were previously cut into a member, or to the printer or the ISPF LIST data set.
SAVE		This command has been modified to save a member (or file) only when it has been changed.
STATUS		The STATUS command enters information about the current member as NOTE lines at the top of the current display.
SUBMIT		Submits the current member, data set, or specified member in the same library as a batch job

## COMPRESS

The **COMPRESS** subcommand is used to compress the library currently in EDIT or VIEW. It is to be distinguished from the MSL COMPRESS command, which is used to compress any library in the hierarchy.

### Format

---

```
COM Pr ess
```

---

### Operands

COMPRESS takes no operands.

*Example:*

```
COMPRESS  
COMP
```

## CUT

The **CUT** subcommand lets you copy or move lines from the currently edited member to one of the clipboards for later pasting or for immediate printing.

### Format

---

```
CUT [ ALL ] [ range ] [ X ] [ NX ] [ REPlace ] [ APPend [ AFTER ] [ BEFORE ] ] [ FIND ] [ DISplay ] [ TO n ] [ PRINT ]
```

---

### Operands

ALL	Indicates that the entire edited file is to be cut.
range	When entered, is a pair of operands, separated by at least one blank, specifying either the EDIT labels of the first and last lines to be cut or the first and last relative line numbers. If omitted, you can specify the range via the C, CC, M or MM line commands.
X	Indicates that only excluded (non-displayed) lines are to be cut.
NX	Indicates that only displayed (non-excluded) lines are to be cut. NOTE: If both X and NX are omitted, both excluded and non-excluded lines are cut.
REPlace	When specified, the cut lines replace the contents of the specified or default clipboard. (This is the default.)
APPend	When specified, the cut lines are added to the specified or default clipboard either at the end or the beginning, as indicated:
AFTer	The cut lines are placed at the end of the clipboard. This is the default location if APPEND is specified. (This is the default.)
BEFORE	The cut lines are placed at the beginning of the clipboard, before any lines already present
FIND	Displays a prompt panel on which to specify a string to be found. Only lines containing the specified string will be cut.
DISplay	Displays the contents of the clipboard as a result of the CUT operation.
TO	Indicates that the cut lines are to be sent to a clipboard, and is followed by a number specifying which clipboard, numbered 0 through 9, the cut lines are to be placed in. If TO is not used, "TO 0" is the default clipboard.
n	Following the operand "TO", a number from 0 to 9 indicating the clipboard number to which the data is to be cut.
PRINT	When specified, the contents of the clipboard are also to be printed.
STatus	Displays a list of the current active clipboards from which you can select the entries to cut.

*Example:*

```
CUT                                CUT X TO 1
CUT ALL                            CUT 5 7 TO 0 APPEND
```

CUT ALL FIND

CUT ALL FIND DISPLAY

CUT ALL PRINT

CUT TO 9 NX APP BEFORE

CUT TO 8 X APP AFT

CUT .A .ZL

## EXPDIR

The **EXPDIR** command is used to expand the directory of the library being edited, thereby allowing it to contain more members. It is to be distinguished from the MSL EXPDIR command, which is used to expand any library in the hierarchy.

### Format

---

```
EXPDIR BLKS [n]
```

---

### Operands

BLKS	Specifies by how many blocks the directory is to be expanded.
n	The number of blocks by which the directory is to be expanded. If no number is specified, the default is 1.

### Usage Notes

One block is enough for 5 members with ISPF statistics or 20 members without statistics.

*Example:*

```
EXPDIR  
EXPDIR BLKS 3
```



## PASTE

The **PASTE** command can insert lines that were previously cut into a member, or to the printer or the ISPF LIST data set. In addition, a directory list, the output of a TSO command or another member may also be pasted, the contents of a clipboard may be displayed, or the status and contents of all active clipboards may be displayed.

### Format

---

```

PASTE [ FROM n
      MEMBER name ] [ Pr int
                    [ [ AFTer ] t arg et ] [ TEXT
                    [ BEFore ]          NOTEs ] [ DISplay ] [ RESet ]
                    STATUS

```

---

### Operands

FROM	Specifies which clipboard, numbered 0 through 9, the cut lines are to be retrieved from. If FROM is not used, "FROM 0" is the default. (This is the default location into which CUT lines are placed.)
n	Following the operand "FROM", a number from 0 to 9 indicating the clipboard from which the data is to be pasted.
MEMber	When specified, indicates that the pasted lines should be retrieved from another member in the current PDS.
name	The name of the member to be pasted.
DIR	When specified, displays a panel asking for the name of the library whose directory is to be pasted.
TSO	When specified, displays a TSO prompt panel, allowing you to enter the TSO command whose output should be pasted.
STAtus	When specified, displays a list of the currently active clipboards, from which you can select one to paste from, or to display. You can also cancel the PASTE command from this panel.
Print	When entered, indicates that the specified data be printed to the printer, or to the ISPF LIST data set, as specified on the SET panel.
AFTer	When specified, indicates that the pasted lines should be placed after the indicated line.
BEFore	When specified, indicates that the pasted lines should be placed before the indicated line.
target	The line at which the pasted lines should be placed. It may be specified as an EDIT statement label, a relative line number, or one of the following synonyms for ISPF EDIT labels

:

DIT Label	Synonym
.ZF	TOP
.ZL	BOTtom
.ZCSR	CURsor

The location at which the pasted lines should be placed can also be specified using the ISPF EDIT B (before) or A (after) line commands. In this case, the target is not specified in the PASTE command itself.

*Note: Unless you are pasting temporary lines (MSGs or NOTES), there is no default location for PASTE. A location (AFTER, BEFORE, a target specified using the A or B EDIT line commands, or PRINT) is required.*

TEXT	Indicates that the lines be pasted as normal text lines. This is the default.
NOTEs	Indicates that the lines be pasted as temporary =NOTE= lines.
MSGs	Indicates that the lines be pasted as temporary ==MSG>> lines.
DISplay	When entered, indicates that the specified data be displayed before the paste operation takes place. On the display screen, the lines to be pasted can be selected using ISPF line commands, or the entire paste operation can be canceled.
RESet	Indicates that the current NOTE and MSG lines are to be deleted from the display before the paste operation is performed.

*Example:*

<b>PASTE</b>	<b>PASTE TSO PRINT</b>
<b>PASTE FROM 2 AFTER 5</b>	<b>PASTE DISPLAY</b>
<b>PASTE DIR AFTER 5</b>	<b>PASTE FROM 1 AFTER TOP</b>
<b>PASTE DIR BEFORE BOTTOM</b>	<b>PASTE BEF CUR</b>
<b>PASTE FROM 2 MSG AFT BOT</b>	<b>PASTE MEMBER ACCTMAIN AFTER .ZL</b>
<b>PASTE DIR DIS AFTER CURSOR</b>	<b>PASTE FROM 1 NOTES RESET BEFORE .ZF</b>

---

# SAVE

The **SAVE** command has been modified to save a member (or file) only when it has been changed. You may, however, want to force a **SAVE** (for example, to place the member in a lower level library). A keyword has been added to allow you to force a **SAVE** to be done even if the member or file has not been changed.

## Format

---

```
SAVE [ FORce ] [ parse ] [ build ] [ promote ]
```

---

## Operands

FORce	Indicates that the member (or file) is to be saved, even if it hasn't been changed since the last time it was saved.
parse	For SCLM controlled editing, parse a member for statistical and dependency information.
build	For SCLM controlled editing, build a member.
promote	For SCLM controlled editing, promote a member from one library to another library.

## Usage Notes

If you issue the **SAVE** command under VIEW, a confirmation panel is displayed. You can confirm or cancel the requested save operation.

If there is not enough room in the library or the directory to save the member, SPIFFY will offer to compress the library or expand the directory (as appropriate) before attempting to perform the save operation.

*Example:*

```
SAVE  
SAVE FORCE  
SAVE FOR  
SAVE BUILD  
SAVE PROMOTE
```

## STATUS

The **STATUS** command enters information about the current member as NOTE lines at the top of the current display. In addition, if requested, only lines changed in the current or a specified modification level are displayed (others are excluded).

The information displayed includes:

- The member name.
- The record format and size.
- Whether anything in the member was changed since the last time the member was saved, and if so, how many lines have changed.
- The current directory entry of the member.

### Format

---

```
STATUS [ Changes[ Levelnn ] ] [ SCLM ]
```

---

### Operands

Changes	If specified, indicates that only lines changed in the current modification level (the default) or the specified modification level are to be displayed. All other lines are to be excluded.
Level	If specified, indicates the modification level of which changed lines are to be displayed. The default is the current modification level.
nn	Indicates the modification level of which changed lines are to be displayed.
SCLM	For SCLM controlled edit, displays the SCLM accounting and referenced members.

*Example:*

```
STATUS  
STATUS CHANGES  
STATUS C LEVEL 2  
STATUS CHA LEV 2  
STA C L 2
```

---

## SUBMIT

The SUBMIT command submits the current member or data set or a specified member in the same library as a batch job.

### Format

---

```
SUBmit [  range
        member - name ]
```

---

### Operands

range	An EDIT label-range.
member-name	The name of a member in the current library.

### Usage Notes

If no member-name is specified, the current member or data set is submitted.

*Example:*

```
SUBMIT
SUB
SUB .A .ZL
SUBMIT ACCTMAIN
SUB ACCTMAIN
```

# MSL COMMANDS

Main Command	Line Command	Remarks
	“=”	Repeat preceding line command
	“%”	Executes the CLIST/REXX EXEC specified on the RENAME column
“ASSIST”	N/A	The <b>"ASSIST"</b> command controls the display of MSL assist windows on the member selection list panel.
“B”	B	The <b>B</b> command invokes the BROWSE process on the specified one or more members. The <b>B</b> command can be used as a line command or a main command.
“COMPress”	N/A	The <b>"COMPRESS"</b> command is used to compress one or more of the libraries in the current concatenation hierarchy. It is to be distinguished from the EDIT/VIEW subcommand <b>"COMPRESS"</b> , which is used to compress the library currently in EDIT or VIEW.
“CONFIRM”	N/A	The <b>"CONFIRM"</b> command activates or deactivates the member-delete confirmation screen.
“Copy”	C	The <b>"Copy"</b> command copies the specified one or more members to the same or a different library. <b>"Copy"</b> can be used as a main command. <b>c</b> can be used as a line command or a main command.
“DEFault”	N/A	The <b>"DEFAULT"</b> command is used to change the default process invoked by the <b>"SELECT"</b> and S commands during the current MSL session.
“Delete”	D	The <b>"Delete"</b> command deletes one or more members specified from the library containing them. <b>"Delete"</b> can be used as a main command. <b>D</b> can be used as a line command or a main command.
“DSName”	N/A	The <b>"DSNAME"</b> command is used to change the member selection list to another library, to refresh the current display, or to invoke the current process (BROWSE, EDIT, or VIEW) on a specified data set.
Edit	“E”	The <b>"E"</b> command invokes the EDIT process on the member named.
“EXCLude”	X	The <b>"EXCLUDE"</b> command is used to eliminate members from the member selection list display (or to unexclude all excluded members). The line command equivalent of <b>"EXCLUDE"</b> is <b>X</b> .
“EXIT”	N/A	The <b>"EXIT"</b> command is used to return directly to the panel from which MSL was invoked.
“EXPDIR”	N/A	The <b>"EXPDIR"</b> command is used to expand the directory of one of the libraries in the current concatenation hierarchy, thereby allowing it to contain more members. It is to be distinguished from the EDIT/VIEW subcommand <b>"EXPDIR"</b> , which is used to compress the library currently in EDIT or VIEW.

Main Command	Line Command	Remarks
"FILter"	N/A	The " <b>FILter</b> " command is used to selectively tailor the display of members in the member selection list (or to remove all filtering).
"Find"	N/A	The " <b>Find</b> " command locates a particular member in the member selection list. If the member is in the hidden list, it is displayed in the MSL.
FindText	N/A	The " <b>FINDTEXT</b> " (or FT) command locates the next member in the displayed list that contains a specified text string.
"FLIP"	N/A	The " <b>FLIP</b> " command toggles between visible and invisible (excluded and filtered-out) lines.
"Global"	N/A	The " <b>Global</b> " command is used to initiate global editing of the members in the displayed member list.
"H [WHERE]"	H	The " <b>H [WHERE]</b> " command indicates in which libraries of the concatenation one or more members occur.
"INFO"	N/A	The " <b>INFO</b> " command is used to display information about the libraries in the current concatenation sequence of the MSL.
"ISPEXEC"	I	The " <b>ISPEXEC</b> " command invokes ISPEXEC on the one or more members specified.
"J [SUBMIT]"	J	The " <b>J [SUBMIT]</b> " command submits a member as a batch job.
"K"	K	The " <b>K</b> " command is used for library management functions. It supports either LMF or SCLM.
"LIB"	N/A	The " <b>LIB</b> " command allows you to switch to other libraries by changing the middle level qualifier (GROUP) of the current displayed libraries. In a hierarchy, the " <b>LIB</b> " command adds or removes a library to the concatenation.
"LMAP"	N/A	The " <b>LMAP</b> " command is used to display a load module mapping.
"LMF"	N/A	The " <b>LMF</b> " command promotes the one or more members specified to the next data set in the hierarchy or frees the member.
"Locate"	N/A	The " <b>Locate</b> " command positions the cursor in the member selection list panel at the first member matching the specified character string.
"Move [PDS only]"	M	The " <b>Move [PDS only]</b> " command moves one or more members specified to a different data set.
P	P	The " <b>P [Main Command]</b> " command prints one or more members specified to a printer or to the ISPF LIST data set, as specified on the SET panel. The " <b>P [Line Command]</b> " command copies the one or more members specified.

Main Command	Line Command	Remarks
"PROJECT"	N/A	The <b>"PROJECT"</b> command changes the library (or libraries) being processed to one (or ones) with the same name (or names) as currently displayed except that the high-level qualifier is as specified in the command.
"RELease"	N/A	The <b>"RELease"</b> command is used to terminate processing of pending members under MSL.
"RELease"	N/A	The <b>"RELease"</b> command is used to close or delete the current print group. This is applicable only if the PRINT processing mode is set to GROUP.
"Rename"	R	The <b>"Rename"</b> command renames a member in the current member selection list.
"RESet"	N/A	The <b>"RESet"</b> command is used to reset some or all of the tailoring of the current member list. It can be used to unexclude all excluded members, remove all filters, clear the RENAME field, and restore the default sorting (ascending by member name).
"S"	"S"	The S line command selects an item and invokes the default process for that item. (The default process depends on the type of object, how MSL was invoked, and the setting on the SPIFFY Options panel for MSL.) S can be used as a line command or, following a member, as a main command.
"SAVE"		The <b>"SAVE"</b> command writes the currently displayed member selection list to a user-specified data set, a printer, or the ISPF LIST data set.
"SCLMCMD"	K	The <b>"SCLMCMD"</b> command performs the specified SCLM function on the member(s) (active only if SCLM support is active for the user).
"SCLMPARM"		The <b>"SCLMPARM"</b> command displays the SCLM parameters active for the current library (active only if SCLM support is active for the user).
"SELECT"	S	The <b>"SELECT"</b> command processes members under the default process (BROWSE, EDIT, or VIEW), or another line command specified.
SET		See <b>set</b> in GENERAL COMMANDS
"SORT"		The <b>"SORT"</b> command is used to put the member selection list into a specified order.
"SSI"		The <b>"SSI"</b> command displays SSI information for the specified members.
"STATS"	Z	The <b>"STATS"</b> command creates, removes, or allows the user to change statistics of members.
"SUBmit"	J	The <b>"SUBmit"</b> command submits a member as a batch job.
"TAG"		The <b>"TAG"</b> command places a character string in the RENAME field of the member list of members that match the specified name or pattern.



Main Command	Line Command	Remarks
"TAILOR"		The <b>"TAILOR"</b> command executes the MSL command or commands defined as your tailoring macro. The TAILOR command can also be used to display and change the current definition.
"TOTAL"		The <b>"TOTAL"</b> command displays statistics totals for the non-excluded, non-filtered members.
TSO	T	The T command invokes the specified TSO command or CLIST on the one or more members specified.
"TYPE"		The <b>"TYPE"</b> command changes the library (or libraries) being processed to one (or ones) with the same name (or names) as currently displayed
"UNFilter"		The <b>"UNFilter"</b> command removes the most recently applied filter, or all filters.
"USAGE"		The <b>"USAGE"</b> command lists library members currently in use under ISPF from the displayed list, including the user IDs of the TSO users accessing them.
View	V	The V command invokes the view process on the one or more members specified.
"W"	W	The <b>"W"</b> command displays a preview window in the member selection list for the member named.
"WHERE"	H	See <b>"H [WHERE]"</b>
"X [EXCLUDE]"		Use the <b>"X [EXCLUDE]"</b> command to eliminate members from the member selection list display (or to unexclude all excluded members).
"Z [STATS]"		The <b>"Z [STATS]"</b> command creates, removes, or changes statistics of members.

**=**

The = command invokes the immediately preceding line command on the member named.

**Format**

---

```
= member - name [ operand ]
```

---

**Operands**

member-name	The name of the member in the current member selection list.
operand	The second operand, if any, appropriate to the previous command.

**Usage Notes**

This command can be used only as a line command.

If the previous command accepts (or requires) a second operand, the corresponding operand can (or must) be entered in the RENAME column.

**Feedback Messages**

The feedback message depends on what processing was invoked.

---

## %

The % command executes the CLIST/REXX EXEC specified on the RENAME column, passing to the executed command the name of the library where the member resides along with the member name.

### Usage Notes

% can only be used as a line command.

Use this command for local MSL commands. The CLIST/REXX EXEC invoked has access to the same variables available through the T line command.

*Example:*

NAME	RENAME	LIB	VV.MM	CREATED	CHANGED	...
ACCTMAIN		2	01.00	91/09/02	91/09/02	08:28...
ACCTSTAT		2	02.00	91/09/02	91/09/02	18:49...
% CICSSTAT	UPLOAD	4	01.12	91/08/03	91/08/13	18:32...
CICSTRAN		3	01.04	91/04/26	91/09/03	08:58...
PAYROLM		2	01.20	91/08/23	91/09/02	18:07...

## ASSIST

The **ASSIST** command controls the display of MSL assist windows on the member selection list panel.

### Format

---

```
Assist [ command - name ]
```

---

### Operands

command-name	The name of the command for which you want to see an assist window. If omitted, the action of the command depends on the location of the cursor, as described below.
--------------	--

### Usage Notes

**ASSIST** is a main command only. It cannot be used as a line command.

When automatic assist mode is on, an assist window with a list of the MSL commands is displayed. To toggle automatic assist mode between on and off, enter the **ASSIST** command (without operands) with the cursor on the command line, or change the setting with the SET command.

To reposition the assist window, type the command on the command line (with or without the name of a command you want assistance with) and then put the cursor where you want the assist window and press Enter. The top line of the assist window is placed as close as possible to the position of the cursor when you entered the command.

*Example:*

```
ASSIST  
A  
ASSIST COPY  
ASSIST C  
A DEL
```

## B

The **B** command invokes the **BROWSE** process on the specified one or more members. The **B** command can be used as a line command or a main command.

### Format

---

```
B [ member - name ] DATA
   [ pattern ]
```

---

### Operands

member-name	The name of the member in the current member list.
pattern	A member-name using the wildcard characters “%” and “*”.
DATA	Invoke the installation-defined data editor (for example, a VSAM editor) to process this member.

### Usage Notes

“**B**” is not equivalent to **BROWSE**. **BROWSE** opens a nested level of **BROWSE**. When you use **B** as a main command, you can specify a pattern. If you specify a pattern, each member matching the pattern is browsed.

### Feedback Messages

BROUSED	The member was browsed.
DELETED	The member was deleted before the <b>BROWSE</b> operation was initiated.
IO ERR	An input/output error occurred in reading the directory of the library or the member itself.
NO AUTH	Since you began working, your access to the library has been revoked.

*Example:*

```
B ACCTMAIN
B *CCCT*
B AC%%MAIN
```

## COMPRESS

The **COMPRESS** command is used to compress one or more of the libraries in the current concatenation hierarchy. It is to be distinguished from the **EDIT/VIEW** subcommand **COMPRESS**, which is used to compress the library currently in EDIT or VIEW.

### Format

---

```
COM Pr ess [ liblist  
            ALL ]
```

---

### Operands

liblist	Comprises one or more library numbers (if more than one is allocated) separated by blanks. If omitted, the first library (library 1) is compressed.
ALL	All the concatenated libraries in the MSL.

### Usage Notes

**COMPRESS** is a main command only. It cannot be used as a line command.

*Example:*

```
COMPRESS  
COMPRESS 3  
COMPRESS 2 4  
COMP 2 ALL
```

---

## CONFIRM

The **CONFIRM** command activates or deactivates the member-delete confirmation screen.

### Format

---

```
CONFIRM [  $\frac{\text{ON}}{\text{OFF}}$  ] DATA
```

---

Where the response is:

---

```
CONFIRM { ON | OFF }
```

---

### Operands

**ON**            Activates the member-delete confirmation screen. The default is ON.

**OFF**           Deactivates the member-delete confirmation screen.

*Example:*

```
CONFIRM ON  
CONFIRM OFF
```

## COPY

The **Copy** command copies the specified one or more members to the same or a different library.

### Format

---

```
Copy [ member - name [ out - member - name ] ]  
      [ pattern [ lib ] ]
```

---

### Operands

member-name	The name of the member in the current member list to be copied.
pattern	A member-name using the wildcard characters “%” and “*”.
out-member-name	The target member name. It will be placed in the <i>first</i> library of the hierarchy, regardless of the current location of the source member.
lib	The number of the library in the current concatenation list to which the source is to be copied.

### Usage Notes

**Copy** can be used as a main command. **C** can be used as a line command or a main command.

If **C** is entered as a line command, type the destination in the RENAME field of the member selection list.

With **Copy** or **C** as a main command, a pattern may be specified. In this case, each member matching the pattern is copied. If a pattern is specified, a target member name cannot be specified in the command. (A panel will be displayed on which target member names can be individually specified.)

If no destination is specified, a Copy prompt panel is displayed. This panel allows specification of any data set as the destination.



---

## Feedback Messages

-COPIED	The member was copied.
-COPY ER	The member wasn't copied because an error occurred.
-DELETED	The member was deleted before the operation was initiated.
-IO ERR	An input/output error occurred in reading the directory of the library or the member itself.
-NO AUTH	Since you began working, your access to the library has been revoked.
-NO REPL	The member wasn't copied because the REPLACE option was set to NO.
-NOT OLD	You specified that the target is to be replaced only if it is newer than the source, and the source is not older than the target.
-NO STAT	You specified that the target is to be replaced only if it is older or newer than the source, and either the source or the target was lacking statistics.

*Example:*

```
COPY PAYROL1 PAYROL2 ACCT 2
C PAYROL1 PAYROL2 ACCT* 3
C PAYROL1C *CCT*
C ACCT%11
```

## DEFAULT

The **DEFault** command is used to change the default process invoked by the **SELECT** and **S** commands during the current MSL session.

### Format

---

$$\text{DEFault} \left[ \begin{array}{c} \text{E} \\ \text{V} \\ \text{B} \end{array} \right]$$

---

### Operands

- |   |  |
|---|--|
| E | Invoke the E line command when the SELECT or S command is used in a member selection list. |
| V | Invoke the V line command when the SELECT or S command is used in a member selection list. |
| B | Invoke the B line command when the SELECT or S command is used in a member selection list. |

### Usage Notes

**DEFault** is a main command only. It cannot be used as a line command.

If the operand is omitted, the current default is displayed.

*Example:*

```
DEFAULT E
DEF B
DEF
```

## DELETE

The **DELETE** command deletes one or more members specified from the library containing them.

### Format

---

```
Delete [ member - name ] [ PROMPT ]
       [ pattern       ] [ NOPROMPT ]
```

---

### Operands

member-name	The name of the member in the current member list to be deleted.
pattern	A member-name using the wildcard characters “%” and “*”.
PROMPT	A keyword indicating that the delete prompt panel is to be displayed. “CONFIRM” is a synonym for “PROMPT”.
NOPROMPT	A keyword indicating that the delete prompt panel is not to be displayed.” “NOCONFIRM” is a synonym for “NOPROMPT”.

### Usage Notes

**DELETE** can be used as a main command. **D** can be used as a line command or a main command.

When the command is used specifying a member, a delete confirmation panel is displayed. It shows the selection list entry of the member being deleted as well as the top of the member.

When **DELETE**, **DEL**, or **D** is used as a main command, a pattern may be specified. In this case, a confirmation panel for the entire group is displayed. By default, a confirmation panel for the deletion of each member of the group is also displayed. You can suppress the display of these individual confirmation panels.

**Feedback Messages**

-DELETED	The member was deleted.
-IO ERR	An input/output error occurred in reading the directory of the library or the member itself.
-NO AUTH	Since you began working, your access to the library has been revoked.
-REVEALD	Another member with the same name was found in a higher level library, and is now being displayed in the MSL instead of the deleted one.

*Example:*

```
DELETE ACCTMAIN          DEL STAT1
D PANEL1                 D PANEL1 PROMPT
DEL *CCT*                DEL *CCT* NOPROMPT
DEL *CCT* NOCONFIRM
```

## DSNAME

The **DSName** command is used to change the member selection list to another library, to refresh the current display, or to invoke the current process (BROWSE, EDIT, or VIEW) on a specified data set.

### Format

---

```
DSName [ libnum
        dsname [ member - name
                pattern ] ] [ volser ]
```

```
DSName =
```

---

### Operands

libnum	The number of the library in the current concatenation list for which a member list is to be displayed
dsname	The name of a sequential data set or a library. If not enclosed in quotes, the current TSO prefix will be prefixed to the name.
member-name	The name of the member in the library specified.
pattern	A member-name using the wildcard characters “%” and “*”.
volser	The volume serial number of the library or data set to be processed.
=	The equals sign (=) forces SPIFFY to refresh the member list of the current library or libraries. If this operand is specified, volser cannot be specified.

### Usage Notes

DSName is a main command only; it cannot be used as a line command.

If no operand is specified, the main entry panel of the current function (BROWSE, EDIT, or VIEW) is displayed. You can specify several libraries in an ISPF hierarchy.

If a particular member of a library is specified, the current default process (BROWSE, EDIT, or VIEW) is invoked on that member. If a library is specified without any member or pattern, an MSL is invoked for that library. This has the effect of changing the current library. If a library is specified with a pattern, an MSL is invoked for that library, filtered to include only members whose name match the pattern. This also has the effect of changing the current library. If a sequential data set is specified, the current default process (BROWSE, EDIT, or VIEW) is invoked on that data set.

*Example:*

```
DSNAME                               DSN =
DSN 2                                 DSN 'PAYROLL.JONES.COBOL'
DSN MYLIB(A%C*)                       DSN JONES.COBOL CICS01
DSN 'ROGER12.ISPLOG1.LIST'            DSN A.COBOL(ABC)
```

## E

The **E** command invokes the EDIT process on the member named.

### Format

---

```
E [ member-name ] [ DATA
  pattern          ] [ LOCK
                    ] [ UNLOCK ]
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.
DATA	Invoke the installation-defined data editor (for example, a VSAM editor) to process this member.

If not specified, the EDIT default (as specified on the entry panel or via the SET command) for locking is used.

### Usage Notes

**E** is not equivalent to **EDIT**. **EDIT** opens a nested level of EDIT.

**E** can be used as a line command or a main command. If **E** is entered as a line command, enter the locking parameter (if required) in the RENAME field.

When you use **E** as a main command, you can specify a pattern. If you specify a pattern, each member matching the pattern is browsed.

*Example:*

```
E ACCTMAIN          E ACCT*
E ACCTMAIN LOCK     E STAT1 NOLOCK
```

### Feedback Messages

-IN USE	The member wasn't edited because it was in use.
-IO ERR	An input/output error occurred in reading the directory of the library or the member itself.
-NO AUTH	Since you began working, your access to the library has been revoked.
-NO SAVE	The member wasn't saved.
-SAVED	The member was saved. This feedback message is displayed if the member was saved at any time during the current edit session, whether or not SAVE or END was the last command issued.

---

## EXCLUDE

The **EXCLUDE** command is used to eliminate members from the member selection list display (or to unexclude all excluded members).

### Format

---

```
EXCLUDE [ member-name  
        pattern ]
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.

### Usage Notes

If no operand is specified, all excluded members are unexcluded.

**EXCLUDE** is a main command. The line command equivalent of **EXCLUDE** is **X**.

### Feedback Message

None. The specified members are removed from the displayed member selection list.

*Example:*

```
EXCLUDE ACCTMAIN  
EXCLUDE *TAT*  
EXCLUDE TEXT%%X  
EXCLUDE *  
EXCLUDE
```

## EXIT

The **EXIT** command is used to return directly to the panel from which MSL was invoked.

### Format

---

**EXIT**

---

### Operands

The **EXIT** command has no operands.

### Usage Notes

**EXIT** is a main command. It cannot be used as a line command.

*Example:*

**EXIT**



---

## EXPDIR

The **EXPDIR** command is used to expand the directory of one of the libraries in the current concatenation hierarchy, thereby allowing it to contain more members. It is to be distinguished from the **EDIT/VIEW** subcommand **EXPDIR**, which is used to compress the library currently in EDIT or VIEW.

### Format

---

```
EXPDIR [ library - number ] [ BLKS n ]
```

---

### Operands

library-number	The number of the library whose directory is to be expanded. If no number is entered, the default is 1.
BLKS	Specifies by how many blocks the directory is to be expanded.
n	The number of blocks by which the directory is to be expanded. If no number is entered, the default is 1.

### Usage Notes

**EXPDIR** is a main command. it cannot be used as a line command.

One block is enough for 5 members with ISPF statistics or 20 members without statistics.

*Example:*

```
EXPDIR  
EXPDIR 2  
EXPDIR BLKS 3  
EXPDIR 3 BLKS 4
```

## FILTER

The **FILTER** command is used to selectively tailor the display of members in the member selection list (or to remove all filtering).

### Format

---

```
FILTER [ member - pattern ] [ field - name pattern ]
```

---

### Operands

member-pattern	A member-name using the wildcard characters “%” and “*”.
field-name	The name of a member selection list column heading.
pattern	A pattern for values of the corresponding field using the wildcard characters “%” and “*”.

### Usage Notes

If no operand is specified, all filtering is removed.

**FILTER** is a main command only; it cannot be used as a line command.

Up to six patterns (on six different fields), including member-name, may be specified in a single invocation; only the field name for the member name may be omitted, and only when it is the first pattern.

The **FILTER** command operates on the current MSL, removing from the list all members that do not match the pattern or patterns specified (and placing them on the hidden list).

To see members that have been filtered, enter **FLIP** and to remove all filtering, enter **RESET ALL**.

You can also specify a relative date keyword (i.e.: TODAY, WEEK, MONTH, YEAR, RECENT (defined to the last ten days), or the minus sign followed by the number of days (from today). The relative date function can only be specified as the last parameter when invoking the **FILTER** command. The relative date must be in the ISPF US data notation format in the member list (YY/MM/DD).

*Example:*

```
FILTER ACCT*
FILTER CHANGED 87/02* USERID R%%R*
FILTER CHANGED WEEK
FILTER CHA -20
FIL CREATED 87* CHANGED 87/02*
FIL AC* LIB 2 RENT YES REFR YES AMODE ANY RMODE ANY
FILTER
FIL
```

## FIND

The **Find** command locates a particular member in the member selection list. If the member is in the hidden list, it is displayed in the MSL.

### Format

---

```
Find [ member - name ]
```

---

### Operands

member-name      The exact name of the member that is to be located in the member.

### Usage Notes

**Find** is a main command only; it cannot be used as a line command.

If you enter **Find** with no operands, a Find Object List Entries input panel is displayed where you enter the string to search along with qualifiers.

```

File Edit Find Display Populate Settings SCLM Menu Test Help Exit
-
S      Find Object List Entries          SPF/E  f 69
C      COMMAND ==>                      CSR
H      Enter selection parameters to find entries:  P
+      'TEXT'                             t -+
|      _____                         |
|      N (N=Next, P=Prev, L=Last, F=First, A=All)  |
+      C (C=Character, P=Prefix, S=Suffix, W=Word)  |
O      F1=HELP   F2=SPLIT  F3=END   F4=RETURN  F5=RFIND  ----+
T      F6=RCHANGE F7=UP    F8=DOWN  F9=SWAP   F10=LEFT
C
-----
1 !*** DYNAMIC OLISTS *****

```

The entire MSL is searched (including members that have been filtered out or excluded) for an *exact* match. If no match is found in either the displayed or hidden list, the directory of the library (or libraries) is reread, in case another user has recently added the member specified to the MSL. If there is still no match, a **LOCATE** command is issued for the member-name on the displayed list (to display the closest match).

If the automatic preview option is set, **Find** will display a preview window of the member located. To control this option, use the **SET** command.

To restrict the search to the *displayed* list, use the **LOCATE** command.

*Example:*

```

FIND STAT1
F ACCTMAIN

```

## FINDTEXT

The **FINDTEXT** (or **FT**) command locates the next member in the displayed list that contains a specified text string.

### Format

```
[ FINDTEXT ]
  FT      ] text-string
```

### Operands

text-string      The string to be found. If it contains blanks or special characters, the text-string should be enclosed in quotes.

### Usage Notes

**FINDTEXT** is a main command only; it cannot be used as a line command.

If you enter **FINDTEXT** with no operands, the OLIST Text Search input panel is displayed where you enter the string to search along with qualifiers.

```

File Edit Find Display Populate Settings SCLM Menu Test Help Exit
-
S          OLIST Text Search          SPF/E          of 69
C COMMAND ==> _          > CSR
H Specify string to search within the OLIST entries:          LIP
+ Search string. . . 'TEXT'          ist -+
|          |
|          |
+          |
O Prompt after. . . 50          (Number of items to process before
T          a prompt screen is displayed)
C          F1=HELP          F2=SPLIT          F3=END          F4=RETURN          F5=RFIND
-          F6=RCHANGE          F7=UP          F8=DOWN          F9=SWAP          F10=LEFT
          |
          |
          2 !-----
          3 !* ALLOCATED TO DDNAME: OLIST @LISTA ISPPLIB -----

```

The listing is positioned so that the member containing the text string is the first member on the panel. The feedback message -TXT FND is placed in the rename column and part of the found line is displayed in the member's statistics area. Processing of the **FINDTEXT** command is controlled by the PROMPT AFTER option of the GLOBAL processing options (set via the **SET** command). After the specified number of members have been unsuccessfully processed, **FINDTEXT** stops processing.

---

Use the **RFIND** command (or PF key) to continue the search. The **RFIND** command and the PF key set to **RFIND** (usually PF 5) can be used to reissue the **FINDTEXT** command (with the identical text string) to locate the next member containing that string. Using **RFIND**, if the first member on the display does not contain the feedback message -TXT FND, the search begins from the first member on the display. If the first member does contain the feedback message -TXT FND, the search begins with the second member. Use the PF key set to **RFIND** with a new text string on the command line to continue the search with the string.

*Example:*

```
FINDTEXT ACCOUNTS
FT ACCOUNTS
FT 'MAJOR ACCOUNTS'
```

## Feedback Messages

-TXT FND            The member contains the specified text string.

## FLIP

The **FLIP** command toggles between visible and invisible (excluded and filtered-out) lines.

### Format

---

**FLIP**

---

### Operands

The **FLIP** command has no operands.

*Example:*

**FLIP**

---

## GLOBAL

The **Global** command is used to initiate global editing of the members in the displayed member list.

### Format

---

```
Global [ edit - command ]
```

---

### Operands

edit-command      The **EDIT** command to be executed for each member in the displayed MSL. If omitted, the GLOBAL prompt panel is displayed.

### Usage Notes

**Global** is a main command only. It cannot be used as a line command. If the **Global** command is entered without operands, the GLOBAL prompt panel is displayed.

Global processing is performed as specified on the Global prompt panel or the SET panel.

*Example:*

```
GLOBAL
G
G CHANGE "CUST-MST" "CUST-DET" ALL
GLOBAL LINE_AFTER .ZFIRST = DATALINE "/* (C) 1988"
GLOBAL LOCATE 'DATE'
```

## H [WHERE]

The **H** command indicates in which libraries of the concatenation one or more members occur.

### Format

---

```
H [ member - name ]  
  pattern
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.

### Usage Notes

**H** can be used as a main command or a line command. The main command **WHERE** is equivalent to **H**.

*Example:*

```
H ACCTMAIN  
H %CCT*  
H *
```

### Feedback Messages

-IN nnnn	The library or libraries in which the member occurs.
----------	--



## INFO

The **INFO** command is used to display information about the libraries in the current concatenation sequence of the MSL.

### Format

---

INFO

---

### Operands

The **INFO** command has no operands.

### Usage Notes

**INFO** is a main command only. It cannot be used as a line command.

*Example:*

**INFO**

# ISPEXEC

The **ISPEXEC** command invokes ISPEXEC on the one or more members specified.

## Format

---

```
ISPEXEC [ member - name ] [ command ]
        [ pattern ]
```

---

## Operands

member-name      The name of the member in the current member selection list.

pattern            A member-name using the wildcard characters “%” and “\*”.

command            The ISPEXEC function call to be invoked for this member.

## Usage Notes

**ISPEXEC** can be used as a main command. The command **I** can be used as a main command or a line command.

If **I** is entered as a line command, type the command operand in the RENAME field. If **ISPEXEC** or **I** is entered as a main command, a pattern may be used, in which case **ISPEXEC** is invoked on each member in the displayed list matching the pattern. If the command operand is omitted, the type of ISPEXEC call SPIFFY constructs depends on the type of library (as indicated by the third-level qualifier in the data set name), as shown in the following table:

Library Type	Qualified Recognized	Default function cal constructed
CLIST	IS%CLIB CLIST*	ISPEXEC SELECT CMD(member)
Load module	IS%LLIB LOAD*	ISPEXEC SELECT PGM(member)
Message	IS%MLIB MSG*	ISPEXEC GETMSG(member) SHORTMSG(ZERRSM) LONGMSG(ZERRLM)
Panel	IS%PLIB PANEL*	ISPEXEC DISPLAY PANEL(member)

*Note: If the command operand is omitted and the library is a panel library, the function call constructed will be executed immediately displaying the panel directly.*

*Example:*

```
ISPEXEC PANEL1                    I PANEL1
I PANEL*                            ISPEXEC ACCTMAIN
I PAYROLM TBOPEN
```

## Feedback Messages

The feedback message is the name of the function call you specified or that was implied by the library type.

---

## J [SUBMIT]

The **J** command submits a member as a batch job.

### Format

---

```
J [ member - name ]  
  pattern
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.

### Usage Notes

When **J** is entered as a line command, you can specify one operand in the RENAME field, provided it fits.

The main command **SUBMIT** is equivalent to **J**.

*Example:*

```
J ACCTMAIN  
J ACCT*
```

### Feedback Messages

SUBMIT	The member was submitted.
--------	---------------------------

## K

The **K** command is used for library management functions. It supports either LMF or SCLM.

LMF controlled and SCLM controlled command, formats, associated operands, usage notes, examples, and feedback messages are discussed below:

### Format

#### LMF Controlled

---

$$K \left[ \begin{array}{l} \text{member - name} \\ \text{pattern} \end{array} \right] \left[ \begin{array}{l} \text{Move} \\ \text{Pr omote} \\ \text{Free} \end{array} \right]$$

---

#### SCLM Controlled

---

$$K \left[ \begin{array}{l} \text{BUILD} \\ \text{DELETE} \\ \text{INFO} \\ \text{LOCK} \\ \text{PARSE} \\ \text{PROMOTE} \\ \text{SAVE} \\ \text{MIGRATE} \\ \text{UNLOCK} \end{array} \right]$$

---

## Operands

### LMF

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.
Move	Promote the member. (Same as Promote.) This is the default.
Promote	Promote the member. (Same as Move.)
Free	Free the member.

### SCLM

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.
BUILD	Build a member.
DELETE	Delete database components.
INFO	Displays change code, programming language and promoter associated with the selected member.
LOCK	Lock a member or assign an access key.
PARSE	Parse a member for statistical and dependency information.
PROMOTE	Promote a member from one library to another library.
SAVE	Save the member.
MIGRATE	Produce SCLM accounting information for members in a development library.
UNLOCK	Unlock a member in a development library.

## Usage Notes

### LMF

When **K** is entered as a line command, you can specify the operation operand (FREE, MOVE, or PROMOTE) in the RENAME field. MOVE is the default.

When **K** is used as a main command, a pattern may be specified. In this case, all members in the displayed MSL matching the pattern are processed. LMF is synonym of K when used as a main command.

### SCLM

For use as a main command, SCLMCMD invokes the same function.

If a library is SCLM controlled, the associated LMF controls are ignored.

*Example:*

### LMF

```
K ACCTMAIN FREE
K ACCTMAIN F
```

K ACCT\* MOVE  
K STAT\* P  
K STAT\*

**SCLM**

K PAYROL1 INFO  
K PAYMAIN PROMOTE

**Feedback Messages**

**LMF**

-DELETED	The member was deleted before the operation was initiated.
-FREED	The member was freed.
-PROMOTE	The member was promoted.
-TOP GRP	The member was not promoted because it was already in the highest group.

## LIB

The **LIB** command allows you to switch to other libraries by changing the middle level qualifier (**GROUP**) of the current displayed libraries. In a hierarchy, the **LIB** command adds or removes a library to the concatenation.

### Format

**LIB** [+ | -] [library-number] <library-name>

### Operands

library-name	The name of the library to be used as the specified library number.
+	Add a single library ahead of the current concatenation.
+ library-number	Inserts a new specified group in the hierarchy concatenation. The place where the group is inserted is determined by the library number.
-	Specifies that the library specified is to be removed from the concatenation sequence.

### Usage Notes

**LIB** is a main command; it cannot be used as a line command.

If you have specified a library using “OTHER PARTITIONED OR SEQUENTIAL DATA SET” area of the **BROWSE**, **EDIT**, or **VIEW** Entry Panel, no concatenation of libraries can be defined. In this case, you cannot use the **LIB** command to add a library to the hierarchy, or to redefine any library other than library 1. The same restriction applies if you use the **DSN** command to switch libraries.

This command also provides the ability to specify the plus sign followed by a group. This notation indicates that the groups in the hierarchy concatenation should be shifted right from the specified library number, inserting the new specified group. This works only if an hierarchy (even of one library) is used upon entry to the **MSL**.

*Example:*

```
LIB TEST
LIB 2 TEST
LIB 2 -
LIB +1 DEV
LIB + DEV
LIB -
```

## LMAP

The **LMAP** command is used to display a load module mapping.

### Format

---

```
LMAP [ member - name ]
```

---

### Operands

member-name      The name of the member in the current member selection list.

### Usage Notes

You can also use the **L** line command in front of a member name to issue the **LMAP** on that member.

*Example:*

```
LMAP ABENDON
```



## LMF

The **LMF** command promotes the one or more members specified to the next data set in the hierarchy or frees the member.

### Format

---

```
LMF [ member - name ] [ Move
    pattern           Pr omote
                    Free ]
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.
Move	Promote the member. (Same as Promote.) This is the default.
Promote	Promote the member. (Same as Move.)
Free	Free the member.

### Usage Notes

**LMF** is a main command. The equivalent line command is **K**.

*Example:*

```
LMF ACCTMAIN FREE
LMF ACCTMAIN F
LMF ACCT* MOVE
LMF STAT* P
LMF STAT*
```

### Feedback Messages

-DELETED	The member was deleted before the operation was initiated.
-FREED	The member was freed.
-PROMOTE	The member was promoted.
-TOP GRP	The member was not promoted because it was already in the highest group.

## LOCATE

The **Locate** command positions the cursor in the member selection list panel at the first member matching the specified character string.

### Format

---

```
Locate [ loc - string ] [ field - name ]
```

---

### Operands

loc-string	The leading characters of the field to be located.
field-name	The name of a member selection list column heading. If omitted, the string is matched against the main sort field. (If you have not explicitly sorted the MSL, this is the member name field.)

### Usage Notes

**Locate** is a main command only. It cannot be used as a line command.

A search is performed from the second member displayed on the screen to locate the first member in the displayed list for which the leading characters of the field specified (or implied) exactly match the string specified. If not found, the search starts again from the beginning of the list (that is, it wraps around). If not found again, the member closest to the locate string is selected.

The listing is positioned so that the member selected is the first member on the panel.

If the automatic preview option is on, **Locate** will display a preview window of the located member. To control this option, use the SET command.

*Example:*

```
LOCATE ACCTM  
L ROGER USERID  
L 87/02 CHANGED
```

## MOVE [PDS ONLY]

The **Move** command moves one or more members specified to a different data set.

### Format

---

```
Move [ member - name [ out - member - name ]
      pattern [ lib ] [ lib ] ]
```

---

### Operands

member-name	The name of the member in the current member selection list to be moved. It will be deleted from its current library after the operation, although not necessarily from the member selection list.
pattern	A member-name pattern using the wildcard characters “%” and “*” to match the name or names of the one or more members in the current member selection list to be moved. Each matching member will be deleted from its current library after the operation, although not necessarily from the member selection list (since another member with the same name may still exist in a higher level library).
out-member-name	The target member name. It will be placed in the first library of the hierarchy, regardless of the current location of the source member.
lib	The number of the library in the current concatenation list to which the source is to be moved.

### Usage Notes

**Move** can be used as a main command. **M** can be used as a main command or a line command.

If **M** is entered as a line command, type the member name to which it is to be moved in the RENAME field of the MSL. When **Move** or **M** is used as a main command, a pattern may be specified. In this case, each member matching the pattern is moved. If a pattern is specified, a target member name cannot be specified in the command. (A panel will be displayed on which target member names can be individually specified.)

However the command is entered, if no destination is specified, a Move Prompt Panel is displayed. This panel allows specification of any data set as the destination.

*Example:*

```
MOVE PAYROL1 PAYROL
M PAYROL1 PAYROL
M PAYROL1
M ACCT 2
M ACCT* 3
M ACCT*
```

## Feedback Messages

-DELETED	The member was deleted before the operation was initiated.
-IO ERR	An input/output error occurred in reading the directory of the library or the member itself.
-MOVE ER	The member was not moved because an error occurred.
-NO AUTH	Since you began working, your access to the library has been revoked.
-NO REPL	The member was not copied because the REPLACE option was set to NO.
-NOT OLD	You specified that the target is to be replaced only if it is newer than the source, and the source is not older than the target.
-NO STAT	You specified that the target is to be replaced only if it is older or newer than the source, and either the source or the target was lacking statistics.
-REVEALD	Another member with the same name was found in a higher level library, and is now being displayed in the MSL.

## P [MAIN COMMAND]

The **P** command prints the one or more members specified to a printer or to the ISPF LIST data set, as specified on the SET panel.

### Format

---

```
P [ member - name ]
   [ pattern ]
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.

### Usage Notes

**P** can be used as a main command and a line command.

When **P** is used as a main command, a pattern may be specified. In this case, a confirm print request panel is displayed, allowing you to verify the members that are to be printed, and to set the print options.

If the print-out is directed to the ISPF LIST data set, use the **ISPF LIST** command to process the output.

*Note: Don't confuse this command with the ISPF PRINT command, which prints the screen image to the ISPF LIST data set.*

*Example:*

```
P PAYROLM
P PAYROL*
```

### Feedback Messages

-PRINT I	The member was printed in immediate mode.
-PRINT G	The member was printed in group mode.
-PRINT L	The member was printed to the ISPF LIST data set.
-NO AUTH	Since you began working, your access to the library has been revoked.
-DELETED	The member was deleted before the operation was initiated.
-EMPTY	The member selected for printing was empty.
-IO ERR	An input/output error occurred in reading the directory of the library or the member itself.

## P [LINE COMMAND]

The **P** line command copies the one or more members specified.

### Format

---

$$P \left[ \begin{array}{l} \text{member - name} \\ \text{pattern} \end{array} \right] \left[ \begin{array}{l} ? \\ I \\ G \\ L \end{array} \right]$$

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.
?	Request the print options screen.
I	Process mode to print immediately.
G	Process mode to group requests for later printing.
L	Process mode to print direct to the ISPF LIST data set.

*Example:*

```
P PAYROLM
P PAYROL*
P ACCOUNTS ?
P ACCOUNTS I
```

## PROJECT

The **PROJECT** command changes the library (or libraries) being processed to one with the same name as currently displayed except that the high-level qualifier is specified in the command.

### Format

---

```
PROJECT [ project - name ]
```

---

### Operands

project-name      The name of the new high-level qualifier to be used.

### Usage Notes

**PROJECT** is a main command. It cannot be used as a line command.

*Example:*

```
PROJECT PAYROLL  
PROJECT SYS1
```

## RELEASE

The **RELease** command is used to close or delete the current print group. This is applicable only if the PRINT processing mode is set to GROUP.

### Format

---

```
RELease [ PURge ]
```

---

### Operands

PURge          Delete the current print group.

### Usage Notes

If you do not issue the **RELease** command, the current print group is automatically released when you log off or change print processing mode.

RELease is accepted from within SPIFFY BROWSE, EDIT, and VIEW, and while a SPIFFY enhanced member list or OLIST is active.

*Example:*

```
RELEASE
REL
REL PURGE
REL PUR
```



---

## RENAME

The **Rename** command renames a member in the current member selection list.

### Format

---

```
Rename member – name new – name
```

---

### Operands

member-name	The name of the member in the current member selection list.
new-name	The new name of the member.

### Usage Notes

**Rename** can be used as a main command or a line command. **R** can be used as a line command. Patterns are not allowed with this command. Both operands are required.

When **R** is used as a line command, type the new name in the Rename field. If the new name already exists in the data set hierarchy, a rename confirmation panel is displayed.

*Note: If you continue the rename operation at this point, only the member in the lowest level of the concatenation will be displayed.*

*Example: Examples*

```
RENAME ACCTMAIN ACCTDET  
R ACCTMAIN ACCTDET  
R ACCT1 ACCT@
```

### Feedback Messages

The name of the member before the rename operation appears in the Rename field.

## RESET

The **RESet** command is used to reset the tailoring of the current member list. It can be used to undo all excluded members, remove all filters, clear the RENAME field, and restore the default sorting (ascending by member name).

### Format

---

```
RESet [ Sort ] [ FILTER ] [ EXCLUDE ] [ RENAME ]
```

---

### Operands

Sort	Default sorting order (ascending by member name) should be restored.
FILTER	All filters should be removed.
EXCLUDE	All excluded members should be non-excluded.
REName	The rename field (including all feedback messages and tags) should be cleared.

### Usage Notes

**RESet** is a main command. It cannot be used as a line command.

If no operands are specified, the default is **RESET SORT FILTER EXCLUDE**. The **RENAME** field is not reset by default.

The **RESet** command does not reread the directory. To do so, use the **DSNAME** command with the = operand.

*Example: Examples*

```
RESET
RES
RES S
RES F
RES X
RES REN
RES S F X REN
```

---

## S

The **S** line command selects an item and invokes the default process for that item. (The default process depends on the type of object, how MSL was invoked, and the setting on the SPIFFY Options panel for MSL.)

### Format

---

S

---

### Operands

None

### Usage Notes

**S** can be used as a line command or, following a member, as a main command.

*Example:*

```
S ACCOUNTS
S PAYROL
```

## SAVE

The **SAVE** command writes the currently displayed member selection list to a user-specified data set, a printer, or the ISPF LIST data set.

### Format

---

```
SAVE [ midl - qual ]
```

---

### Operands

midl-qual      The middle qualifier for the name of the data set to which the directory list will be saved.

### Usage Notes

**SAVE** is a main command. It cannot be used as a line command.

If midl-qual is specified, SPIFFY will create a data set whose name uses the following form:

```
'PREFIX.MIDL-QUAL.MEMBERS'
```

where prefix is the current TSO prefix (or user ID).

If midl-qual is omitted, the directory list is printed as specified on the SET panel.

If the print-out is directed to the ISPF LIST data set, it can be printed using the ISPF LIST command.

*Example:*

```
SAVE  
SAVE JONES
```

## SCLMCMD

The **SCLMCMD** command performs the specified SCLM function on the member(s) (active only if SCLM support is active for the user).

### Format

---

```

SCLMCMD [ member - name
          pattern ] [
                BUILD
                DELETE
                INFO
                LOCK
                PARSE
                PROMOTE
                SAVE
                MIGRATE
                UNLOCK
            ]
  
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.
BUILD	Build a member.
DELETE	Delete database components.
INFO	Displays change code, programming language and promoter associated with the selected member.
LOCK	Lock a member or assign an access key.
PARSE	Parse a member for statistical and dependency information.
PROMOTE	Promote a member from one library to another library.
SAVE	Save the member.
MIGRATE	Produce SCLM accounting information for members in a development library.
UNLOCK	Unlock a member in a development library.

### Usage Notes

When used as a line command, K invokes the same function.

If a library is SCLM controlled, the associated LMF controls are ignored.

*Example:*

```

SCLMCMD PAYROL1 INFO
SCLMCMD PAYMAIN PROMOTE
  
```

## SCLMPARM

The **SCLMPARM** command displays the SCLM parameters active for the current library (active only if SCLM support is active for the user).

### Format

---

SCLMPARM

---

### Operands

SCLMPARM has no operands.

*Example:*

**SCLMPARM**

## SELECT

The **SELECT** command processes members under the default process (BROWSE, EDIT, or VIEW), or another line command specified.

### Format

---

```
SELECT [ member - name ] [ line - command ]
       [ pattern          ]
```

---

### Operands

member-name	The name of the member in the current member list to be selected for the current or specified process. If the default or specified process is EDIT, this can also be the name of a new member that is to be created.
pattern	A member-name using the wildcard characters “%” and “*”.
line-command	The line command to be used for this one or more members. Any valid MSL line command can be specified. When specified, this command overrides the default process.

### Usage Notes

**S** can be used as a main command or a line command.

If **S** is entered as a line command, you *cannot* specify the line command parameter. In this case, the current default operation is used.

When **S** is entered as a main command, a pattern can be specified. In this case, all members in the displayed list that match the pattern are processed. If **S** is entered as a main command, you can specify the line command parameter. However, no other parameters can be specified. Thus, line commands that require a parameter in addition to the member name (such as R, which requires the new name) cannot be used in this way.

*Note: SPIFFY has the ability to specify a line command for ISPF. Any line command can be entered as a main command, rather than as an operand of the **SELECT** command. For example, the command*

```
B ACCT*
```

can be entered instead of

```
S ACCT* B
```

### Feedback Messages

The feedback messages depend on the process performed on the member.

SELECT ACCTMAIN	SELECT ACCTMAIN B
S ACCTMAIN B	S ACCT*
S ACCT* P	

## SORT

The **SORT** command is used to put the member selection list into a specified order.

### Format

---

```
SORT [ field - name [ order ] ]
```

---

### Operands

field-name	The name of a member selection list column heading.
order	The order of sort: A Ascending: lowest to highest. D Descending: highest to lowest. The default order depends on the particular field being sorted.

### Usage Notes

**SORT** is a main command. It cannot be used as a line command. Up to six field-name and order pairs may be specified.

When **SORT** is entered with no operands, the default sorting order (member name, ascending) is restored.

*Example:*

```
SORT  
SORT MEMBER D  
SORT CHANGED A  
SORT LIB A  
SORT LIB D MEMBER A CHA  
SORT LIB M CRE ID
```



## SSI

The **SSI** command displays SSI information for the specified members.

### Format

---

```
SSI [ member - name ]
```

---

### Operands

member-  
name            The name of the member in the current member selection list.

### Usage Notes

**SSI** is available for load libraries only.

*Example:*

```
SSI ACCTMAIN
```

## STATS

The **STATS** command creates, removes, or allows the user to change statistics of members.

### Format

---

```
STATS [ member - name ] [ CREate ]
      [ pattern          ] [ REMove ]
                          [ CHange ]
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.
CREate	Create new statistics. VV and MM will be set to 00; the CREATED and CHANGED dates of the member will be set to the current date; the CHANGED time will be set to the current time; SIZE and INIT will be set to the current size of the member; MOD will be set to 0; and USERID will be set to your user ID.
REMOve	Remove existing statistics (if any).
CHAnge	Modify or create new statistics. (This is the default.)

### Usage Notes

**STATS** is a main command only. The equivalent line command is **Z**.

If **CHANGE** is specified or no operand is specified, a prompt panel is displayed. You can make changes, or remove the statistics on the prompt panel. You reset the fields VV, MM, CREATED, CHANGED, SIZE, INIT, and MOD selectively. (The effect of this is as with the **CREATE** operand, but on each field individually.) The fields VV, MM, and USERID can be set to any valid user-specified value.

*Example:*

```
STATS ACCTMAINSTATS ACCTMAIN CREATE
STATS ACCTMAIN CRESTATS *CCT*
STATS *CCT* REMOVESTATS *CCT* REM
STATS AC%%MAINSTATS AC%%MAIN CHANGE
STATS AC%%MAIN CHA
```

---

## SUBMIT

The **SUBmit** command submits a member as a batch job.

### Format

---

```
SUBmit [ member - name ]
        [ pattern ]
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.

### Usage Notes

**SUBmit** is a main command. The equivalent line command is **J**.

### Feedback Messages

**SUBMIT**      The member was submitted.

*Example:*

```
SUBMIT ACCTMAIN
SUB ACCT*
```

## T

The **T** command invokes the specified TSO command or CLIST on one or more members specified.

### Format

---

$$T \left[ \begin{array}{l} \text{member - name} \\ \text{pattern} \end{array} \right] [ \text{tso - command} ]$$

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.
tso-command	The TSO command or CLIST that is to be executed for this member.

### Usage Notes

**T** can be used as a main command or a line command.

When **T** is used as a main command, a pattern can be specified. In this case, each member matching the pattern is processed.

If the **T** command is entered as a line command, specify the TSO command parameter in the RENAME field.

The TSO command issued has the format

```
TSO-COMMAND 'LIBRARY(MEMBER)'
```

where library is the name of the library in which the member resides. Omitting the TSO command parameter causes the TSO prompt panel to be displayed.

*Example:*

```
T PAYROLM DOWNLOAD
T PAYROL* UPLOAD
T WORKDOC
```

### Feedback Messages

The feedback message consists of the TSO command you specified.

## TAG

The **TAG** command places a character string in the RENAME field of the member list of members that match the specified name or pattern.

### Format

---

```
T [ member - name ] [ tso - command ]
   [ pattern ]
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.
tag	A character string of up to eight characters with no embedded blanks to be placed in the RENAME field of the specified member, or all members matching the specified pattern.
<b>FILTER</b>	After the tag is applied as specified, <b>FILTER</b> the member list to display only those members having the specified tag (including members with this tag as a result of prior invocations of the TAG command).

### Usage Notes

**TAG** is a main command. It cannot be used as a line command.

*Example:*

```
TAG *AB T
TAG %ABC T
TAG *A*C T FILTER
```

### Feedback Messages

The specified tag is placed in the feedback message field.

# TAILOR

The **TAILOR** command executes the MSL command or commands defined as your tailoring macro. The **TAILOR** command can also be used to display and change the current definition.

## Format

---

```
TAILOR [ Define ]  
      ?
```

---

## Operands

Define	Display a panel on which to specify the sequence of commands to be executed when the <b>TAILOR</b> command is invoked without operands.
?	Display the currently specified tailoring commands.

## Usage Notes

**TAILOR** is a main command only. It cannot be used as a line command.

If **TAILOR** is invoked without operands, the currently defined tailoring commands are executed. (If no tailoring commands are defined, a panel is displayed on which tailoring commands can be specified, as if **TAILOR DEFINE** had been invoked.)

The PF key currently set to RCHANGE (usually PF6) also executes the **TAILOR** command.

You can use the PF key set to RCHANGE with a parameter entered on the command line.

The tailoring commands can also be defined on the SPIFFY Options panels (accessed via the **SET** command) or via the BROWSE, EDIT, or VIEW Entry Panel (when Execute **TAILOR** is set to D).

*Example:*

```
TAILOR  
TAILOR ?  
TAILOR DEFINE  
TAILOR D
```

# TOTAL

The **TOTAL** command displays statistics totals for the non-excluded and non-filtered members.

## Format

---

TOTAL

---

## Operands

**TOTAL** has no operands.

## Usage Notes

**TOTAL** is a main command only. It cannot be used as a line command.

*Example:*

**TOTAL**

## TYPE

The **TYPE** command changes the library being processed with the same name as currently displayed except that the low-level qualifier is specified in the command.

### Format

---

```
TYPE type - name
```

---

### Operands

type-name      The name of the new low-level qualifier to be displayed.

### Usage Notes

**TYPE** is a main command. It cannot be used as a line command.

*Example:*

```
TYPE COBOL  
TYPE CNTL
```



---

## UNFILTER

The **UNFilter** command removes the most recently applied filter, or all filters.

### Format

---

```
UNFilter [ ALL ]
```

---

### Operands

**ALL**            A keyword indicating that all filters are to be removed.

### Usage Notes

**UNFilter** is a main command. It cannot be used as a line command.

If **ALL** is not specified, one level of filtering is removed: the last applied filter is removed first.

**UNFilter ALL** is equivalent to entering the command "**FILter**" with no operands, or the command **RESET "FILter"**.

*Example:*

```
UNFILTER
UNF
UNF ALL
```

## USAGE

The **USAGE** command lists library members currently in use under ISPF, and the user IDs of the TSO users accessing them.

### Format

---

USAGE

---

### Operands

The **USAGE** command has no operands.

### Usage Notes

**USAGE** is a main command. It cannot be used as a line command.

*Example:*

**USAGE**

## V

The **V** command invokes the view process on one or more members specified.

### Format

---

```
v [ member - name ]
   pattern
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.

### Usage Notes

**V** is not equivalent to **VIEW**, **VIEW** opens a nested level of **VIEW**.

**V** can be used as a main command or a line command.

When you use **V** as a main command you can specify a pattern. If you specify a pattern, each member matching the pattern is processed.

*Example:*

```
V ABENDOFF
V ABEND*
```

### Feedback Messages

SAVED	The member was saved at some during the session just ended. (You issued a <b>SAVE</b> command and explicitly confirmed your <b>SAVE</b> request.) This feedback message is displayed if the member was saved at any time during the session, whether or not <b>SAVE</b> or <b>END</b> was the last command issued.
VIEWED	The member was viewed.
DELETED	The member was deleted before the operation was initiated.
IO ERR	An input/output error occurred in reading the directory of the library or the member itself.
NO AUTH	Since you began working, your access to the library has been revoked.

## W

The **W** command displays a preview window in the member selection list for the member named.

### Format

---

```
W member - name
```

---

### Operands

member-  
name            The name of the member in the current member selection list.

### Usage Notes

**W** can be used as a main command or a line command. Patterns cannot be used with this command.

Depending on the position of the assist window, the **W** command displays up to ten lines of the specified member.

*Example:*

```
W ACCTMAIN  
W DEMO
```

### Feedback Messages

None.

---

## WHERE

The **WHERE** command indicates in which concatenation libraries one or more members occur.

### Format

---

```
WHERE [ member - name ]  
      [ pattern ]
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.

### Usage Notes

**WHERE** is a main command only. The equivalent line command is **H**.

*Example:*

```
WHERE ACCTMAIN  
WHERE %CCT*  
WHERE *
```

### Feedback Messages

-IN nnnn	The library or libraries in which the member occurs.
----------	--

## X [EXCLUDE]

Use the **X** command to eliminate members from the member selection list display (or to unexclude all excluded members).

### Format

---

```
x [ member - name  
  pattern ]
```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.

### Usage Notes

If no operand is specified, all excluded members are non-excluded.

**X** can be used as a main command or a line command. When **X** is used as a main command, a pattern may be specified. In this case, all members in the current list matching the pattern are excluded.

**"EXCLude"** is a main command synonym of **X**.

### Feedback Message

None. The specified members are removed from the displayed member selection list.

*Example:*

```
X ACCTMAIN  
X *TAT*  
X TEXT%%X  
X *  
X
```

## Z [STATS]

The **Z** command creates, removes, or changes statistics of members.

### Format

---

```

z [ member - name ] [ CREate
  pattern           ] [ REMove
                    ] [ CHAnge
                    ]

```

---

### Operands

member-name	The name of the member in the current member selection list.
pattern	A member-name using the wildcard characters “%” and “*”.
CREate	Create new statistics. VV and MM will be set to 00; the CREATED and CHANGED dates of the member will be set to the current date; the CHANGED time will be set to the current time; SIZE and INIT will be set to the current size of the member; MOD will be set to 0; and USERID will be set to your user ID.
REMOve	Remove existing statistics (if any).
CHAnge	Modify or create new statistics. (This is the default.)

### Usage Notes

**Z** can be used as a main command or a line command. The main command **STATS** is equivalent to **Z**.

If **CHANGE** is specified or no operand is specified, a prompt panel is displayed. You can make changes or remove the statistics. On the prompt panel, the fields VV, MM, CREATED, CHANGED, SIZE, INIT, and MOD can be reset selectively. (The **CREATE** command has similar results, but on each field individually.) The fields VV, MM, and USERID can be set to any valid user-specified value.

*Example:*

```

Z ACCTMAIN          Z ACCTMAIN CREATE
Z ACCTMAIN CRE      Z *CCT*
Z *CCT* REMOVE      Z *CCT* REM
Z AC%%MAIN          Z AC%%MAIN CHANGE
Z AC%%MAIN CHA

```

# OLIST COMMANDS

SPIFFY provides a function called OLIST (PLIST in SPIFFY Version 4) that allows access to the different object classes.

OLIST maintains two types of object lists—temporary and permanent.

Permanent OLISTs are maintained in the user's OLIST library. By default, when the user logs on, SPIFFY looks for a non-concatenated library with the DD name PLSTLIBW.

If it does not find this DD name PLSTLIBW pre-allocated, it will allocate it to the SPIFFY Persistent Table Library associated with DD name IPITBLIB. If SPIFFY Persistent Table Library is also disabled, it will try to allocate it to a library named 'id.OLIST.LIBRARY' (Later, using the Customization Wizard, you will determine whether "id" is the TSO userid or the user's current TSO prefix). If such a library does not exist, SPIFFY will try to create a new one by that name [using LRECL=80, RECFM=FB, BLKSIZE=3120, DSORG=PO, SPACE=(TRK,(10,10,20)), DISP=SHR, and the UNIT name specified with the Customization Wizard].

*Note: Although SPIFFY Release 5.8 allows a user to separate the OLISTs from other persistent tables in different libraries, it is recommended that a single library be maintained for both purposes. ISOGON's strategy is to eventually migrate all permanent OLISTs into the Persistent Table Library in the future release.*

Main Command	Line Command	Remarks
	=	The = line command invokes the immediately preceding line command on the item specified.
	/	The slash command displays the Object List Line Command input panel. From this panel you have access to all line commands that can be applied an OLIST dataset. You can use the slash command when you are not sure of the available line commands.
"A"	A	The A line command allocates a data set.
"Assist"		The ASSIST command toggles the form of the OLIST display between a panel which shows the OLIST Main and Line commands and one which does not, providing more room for the listing itself.
"B"	B	The B line command invokes an MSL with a default process of BROWSE, or invokes BROWSE on an object. The action taken depends on the type of object, as shown below:
"C"	C	The C line command catalogs the specified data set on the indicated volume.
"CANcel"		The CANCEL command ends the use of the OLIST without saving any changes you have made to the list itself.



Main Command	Line Command	Remarks
“CLRVOL”		The CLRVOL command clears the VOLUME column of a data set object.
“CMDparms”		The CMDPARMS command controls a field in which TSO command parameters can be specified. The parameters specified in this field are appended to all TSO commands you enter on the OLIST.
“COMPRESS [PDS only]”	COMP	The COMPRESS line command compresses the specified library.
“COPY”		The COPY line command copies the one or more members specified.
“CUT”		The CUT command copies the OLIST into the specified clipboard number.
	“/D”	The /D line command deletes one or more entries in the OLIST. The remaining entries are renumbered.
“D”	D	The D line command deletes a data set or the one or more members specified (with confirmation).
“DEFAULT”		The DEFAULT command changes the default process invoked by the SELECT and S commands during the current OLIST session.
“DSLIS”	DSLIS	The DSLIS line command invokes an ISPF data set list (option 3.4) of all items in the current catalog matching the specification.
“E”	E	The E line command invokes an MSL with a default process of EDIT, or invokes EDIT on a data set or member. The action taken depends on the type of object, as shown below:
“eXlude”	X	Use the EXCLUDE main command to exclude selected OLIST objects. When this command is used, the *EXCLUDE* tag will appear next to the Volume or Class column on the OLIST screen.  If you need to exclude a certain range of entries, use the / <b>XX</b> line command at the beginning of the range and the end of the range.
“EXDIR [PDS only]”	EXDIR	The EXDIR line command expands the library specified.
“EXPORT”		The EXPORT command saves the OLIST under its current name in the specified library.
“F”	F	The F line command frees unused space in the specified data set.
“FILLVOL”		The FILLVOL command fills in the VOLUME column of data set objects.

Main Command	Line Command	Remarks
“FILTER”		The FILTER command selectively tailors the display of members in the OLIST (or to remove all filtering).
“Find”		The FIND command locates the next item in the OLIST whose name contains a specified text string.
“FINDTEXT [FT]”		The FINDTEXT command searches for the first sequential file or the first member of a library that contains the search text. The search starts from the first OLIST entry displayed on the screen.
“FLIP”		The FLIP command toggles between visible and invisible (excluded and filtered-out) lines.
	“/I”	The /I line command inserts one or more empty lines in the OLIST for the insertion additional items.
“LEVEL”		The LEVEL command creates a temporary list of all datasets that satisfy the specified level of qualifier.
“LISTA”		The LISTA command adds allocated data sets from the specified DD name or all allocated data sets if no DD name is specified to the OLIST.
“LISTB”		The LISTB command populates the current OLIST with data sets of the Generation Data Groups.
“LISTC”	LISTC	The LISTC line command adds the catalog items that match a specified level to the OLIST.
“LISTGDG”		The LISTGDG command populates the current OLIST with data sets of the specific GDG base.
“LISTSYS”		The LISTSYS command populates the current OLIST with the libraries of the specified system libraries.
“LISTV”	LISTV	The LISTV line command adds items from a specified VTOC volume to the OLIST. These VTOC items match the entry specified.
“Locate”		The LOCATE command locates the next data set (or object) name beginning with the specified text string.
“MEMFind”		The MEMFIND command locates the first, next, or all libraries in the OLIST that contain the specified member.
“MLIST”		The MLIST command populates the current OLIST with entries from multiple list specifications.
“MOVE [PDS only]”	MOVE	The MOVE line command moves the specified member or members.

Main Command	Line Command	Remarks
“OLIST”	OLIST	The OLIST line command invokes a temporary OLIST of all items in the current catalog matching the specification.
“OPEN”		The OPEN command switches to another OLIST.
“PASTE”		The PASTE command attaches the contents of a previously cut OLIST to the end of the current OLIST.
“POPULATE”		The POPULATE command accesses a pull-down menu which allows you to select how to populate the current OLIST. This is similar to selecting the Populate option on the Action Bar. From the Populate pull-down menu, you select from nine population options.
“PRINT”		The PPRINT command prints the current OLIST.
“PRINT [PDS only]”	PRINT	The PRINT line command copies the one or more members specified.
	"/R"	The /R command repeats an existing line in the OLIST one or more specified times (presumably for subsequent editing).
“RENAME”	RENAME	The RENAME line command renames a data set or a member.
“RESet”		The RESET command clears selected (or all) columns in the display and removes the empty lines.
“S”	S	The S line command selects an item and invokes the default process for that item. (The default process depends on the type of object, how OLIST was invoked, and the setting on the SPIFFY Options panel for OLIST.)
“SAVE”		The SAVE command saves permanent OLIST under a new name. This command can also save a temporary list as a permanent list with a new name.
“SHOWcmd”		The SHOWCMD command controls whether TSO commands, REXX EXECs, and CLISTs are to be displayed before execution (so that they can be modified) or are to be executed immediately.
“SORT”		The SORT command sorts the entries in the OLIST.
“SUBmit”	SUBMIT	The SUBMIT line command submits a data set or a member as a batch job.

Main Command	Line Command	Remarks
“TITLE”		The TITLE command gives you the ability to enter a description for an existing OLIST from a Define OLIST Description input panel.
“U”	U	The U line command uncatalogs the data set.
“UPDate”		The UPDATE command invokes the SPIFFY EDIT panel for extensive editing of the OLIST. Note: You can edit and save the history command list.
“UTIL”		The UTIL command opens a nested level of ISPF option 3 (Utilities) or a suboption of option 3.
“V”	V	The V line command invokes an MSL with a default process of VIEW, or invokes VIEW on a data set or member. The action taken depends on the type of object, as shown below:
“VALIDate”		The VALIDATE command is used to compare the entries in the OLIST with the current catalog and volume, and to bring them into conformity with the catalog. It marks items on the OLIST that are not in the catalog, and corrects the volume information for those that show the wrong volume. Migrated or archived data sets are indicated.
“X [EXCLUDE]”	X	The X command can be used as a Main line command or a Line command to remove an Object List entry from an OLIST.
	“XFER”	The XFER line command accesses a pop-up window to upload or download data sets or workstation files.

**Note:** From the main command, you can enter a number followed by a space and a line command, or, you can enter a range of entries <from#>-<to#> followed by a space and a line command to execute the **edit**, **view**, or **browse** commands.

*Example:*

In the Command line, enter

**3 E**

to edit the entry Number 3, or,

**3-6 B**

to browse the entries from Number 3 to Number 6.

---

=

The = line command invokes the immediately preceding line command on the item specified.

## Usage Notes

= can only be used as a line command.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
B		1	'ACCOUNTS.JONES.JCL'	
=		2	'ACCOUNTS.JONES.COBOL'	
=		3	'ACCOUNTS.TEST.COBOL'	TST001
=	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	
=	PAY*	5	'ACCOUNTS.TEST.COBOL'	TST001

/

The slash command displays the Object List Line Command input panel. From this panel you have access to all line commands that can be applied an OLIST dataset. The slash command can be used when you are not sure of the available line commands.

## Usage Notes

The slash command can only be used as a line command.

```

File Edit Find Display Populate Settings SCLM Menu Test Help Exit
-----
SPF/E OLIST (B) ----- LEVEL S* ----- Row 1 to 13 of 2,665
Command ===>
Hotbar?
                                     *TEMPORARY LIST*

TSO PARMS . . .
Command Member Num. Data Set Names / Objects Volume
-----
/_          1 'SERVICES'
           2 'SERVICES.ABNAMRO.ANALYSER'
           3 'SERVICES.ABNAMRO.JCL'
           4 'SERVICES.ABNAMRO.JOBFILT'

```

```

File Edit Find Display Populate Settings SCLM Menu Test Help Exit
-----
SPF/E SPF/E----- Object List Line Command -----
Comma COMMAND ===>
Hotba I0
      Press ENTER to execute or END to cancel.
TSO P  _ Allocate dataset  _ List UTOC
Comma  _ Browse           _ Move members
----- _ Catalog dataset  _ OLIST
/      _ Compress library _ Print
      _ Copy members     _ Rename dataset
      _ Delete           _ Submit members
      _ DSLIST          _ Uncatalog dataset
      _ Edit            _ View
      _ Expand directory _____ TSO commands
      _ Free unused space _____ Delete line(s)
      _ Dataset information _____ Insert line(s)
      _ Listcat         _____ Repeat line(s)

MEMBER  NUM.  DATA SET NAME                                VOLUME
-----
F1=HELP  F2=SPLIT  F3=END    F4=RETURN  F5=RFIND
F6=RCHANGE F7=UP     F8=DOWN   F9=SWAP    F10=LEFT
F7=U

```

# A

The **A** line command allocates a data set.

## Usage Notes

**A** can be used as a line command or, when preceded by an item number, as a main command.

The **A** command ignores the member name field.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
A		2	'ACCOUNTS.JONES.COBOL'	
A		3	'ACCOUNTS.TEST.COBOL'	TST001

2 A

## ASSIST

The **Assist** command toggles the form of the OLIST display between a panel which shows the OLIST main and line commands and one which does not, providing more room for the listing itself.

### Format

---

`Assist`

---

### Operands

**Assist** takes no operands.

### Usage Notes

**Assist** is a main command only. It cannot be used as a line command. Your OLIST panel display preference is retained across sessions.

When the OLIST main and line commands are displayed, you can Point-and-Shoot on any main command listed.

*Example:*

```
ASSIST  
A
```



**B**

The **B** line command invokes an MSL with a default process of BROWSE, or invokes BROWSE on an object. The action taken depends on the type of object, as shown below:

TYPE	Member or pattern specification (if any)	Processing
SEQ		Browse data set
PDS	None	Display MSL of all members with browse as default process
PDS	Pattern specified	Display MSL of matching members with browse as default process
PDS	Member specified	Browse member
LIST		Display temporary OLIST of matching items with browse as default process
VSAM		Browse VSAM file (if option installed)
DB2		Browse DB2 file (if option installed)
USER		Browse VSAM file (if option installed)
PC		Browse PC file (if option installed)

**Usage Notes**

**B** can be used as a line command or, when preceded by an item number, as a main command.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
B		2	'ACCOUNTS.JONES.COBOL'	
B		3	'ACCOUNTS.TEST.COBOL'	TST001
B	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	
B	PAY*	5	'ACCOUNTS.TEST.COBOL'	TST001

## C

The **C** line command catalogs the specified data set on the indicated volume.

### Usage Notes

**C** can be used as a line command or, when preceded by an item number, as a main command.

The volume field must be specified.

The **C** command ignores the member name field.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	-----	-----	-----
C		3	'ACCOUNTS.TEST.COBOL'	TST001

## CANCEL

The **CANce1** command ends the use of the OLIST *without* saving any changes you have made to the list itself.

### Format

---

CANce1

---

### Operands

**CANce1** takes no operands.

### Usage Notes

**CANce1** is a main command only. It cannot be used as a line command.

*Note: On the editing panel that is displayed following the "UPDate" command, the **CANce1** command ends the editing session without saving any changes you have made; you are returned to the OLIST display panel.*

*Example:*

**CANCEL**  
**CAN**

## CLRVOL

The **CLRVOL** command clears the VOLUME column of a data set object.

### Format

---

**CLRVOL**

---

### Operands

**CLRVOL** takes no operands.

### Usage Notes

The command is a good candidate for the OLIST Hotbar.

---

## CMDPARMS

The **CMDparms** command controls a field in which TSO command parameters can be specified. The parameters specified in this field are appended to all TSO commands you enter on the OLIST.

### Format

---

CMDparms  $\left[ \begin{array}{c} \text{ON} \\ \text{OFF} \end{array} \right]$

---

### Operands

ON	Displays the field. (This is the default.)
OFF	Removes the field.

### Usage Notes

**CMDparms** is a main command only. It cannot be used as a line command.

This option is also controlled from the SPIFFY Options panel.

*Example:*

```
CMDPARMS
CMD
CMD ON
CMD OFF
```

## COMPRESS [PDS ONLY]

The **COMPRESS** line command compresses the specified library.

### Usage Notes

**COMPRESS** can be used as a line command or, when preceded by an item number, as a main command.

The **COMPRESS** command ignores the member name field.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	----	-----	-----
COMPRESS		2	'ACCOUNTS.JONES.COBOL'	
COMP		3	'ACCOUNTS.TEST.COBOL'	TST001

# COPY

The **COPY** line command copies one or more members specified.

## Usage Notes

A member or pattern is required.

**COPY** can be used as a line command or, when preceded by an item number, as a main command.

This command is passed to MSL for processing; the COPY/MOVE prompt panel is displayed for specification of the target library and other parameters.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	-----	-----	-----
COPY	*	2	'ACCOUNTS.JONES.COBOL'	
COPY	*	3	'ACCOUNTS.TEST.COBOL'	TST001
COPY	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	
COPY	PAY*	5	'ACCOUNTS.TEST.COBOL'	TST001

## CUT

The **CUT** command copies the OLIST into the specified clipboard number.

### Format

---

```
CUT [ n ]
```

---

### Operands

n	An integer from 0 to 9 indicating the clipboard from which the data is to be pasted. If no integer is specified, 0 is the default clipboard.
---	--

### Usage Notes

Use the **PASTE** command to copy a previously cut OLIST to the end of a displayed OLIST or to an edited file.

*Example:*

```
CUT  
CUT 4
```



---

## /D

The **/D** line command deletes one or more entries in the OLIST. The remaining entries are renumbered.

### Usage Notes

**/D** can only be used as a line command; it cannot be used as a main command.

**/D** can be used with a number specifying the number of lines to delete.

**/D** can be used in pairs, in the form **/DD**, to indicate a block of lines to delete.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
/D2		1	'ACCOUNTS.JONES.JCL'	
		2	'ACCOUNTS.JONES.COBOL'	
/D		3	'ACCOUNTS.TEST.COBOL'	TST001
/DD	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	
/DD	PAY*	5	'ACCOUNTS.TEST.COBOL'	TST001

## D

The **D** line command deletes a data set or the one or more members specified (with confirmation).

### Usage Notes

**D** can be used as a line command or, when preceded by an item number, as a main command.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	-----	-----	-----
D		2	'ACCOUNTS.JONES.COBOL'	
D		3	'ACCOUNTS.TEST.COBOL'	TST001
D	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	
D	PAY*	5	'ACCOUNTS.TEST.COBOL'	TST001

---

## DEFAULT

The **DEFault** command changes the default process invoked by the **select** and **S** commands during the current OLIST session.

### Format

---

```
DEFault [ E  
         V  
         B ]
```

---

### Operands

- E        Invoke the E line command when the SELECT or S command is used in an OLIST.
- V        Invoke the V line command when the SELECT or S command is used in an OLIST.
- B        Invoke the B line command when the SELECT or S command is used in an OLIST.

### Usage Notes

**DEFault** is a main command only; it cannot be used as a line command.

If the operand is omitted, the current default is displayed.

*Example:*

```
DEFAULT E  
DEF B  
DEF
```

## DSLIS

The **DSLIS** line command invokes an ISPF data set list (option 3.4) of all items in the current catalog matching the specification.

### Usage Notes

**DSLIS** can be used as a line command or, when preceded by an item number, as a main command. The item must conform to input specifications for a data set list. You must specify at least one asterisk. To get a full list of a specific level, specify it as shown in the last example below.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	----	-----	-----
DSLIS		2	'ACCOUNTS.*.COBOL'	
DSLIS		3	'ACCOUNTS.TEST.*'	TST001
DSLIS		4	'ACCOUNTS.TEST.COB*'	
DSLIS		5	'ACCOUNTS.*'	

## E

The **E** line command invokes an MSL with a default process of EDIT, or invokes EDIT on a data set or member. The action taken depends on the type of object, as shown below:

TYPE	Member or pattern specification (if any)	Processing
SEQ		Edit data set
PDS	None	Display MSL of all members with edit as default process
PDS	Pattern specified	Display MSL of matching members with edit as default process
PDS	Member specified	Edit member
LIST		Display temporary OLIST of matching items with edit as default process
VSAM		Edit VSAM file (if option installed)
DB2		Edit DB2 file (if option installed)
USER		Edit VSAM file (if option installed)
PC		Edit PC file (if option installed)

### Usage Notes

**E** can be used as a line command or, when preceded by an item number, as a main command.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	-----	-----	-----
E		2	'ACCOUNTS.JONES.COBOL'	
E		3	'ACCOUNTS.TEST.COBOL'	TST001
E	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	
E	PAY*	5	'ACCOUNTS.TEST.COBOL'	TST001

## EXCLUDE

Use the **exclude** main command to exclude selected OLIST objects. When this command is used, the \*EXCLUDE\* tag will appear next to the Volume or Class column on the OLIST screen.

**exclude** can also be used as a line command by specifying **x**.

### Format

---

```
eXclude [ ALL
         string [ prefix
                suffix
                word
                char ] [ ALL
                       NEXT
                       PREV
                       LAST
                       FIRST ] ]
```

---

### Operands

ALL	All members of the OLIST.
string	The text string to be found in the item name.
prefix	When specified, restricts search of the text string to the prefix of a qualifier within the data set name.
suffix	When specified, restricts search of the text string to the suffix of a qualifier within the data set name.
word	When specified, restricts search of the text string to the qualifier within the data set name.
char	When specified, restricts search of the text string to a character within the data set name. This is the default.
[ALL]	All members that possess the text string.
NEXT	Search the list for the next member specified in the string. This is the default.
PREV	Search the list for the previous member specified in the string.
LAST	Search the list for the last member specified in the string.
FIRST	Search the list for the first member specified in the string.

*Example:*

```
EXCLUDE TEST WORD
EXCLUDE R CHAR
EXCLUDE INT ALL
EXCLUDE S SUFFIX
EXCLUDE INV PREFIX PREV
```

---

## EXPDIR [PDS ONLY]

The **EXPDIR** line command expands the library specified.

### Usage Notes

**EXPDIR** can be used as a line command or, when preceded by an item number, as a main command.

The **EXPDIR** command ignores the member name field.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
EXPDIR		2	'ACCOUNTS.JONES.COBOL'	
EXPDIR		3	'ACCOUNTS.TEST.COBOL'	TST001

## EXPORT

The **EXPORT** command saves the OLIST under its current name in the specified library.

### Format

---

```
EXPORT [ library - name ]
```

---

### Operands

library-name    The name of the library to be used as the specified library number.

### Usage Notes

Use the **EXPORT** command to export an OLIST to a public OLIST library.

*Example:*

```
EXPORT TEST
```



## F

The **F** line command frees unused space in the specified data set.

### Usage Notes

**F** can be used as a line command or, when preceded by an item number, as a main command.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
F		2	'ACCOUNTS.JONES.COBOL'	
F		3	'ACCOUNTS.TEST.COBOL'	TST001
F	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	
F	PAY*	5	'ACCOUNTS.TEST.COBOL'	TST001

2 F

## FILLVOL

The **FILLVOL** command fills in the VOLUME column of data set objects.

### Format

---

**FILLVOL**

---

### Operands

The **FILLVOL** command has no operands.

### Usage Notes

The command is a good candidate for the OLIST Hotbar.

*Example:*

**FILLVOL**

---

## FILTER

The **FILTER** command selectively tailors the display of members in the OLIST (or to remove all filtering).

### Format

---

```
FILTER pattern [ Word  
                Char  
                Prefix  
                Suffix ]
```

---

### Operands

pattern	A word or character which the <b>FILTER</b> command acts on.
Word	Word within the OLIST.
Char	Character within the OLIST.
Prefix	First letter of a word within the OLIST.
Suffix	Last letter of a word within the OLIST.

### Usage Notes

Wildcard characters are not accepted under the command **FILTER**.

*Example:*

```
FILTER WORD TEST  
FILTER CHAR R  
FILTER PREFIX I  
FILTER SUFFIX T
```

## FIND

The **Find** command locates the next item in the OLIST whose name contains a specified text string.

### Format

---

```
Find [ string ]  
      [ pattern ]
```

---

### Operands

string	The text string to be found in the item name.
pattern	A pattern representing the text string to be found in the item name using the wildcard characters “%” and “*”.

### Usage Notes

**Find** is a main command only; it cannot be used as a line command.

Do not enclose the string or pattern in quotes.

**Find** starts the search from the second entry on the list and searches to the end of the list. If nothing is found, the search starts again from the top. If again nothing is found, the list does not change its position.

*Example:*

```
FIND STAT1  
F *ACCT%
```

---

## FINDTEXT [FT]

The **FINDTEXT** (or **FT**) command searches for the first sequential file or the first member of a library that contains the search text. The search starts from the first OLIST entry displayed on the screen.

### Format

---

```
FINDTEXT [ search - string ]
```

---

### Operands

search-string    The string to be found. If it contains blanks or special characters, the text-string should be enclosed in quotes.

### Usage Notes

**FINDTEXT** is a main command only; it cannot be used as a line command.

If the **MEMBER** column contains a member name, the search is limited to that member.

If the **FINDTEXT** command specifies a wildcard pattern, the search is limited to the members that meet that criteria.

Since the search stops at the first member within the library, to search for multiple members switch into the member list and use the MSL GLOBAL **find** or **findtext** commands.

If the search is successful, to search again from the next line in the OLIST you must scroll down one line and press the **RFIND** key.

Since the search starts at the first OLIST entry displayed, to locate the next occurrence you should scroll down a line (using the "DOWN 1" command) and then use the **RFIND** command.

*Example:*

```
FINDTEXT ACCOUNTS
FT ACCOUNTS
FT 'MAJOR ACCOUNTS'
```

## FLIP

The **FLIP** command toggles between visible and invisible (excluded and filtered-out) lines.

### Format

---

```
FLIP
```

---

### Operands

The **FLIP** command has no operands.

*Example:*

```
FLIP
```

**I**

The **I** line command provides information about a data set.

**Usage Notes**

**I** can be used as a line command or, when preceded by an item number, as a main command.

The **I** command ignores the member name field.

*Example:*

**2 I**

```

                                Data Set Information
Command ==> _____
Data Set Name . . . : INTT055.SYSA.PLIST.LIBRARY

General Data                      Current Allocation
Volume serial . . . : USER03      Allocated tracks . : 16
Device type . . . . : 3390        Allocated extents . : 12
Organization . . . . : P0         Maximum dir. blocks : 20
Record Format . . . . : FB
Record length . . . . : 80
Block size . . . . . : 3120
1st extent tracks . : 5
Secondary tracks . . : 1

                                Current Utilization
Creation date . . . : 2004/01/06   Used tracks . . . . : 16
Referenced date . . : 2005/03/23   Used extents . . . . : 12
Expiration date . . : ***None***    Used dir. blocks . . : 1
                                      Number of members . : 3

```

## /I

The **/I** line command inserts one or more empty lines in the OLIST for the insertion of additional items.

### Usage Notes

**/I** can only be used as a line command; it cannot be used as a main command.

**/I** can be used with a number specifying the number of empty lines to insert.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	-----	-----	-----
/I		2	'ACCOUNTS.JONES.COBOL'	
/I3		3	'ACCOUNTS.TEST.COBOL'	TST001



## LEVEL

The **LEVEL** command creates a temporary list of all datasets that satisfy the specified level of qualifier.

### Format

---

```
LEVEL [ n
      ALL ]
```

---

### Operands

n            A qualifier level number  
 ALL         Displays datasets of every level

### Usage Notes

**LEVEL** can only be used a main command.

If you enter the command **LEVEL** with no operand, a message is displayed requesting the input of either a level qualifier or the operand ALL.

The first level of qualifier is assumed. Therefore, a level of qualified specified as '1' would return dataset names of two positions or less, where a level qualifier of '2' would return all datasets of three positions or less.

Only

*Example:*

LEVEL 1:	LEVEL 2	LEVEL 3
SERVICES	SERVICES	SERVICES
SERVICES.ACSREP	SERVICES.ACSREP	SERVICES.ACSREP
	SERVICES.ACSREP.JCL	SERVICES.ACSREP.JCL
		SERVICES.ACSREP.PCF.JCL

## LISTA

The **LISTA** command adds allocated data sets from the specified DD name or all allocated data sets if no DD name is specified to the OLIST.

### Format

---

```
LISTA [ ddname ]
```

---

### Operands

Ddname            A DD name.

### Usage Notes

**LISTA** is a main command only; it cannot be used as a line command.

If no DD name is specified, all currently allocated data sets are added to the OLIST. Otherwise, all currently allocated data sets with the specified DD name are added to the OLIST.

Use this command with the "**MEMFind**" command, revealing where in the concatenation a member resides.

*Example:*

```
LISTA  
LISTA INPUT
```

## LISTB

The **LISTB** command populates the current OLIST with data sets of the Generation Data Groups.

### Format

---

```
LISTB [ base - name - pattern ]
```

---

### Operands

base-name-pattern      A generation data groups base name.

### Usage Notes

**LISTB** is a main command only; it cannot be used as a line command.

*Example:*

```
LISTB  
LISTB GB*
```

## LISTC

The **LISTC** line command adds the catalog items that match a specified level to the OLIST.

### Format

---

```
LISTC [ level [ pattern ] [ vol - pattern ] ]
```

---

### Operands

level	A high-level catalog qualifier.
pattern	A member-name using the wildcard characters “%” and “*” to match one or more catalog qualifiers.
vol-pattern	A volume pattern using the wildcard characters “%” and “*” to match one or more volumes.\

### Usage Notes

If no operand is specified, a panel is displayed on which a level and a volume pattern can be specified.

If a volume pattern is specified, **LISTC** will locate all cataloged entries matching the level and pattern specified on volumes matching that pattern. **LISTC** will then automatically fill the VOLUME column.

If no volume pattern is specified, **LISTC** will locate all cataloged entries on all volumes, but will not fill in the VOLUME column. If the volume pattern is specified as an asterisk (“\*”), entries will be found on all volumes, and the VOLUME column will be automatically filled.

To create a list of all migrated (or archived) data sets, specify the volume pattern as the name of your migration volume (MIGRAT, ARCVOL, <->ARCIVE, etc.).

*Example:*

```
LISTC                                LISTC PAYROLL
LISTC PAYROLL.*                      LISTC ACCOUNTS.JONES.*
LISTC ACCOUNTS.J%%.DATA              LISTC PAYROLL PROD01
LISTC PAYROLL.* PROD%%                LISTC ACCOUNTS MIGRAT
LISTC ACCOUNTS.JONES.*                LISTC PAYROLL.LIB1.* ARCVOL
*
```

---

## LISTGDG

The **LISTGDG** command populates the current OLIST with data sets of the specific GDG base.

### Format

---

```
LISTGDG [ gdg - base ]  
        [ pattern ]
```

---

### Operands

gdg-base	An entry that permits a non-VSAM data set to be related with other non-VSAM data sets as generation data sets.
pattern	A pattern representing the text string to be found in the item name using the wildcard characters “%” and “*”.

### Usage Notes

Use **LISTGDG** to reveal the current connection between the physical GDG data set and the cataloged relative number. Both the physical GDG data set and the cataloged relative number are displayed in the resulting OLIST).

*Example:*

```
LISTGDG ACCOUNTS.TRANSACT.MONTHLY
```

## LISTSYS

The **LISTSYS** command populates the current OLIST with the libraries of the specified system libraries.

### Format

---

```
LISTSYS [ APFLIST  
         LINKLIST  
         LPALIB  
         ALL ]
```

---

### Operands

APFLIST	The authorized program facility library list.
LINKLIST	The LINKLIST load libraries.
LPALIB	The link pack area libraries.
ALL	Indicates APFLIST, LINKLIST, and LPALIB (default).
PARMLIB	The z/OS PARMLIB libraries.

### Usage Notes

Use this command with the "**MEMFind**" command to locate where the system may locate a module.

*Example:*

```
LISTSYS APFLIST  
LISTSYS LINKLIST  
LISTSYS LPALIB  
LISTSYS ALL
```

## LISTV

The **LISTV** line command adds items from a specified VTOC volume to the OLIST. These VTOC items match the entry specified.

### Usage Notes

**LISTV** can be used as a line command or, when preceded by an item number, as a main command.

The **LISTV** command ignores the member name field.

The generic data set specification must conform to the rules of the Data Set List Utility: the first level must be fully qualified; in all other levels, an asterisk is permitted in only the first or last position.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	-----	-----	-----
LISTV		2	'ACCOUNTS.PAY*.COBOL'	PROD01
LISTV		3	'ACCOUNTS.*TEST.*'	TST001
LISTV		4	'ACCOUNTS.TEST.COB*'	PROD02

## LISTV

The **LISTV** command adds items from a specified VTOC volume to the OLIST. These items may optionally match a specified level.

### Format

---

```
LISTV [ volume level [ pattern ] ]
```

---

### Operands

volume	A volume specification.
level	A high-level catalog qualifier.
pattern	A pattern using the wildcard character "*" in the first or last position of any qualifier to match one or more catalog qualifiers.

### Usage Notes

**LISTV** can also be used as a line command.

If no operand is specified, a panel is displayed on which a volume and level can be specified.

**LISTV** requires ISPF version 3.2 or above. In lower versions of ISPF, to obtain a list of data sets on a volume, use the OLIST line command "**DSL**LIST".

*Example:*

```
LISTV
LISTV PROD01
LISTV TES002 ACCOUNTS.*
LISTV TES002 ACCOUNTS.DEV*.COBOL
LISTV TES002 ACCOUNTS.*DEV.COBOL
```



---

## LOCATE

The **Locate** command locates the next data set (or object) name beginning with the specified text string.

### Format

---

```
Locate [ string  
       pattern  
       number ]
```

---

### Operands

string	The text string the data set name is to begin with.
Pattern	A pattern representing the text string to be located at the beginning of the item name using the wildcard characters “%” and “*”.
Number	The entry number of the item to be located.

### Usage Notes

**Locate** is a main command only; it cannot be used as a line command.

If the specified text string does not begin with a quotation mark ('), quotation marks beginning data set names are ignored. If the specified text string begins with a quotation mark, only data set names beginning with a quotation mark are considered to match.

*Example:*

```
LOCATE ACCOUNTS  
L 'ACCOUNTS  
LOCATE A*B  
L 23
```

## MEMFIND

The **MEMFIND** command locates the first, next, or all libraries in the OLIST that contain the specified member.

### Format

---

```
MEMFIND member - name [ ALL ] [ FIRST ] [ NEXT ] [ NOrecall ] [ NOrestore ] [ Re call ] [ REstore ]
```

---

### Operands

member-name	The name of the member, or a generic member-name pattern consisting of one or more leading characters followed by an asterisk (“*”), which is considered to match zero or more characters.
ALL	Search all libraries for the member specified.
FIRST	Search the list in order; stop as soon as a library is found containing the member. This is the default.
NEXT	Search the list for the next library containing the member specified.
Norecall	Do not retrieve archived or migrated data sets to search for the member specified. (This is a synonym of NORESTORE.)
Norestore	Do not retrieve archived or migrated data sets to search for the member specified. (This is a synonym of NORECALL.)
Recall	If a data set to be searched is archived or migrated, retrieve it so that it can be searched for the member specified. (This is a synonym of RESTORE.)
REstore	If a data set to be searched is archived or migrated, retrieve it so that it can be searched for the member specified. (This is a synonym of RECALL.)

### Usage Notes

**MEMFIND** is a main command only; it cannot be used as a line command.

If neither NEXT, FIRST, nor ALL is specified, the search begins with the first item on the current display.

Following a **MEMFIND**, the **RFIND** command (or the key assigned to **RFIND**, normally PF5) repeats the last **MEMFIND** (with the operand NEXT assumed).

When the member is found, **MEMFIND** places the member name in the MEMBER field.

The default setting of RECALL (RESTORE) or NORECALL (NORESTORE) is controlled via the SET command. Its initial value is NORECALL. These parameters temporarily override the value specified in the **SET** command.

*Example:*

MEMFIND PAYMAIN	MEMFIND PAYM*
MEMF PAYMAIN FIRST	MEMFIND PAYMAIN NEXT
MEMFIND P* NEXT	MEMF TAX1990 ALL
MEMF TAX1990 ALL NORECALL	MEMF TAX1990 ALL NORESTORE
MEMF TAX1990 ALL RECALL	MEMF TAX1990 ALL RESTORE
MEMF TAX1990 ALL NO	MEMF TAX* ALL RE

## MLIST

The **MLIST** command populates the current OLIST with entries from multiple list specifications.

### Format

---

MLIST

---

### Operands

The **MLIST** command has no operands.

### Usage Notes

You can perform this command with more than one data set name. You can also use wildcard characters "\*" and "%" if necessary. The **"Locate"** command locates the next data set (or object) name beginning with the text string specified.

*Example:*

**MLIST**

---

## MOVE [PDS ONLY]

The **MOVE** line command moves the specified member or members.

### Usage Notes

A member or pattern is required.

**MOVE** can be used as a line command or, when preceded by an item number, as a main command.

This command is passed to MSL for processing; the COPY/MOVE prompt panel is displayed for specification of the target library and other parameters.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
MOVE	*	2	'ACCOUNTS.JONES.COBOL'	
MOVE	*	3	'ACCOUNTS.TEST.COBOL'	TST001
MOVE	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	
MOVE	PAY*	5	'ACCOUNTS.TEST.COBOL'	TST001

## OLIST

The **OLIST** line command invokes a temporary OLIST of all items in the current catalog matching the specification.

### Usage Notes

**OLIST** can be used as a line command or, when preceded by an item number, as a main command. The first level must be fully qualified. In all other levels, wildcards (“%” and “\*”) can be used freely.

**OLIST** is the default process whenever a generic data set specification is selected. The VOLUME field is ignored.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	-----	-----	-----
OLIST		2	'ACCOUNTS.%PAY*.COBOL'	
OLIST		3	'ACCOUNTS.%%TEST.*'	TST001
OLIST		4	'ACCOUNTS.TEST'	

## OPEN

The **OPEN** command switches to another OLIST.

### Format

---

```
OPEN [ olist - name ]
```

---

### Operands

olist-name      The name of the OLIST you want to switch to.

### Usage Notes

Usually, it is easier to switch to another OLIST by typing over the permanent OLIST name. However, when operating in a temporary OLIST, the Open list field is not visible. This is when the **OPEN** command is useful.

*Example:*

```
OPEN LEDGER1  
OPEN PAYROL
```

## PASTE

The **PASTE** command attaches the contents of a previously cut OLIST to the end of the current OLIST.

### Format

---

```
PASTE [ n ]
```

---

### Operands

n            An integer from 0 to 9 indicating the clipboard from which the data is to be pasted. If no integer is used, the default clipboard is 0.

### Usage Notes

Use the "**CUT**" and **PASTE** commands to copy lines among different OLISTS.

*Example:*

```
PASTE 5  
PASTE
```



## POPULATE

The **POPULATE** command accesses a pull-down menu which allows you to select how to populate the current OLIST. This is similar to selecting the Populate option on the Action Bar. From the Populate pull-down menu, you select from nine population options.

### Format

---

```
POPULATE
```

---

### Operands

The **POPULATE** command has no operands.

*Example:*

```
POPULATE
```

## PPRINT

The **PPRINT** command prints the current OLIST.

### Format

---

PPRINT

---

### Operands

**PPRINT** has no operands.

*Example:*

**PPRINT**

---

## PRINT [PDS ONLY]

The **PRINT** line command copies the one or more members specified.

### Usage Notes

A member or pattern is required.

**PRINT** can be used as a line command or, when preceded by an item number, as a main command.

This command is passed to MSL for processing.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	-----	-----	-----
PRINT	*	2	'ACCOUNTS.JONES.COBOL'	
PRINT	*	3	'ACCOUNTS.TEST.COBOL'	TST001
PRINT	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	
PRINT	PAY*	5	'ACCOUNTS.TEST.COBOL'	TST001

## /R

The **/R** command repeats an existing line in the OLIST one or more specified times (presumably for subsequent editing).

### Usage Notes

**/R** can only be used as a line command; it cannot be used as a main command.

**/R** can be used with a number specifying the number of times to repeat the line.

You can overwrite the information in the other input fields (MEMBER, DATA SET NAME, VOLUME). The original line remains intact. The cursor is positioned on the first of the newly inserted lines, so that you can select it by pressing the Enter key.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
/R		2	'ACCOUNTS.JONES.COBOL'	
/R3		3	'ACCOUNTS.TEST.COBOL'	TST001

---

# RENAME

The **RENAME** line command renames a data set or a member.

## Usage Notes

**RENAME** can be used as a line command or, when preceded by an item number, as a main command.

**RENAME** does not accept a pattern in the member field.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	----	-----	-----
RENAME		2	'ACCOUNTS.JONES.COBOL'	
R		3	'ACCOUNTS.TEST.COBOL'	TST001
R	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	

## RESEt

The **RESEt** command clears selected (or all) columns in the display and removes the empty lines.

### Format

---

RESEt	<u>Commands</u> ALL DEL Member VOLume FILTER EXCLUDE
-------	--

---

### Operands

Commands	Blank out the COMMANDS column. This is the default.
ALL	Blank out the COMMANDS column, the MEMBER column, and the VOLUME column.
DEL	Following a VALIDATE command, remove from the OLIST entries that contain “*DEL*” in the CLASS column because they do not correspond to any object in the catalog or on the volume.
Member	Blank out the MEMBER column.
VOLume	Blank out the VOLUME column.
FILTER	Removes all OLIST filtering.
EXCLUDE	Restores all OLIST excluded objects.

### Usage Notes

**RESEt** is a main command only; it cannot be used as a line command.

When **RESEt** is issued (with or without operands), empty lines are removed and the entries are renumbered.

If **RESEt** FILTER or X is used, all other parameters stay the same.

*Example:*

RESEt	RES ALL
RESEt COMMANDS	RES C
RESEt DEL	RES DEL
RES FILTER	RESEt MEMBER
RES M	RES X
RESEt VOLUME	RESEt VOL

## S

The **S** line command selects an item and invokes the default process for that item. (The default process depends on the type of object, how OLIST was invoked, and the setting on the SPIFFY Options panel for OLIST.)

### Usage Notes

**S** can be used as a line command or, when preceded by an item number, as a main command.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
S		2	'ACCOUNTS.JONES.COBOL'	
S		3	'ACCOUNTS.TEST.COBOL'	TST001
S	PAYMAIN	4	'ACCOUNTS.TEST.COBOL'	TST001
S	PAYM*	5	'ACCOUNTS.TEST.COBOL'	TST001

5 S

## SAVE

The **SAVE** command saves a permanent OLIST under a new name.

### Format

---

```
SAVE [ new - name ]
```

---

### Operands

new-name      New name of the indicated OLIST.

### Usage Notes

**SAVE** is a main command only; it cannot be used as a line command.

If no new-name is specified, the OLIST is saved under the current name.

*Example:*

```
SAVE
```

A temporary OLIST can be saved as a permanent OLIST. When saving as a permanent OLIST, you need to rename the OLIST with a new name.



---

## SHOWCMD

The **SHOWcmd** command controls whether TSO commands, REXX EXECs, and CLISTs are to be displayed before execution (so that they can be modified) or are to be executed immediately.

### Format

---

$$\text{SHOWcmd} \left[ \begin{array}{c} \text{ON} \\ \text{OFF} \end{array} \right]$$

---

### Operands

ON	TSO commands, REXX EXECs, and CLISTs are to be displayed before execution. This is the default.
OFF	TSO commands, REXX EXECs, and CLISTs are to be executed immediately.

### Usage Notes

**SHOWcmd** is a main command only; it cannot be used as a line command.

This option is also controlled from the SPIFFY Options panels.

*Example:*

```
SHOWCMD
SHOW ON
SHOW
SHOW OFF
```

## SORT

The **SORT** command sorts the entries in the OLIST.

### Format

---

```
SORT [ field - name [ order ] ]
```

---

### Operands

field-name	The name of an OLIST field: COMMAND, DSNAME, MEMBER, CLASS, or VOLUME.	
order	The order of sort:	
	A	Ascending: lowest to highest.
	D	Descending: highest to lowest.

### Usage Notes

**SORT** is a main command only; it cannot be used as a line command.

The **SORT** command ignores a leading quote (or hyphen) in the item name.

*Example:*

```
SORT DSN
SORT MEMBER
SORT MEMBER D
SORT DSN D MEMBER A
SORT VOLUME
SORT CLASS VOLUME
```

---

## SUBMIT

The **SUBmit** line command submits a data set or a member as a batch job.

### Usage Notes

**SUBmit** can be used as a line command or, when preceded by an item number, as a main command.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
SUBMIT		2	'ACCOUNTS.JONES.COBOL'	
SUB		3	'ACCOUNTS.TEST.COBOL'	TST001
SUBMIT	ACCMAIN	4	'ACCOUNTS.TEST.COBOL'	
SUB	PAY*	5	'ACCOUNTS.TEST.COBOL'	TST001

## TITLE

The **TITLE** command gives you the ability to enter a description for an existing OLIST from a Define OLIST Description input panel.

### Format

---

**TITLE**

---

### Operands

The **TITLE** command has no operands

### Usage Notes

**TITLE** is a main command only; it cannot be used as a line command.

**TITLE** must be invoked from an existing OLIST.

The description is saved in the reference list

*Example:*

---

## U

The **U** line command uncatalogs the data set.

### Usage Notes

**U** can be used as a line command or, when preceded by an item number, as a main command.

The **U** command ignores the member name field.

*Example:*

COMMAND	MEMBER	NUM.	DATA SET NAMES/OBJECTS	VOLUME
-----	-----	-----	-----	-----
U		3	'ACCOUNTS.TEST.COBOL'	TST001
3 U				

## UPDATE

The **UPDate** command invokes the SPIFFY EDIT panel for extensive editing of the OLIST.

### Format

---

UPDate

---

### Operands

**UPDate** takes no operands.

### Usage Notes

**UPDate** is a main command only; it cannot be used as a line command.

*Example:*

```
UPDATE  
UPD
```

## UTIL

The **UTIL** command opens a nested level of ISPF option 3 (Utilities) or a suboption of option 3.

### Format

---

```
UTIL [ option ]
```

---

### Operands

option            An integer indicating a menu item of option 3.

### Usage Notes

**UTIL** is a main command only; it cannot be used as a line command.

*Example:*

```
UTIL  
UTIL 2
```

**V**

The **v** line command invokes an MSL with a default process of VIEW, or invokes VIEW on a data set or member. The action taken depends on the type of object, as shown below:

TYPE	Member or pattern specification (if any)	Processing
SEQ		View data set
PDS	None	Display MSL of all members with view as default process
PDS	Pattern specified	Display MSL of matching members with view as default process
PDS	Member specified	View member
LIST		Display temporary OLIST of matching items with view as default process
VSAM		View VSAM file (if option installed)
DB2		View DB2 file (if option installed)
USER		View VSAM file (if option installed)
PC		View PC file (if option installed)

**Usage Notes**

**V** can be used as a line command or, when preceded by an item number, as a main command.

*Example:*

```

COMMAND  MEMBER  NUM.  DATA SET NAMES/OBJECTS  VOLUME
-----  -
V                2  'ACCOUNTS.JONES.COBOL'
V                3  'ACCOUNTS.TEST.COBOL'  TST001
V      ACCMAIN  4  'ACCOUNTS.TEST.COBOL'
V      PAY*    5  'ACCOUNTS.TEST.COBOL'  TST001

4 V

```



## VALIDATE

The **VALIDate** command is used to compare the entries in the OLIST with the current catalog and volume, and to bring them into conformity with the catalog. It marks items on the OLIST that are not in the catalog, and corrects the volume information for those that show the wrong volume. Migrated or archived data sets are indicated.

### Format

---

VALIDate

---

### Operands

The **VALIDate** command accepts no operands.

### Usage Notes

**VALIDate** is a main command only; it cannot be used as a line command.

Following **VALIDate**, use the RESET DEL command to remove entries that have the feedback message “-NOT FND-” in the command column because they were not found in the catalog or the volume.

*Example:*

#### VALIDATE

```

File Edit Find Display Populate Settings SCLM Menu Test Help Exit
-----
IPIPLSTS ST (B) ----- Objects List ----- Row 1 to 13 of 13
Command ==> SCROLL ==> PAGE
Hotbar?
Open list . . . INTT055 (or BLANK for reference list)
TSO PARMS . . .
Command Member Num. Data Set Names / Objects Volume
-----
- NOT FND-          1 'INTT055'
                   2 'INTT055.BEGIN.CLIST'
                   3 'INTT055.LOGPARM.CLIST'
- NOT FND-          4 'INTT055.SPFL0G1.LIST'
                   5 'INTT055.SYSA.ISPF.ISPPROF'
                   6 'INTT055.SYSA.PLIST.LIBRARY'
                   7 'INTT055.SYSB.ISPF.ISPPROF'
                   8 'INTT055.SYSB.PLIST.LIBRARY'

```

## X [EXCLUDE]

The **X** command can be used as a Main line command or a Line command to remove an Object List entry from an OLIST.

If you invoke it as a Main line command, an Exclude Object List Entries panel is displayed where you can enter a string that is excluded from the OLIST.

```

File Edit Find Display Populate Settings SCLM Menu Test Help Exit
-
S      Exclude Object List Entries      SPF/E
C      COMMAND ==>
H
O      Object List entries that match the following selection will be excluded:
T      Search string. . . _____
C
-      Direction. . . . N (N=Next, P=Prev, L=Last, F=First, A=All)
      String type. . . . C (C=Character, P=Prefix, S=Suffix, W=Word)
      F1=HELP   F2=SPLIT  F3=END    F4=RETURN  F5=RFIND  F6=RCHANGE
      F7=UP     F8=DOWN   F9=SWAP  F10=LEFT  F11=RIGHT
-
      5 !-----
      6 !* ALL CATALOGED ENTRIES: OLIST @LISTC * -----

```

If you invoke it as a line command, the Object List entry is removed from the OLIST.

### Format

```
x [ line - number ]
  [ search - string ]
```

### Operands

line-number	Line number from OLIST
search-string	Object List entries that match the selection

*Example:*

```
X 1
```

## XFER

The **XFER** line command accesses a pop-up window to upload or download data sets or workstation files.

You must have an active workstation connection using the ISPF Workstation Client to use this command.

### Format

---

XFER

---

### Operands

The **XFER** command has no operands.

*Example: s*

**XFER**

## TSO COMMAND SHELL

SPIFFY's TSO Command Shell provides a convenient way of entering TSO commands, CLISTs, REXX EXECs, and ISPEXECs from within ISPF. The TSO Command Shell maintains two independent lists: History Command List and Permanent Command List.

Both History Command List and Permanent Command List can store up to 999 commands. You can invoke any command from either list by selecting the number of that list from the TSO Command Shell, or, directly from any ISPF panel without having to display the TSO command processor panel. The commands in History Command List are stored chronologically-- from the most recent to the least recent. Both History Command List and Permanent Command List are remembered across ISPF session.

## TSO SHELL OPTIONS

Using the command **SPIFFY SET**, you can select the TSO settings. From the TSO Shell Options panel, you are asked to select one of the two options:

- Use the SPIFFY TSO shell
- Use the standard ISPF TSO shell

When you select the SPIFFY TSO shell, you can set your panel preference:

- Enter "H" to show History Command List in the Initial screen, or "P" to show Permanent Command List
- Enter "Y" to automatically fill Permanent Command List or History Command List, or "N" without automatical filling
- Enter a number in "Output line number" to display the output of TSO commands

## INVOKING THE TSO COMMAND SHELL

You can invoke the TSO Command Shell using one of the following methods:

- From the ISPF main menu, select option 6
- On the command line of any panel, enter the TSO command with a question mark:  
**TSO ?**

To exit the TSO Command Shell, press the END key.

## TSO SHELL COMMANDS

SPIFFY TSO Shell has the following commands:

Command	Remarks
<b>/IS</b>	Uses standard ISPF/TSO.
<b>/H</b>	Displays history command list.
<b>/EH</b>	Edits the history command list.

Command	Remarks
<code>/EP</code>	Edits the permanent command list.
<code>/SAV</code>	Saves the command list in the library.
<code>/RES</code>	If you did not save your new entries in the library, you can always use this command to restore the command list to its original one.
<code>&lt;c&gt;&lt;entry number&gt;</code>	<code>&lt;c&gt;</code> can be a question mark “?”, or a slash “/”, or can be omitted.

## INVOKING A COMMAND

In the SPIFFY TSO Command Shell panel, you can invoke the commands on History Command List or Permanent Command List using the following methods:

- Enter a command entry number on the main Command line and press ENTER
- Enter a question mark followed by a command entry number, and press ENTER:  
`?3 [ENTER]`
- Move the cursor to a command on Permanent Command List and press ENTER.
- Enter a slash and a command number. This will bring up the whole command to one screen no matter how long the command is.  
`/5 [ENTER]`

*Note: To avoid redundancy, the command invoked by number is not added to History Command List.*

You can also invoke a SPIFFY TSO command from other panels:

- Enter a command entry number from History Command List or Permanent Command List:  
`TSO 3`
- Use the equal sign to invoke the most recently executed command:  
`TSO =`
- Invoke the TSO Command Shell with a new command on the main Command line:  
`TSO ?ALLOC FILE(INPUT) DA('ACCT.TEST') SHR [ENTER]`
- Use the equal sign with the question mark to invoke the most recently executed command on the main Command line.

## ADDING ENTRIES TO PERMANENT COMMAND LIST

You can add an entry to Permanent Command List using one of the following methods:

- Type the command directly into the command line field
- Use the Edit command to “Cut” and “Paste”
- If your “Automatic filling” is set up, you can type a new command in the main command line and press ENTER.

## MODIFYING A COMMAND

Before executing a command, you can modify the command. To modify the command, invoke the command first to bring it to the main Command line. Edit the command and press ENTER to execute it. If your Automatic filling is set up, the new command is shown in Permanent Command List.

*Tip: To ensure that a command is correct before you execute it, you can proceed a command from Permanent Command List with a question mark and bring it to the main Command line. Make appropriate changes if you need to.*

---

# 5. APPENDIXES

SPIFFY offers the ability to control many aspects of its processing, including Member Selection List options, OLIST options, MSL GLOBAL command options, and print options. Once you change these setting, they are retained across SPIFFY/ISPF sessions until the next time you change them.

## APPENDIX A: CONTROLLING SPIFFY PROCESSING (THE SET COMMAND)

To display the panels controlling these options, enter the SET command:

```
SET
```

SPIFFY displays a panel like this:

```
SPF/E -----SPIFFY OPTIONS -----
-----
COMMAND ==>

MEMBER SELECTION LIST OPTIONS:
  LINE NUMBER FOR MEMBER LIST WINDOWS   ==> 15 (1 TO 24)
  AUTOMATIC PREVIEW (WITH LOCATE/FIND)   ==> N (Y=YES,
N=NO)
  DISPLAY LIST OF COMMANDS ON THE PANEL  ==> N (Y=YES,
N=NO)

  REPLACE EXISTING MEMBERS (COPY/MOVE)   ==> Y (Y=YES,
N=NO, O=TARGET OLDER)
  EDIT LOCKS MEMBERS SELECTED UNDER LMF ==> Y (Y=YES,
N=NO)
  COMMANDS EXECUTED BY TAILOR COMMAND    ==> SORT
CHANGED;FILTER USERID JONES

OLIST OPTIONS:
  DEFAULT OLIST COMMAND                   ==> E (V=VIEW,
B=BROWSE, E=EDIT)
  CHECK PENDING EDIT RECOVERY IN OLIST   ==> Y (Y=YES,
N=NO)
  DISPLAY LIST OF COMMANDS ON THE PANEL  ==> Y (Y=YES,
N=NO)
  PROVIDE A FIELD FOR TSO COMMAND PARMS ==> Y (Y=YES,
N=NO)
  MEMFIND RECALLS (RESTORES) DATA SETS ==> N (Y=YES,
N=NO)
  OLIST DISPLAY MODE                      ==> T (T=TYPE,
V=VOLUME)
```

PRESS ENTER FOR MORE OPTIONS OR THE END KEY  
TO EXIT.

Here is what you can do with each option on the panel:

## MEMBER SELECTION LIST OPTIONS

---

Line number for member list windows ==> (1 to 24)

---

Specify the line number (relative to the first entry in the MSL) at which the top of assist and preview windows is to be positioned.

---

Automatic preview (with LOCATE/FIND) ==> (Y=Yes, N=No)

---

Control the automatic preview of members found by LOCATE, FINDTEXT, or FIND:

- Y            Display a preview window of the member found.
- N            Don't display a preview window of the member found.

Display list of commands on the panel ==> (Y=Yes, N=No)

Turn on or off the MSL automatic assist window:

- Y            Display the assist window at all times.
- N            Don't display the assist window unless requested.

---

Replace existing members (COPY/MOVE) ==> (Y=Yes, N=No, O=Target older)

---

When you issue a COPY or MOVE command, the setting here controls the standard ISPF option of whether or not like-named members in the target should be replaced by those in the source:

- Y            Always replace members in the target that have the same name as those in the source.
- N            If a member in the target has the same name as one in the source, don't copy or move that member.



- O Always replace members in the target, unless the time and date stamp of the target in the member is later than that of the source.

---

EDIT LOCKs members selected under LMF ==> (Y=Yes, N=No)

---

LMF users only: This setting controls whether or not a LOCK is issued on a member you select for editing.

- Y Lock the member.  
N Don't lock the member.

---

Commands executed by TAILOR command ==>

---

Specify one or more MSL commands (such as SORT, FILTER, and <->EXCLUDE) here to tailor the MSL to your liking. These MSL commands can be executed via the TAILOR command, and, optionally, automatically when an MSL is invoked via the EDIT, VIEW, or BROWSE Entry panel.

## OLIST Options

---

Default OLIST command ==> (V=View, B=Browse, E=Edit)

---

Specify the process to be invoked by default when an item on a OLIST is selected by number:

- V The default process is VIEW.  
B The default process is BROWSE.  
E The default process is EDIT.

---

Check pending edit recovery in OLIST ==> (Y=Yes, N=No)

---

Specify whether or not edit recovery is checked whenever OLIST is invoked:

- Y Check for pending edit recovery whenever OLIST is invoked.  
N Don't check for pending edit recovery whenever OLIST is invoked.

---

Display list of commands on the panel ==> Y (Y=Yes, N=No)

---

Specify whether or not the OLIST panel should include a list of the OLIST commands:

- |   |  |
|---|--|
| Y | Use the form of the panel that shows the commands.       |
| N | Don't use the form of the panel that shows the commands. |

---

Provide a field for TSO command parms ==> (Y=Yes, N=No)

---

Specify whether or not to display the OLIST panel should include a field on which to enter parameters to be appended to the command as issued:

- |   |  |
|---|--|
| Y | Use the form of the panel that provides a parameter input field.       |
| N | Don't use the form of the panel that provides a parameter input field. |

---

MEMFIND recalls (restores) data sets ==> (Y=Yes, N=No)

---

Specify whether or not migrated or archived data sets are to be retrieved when MEMFIND is issued.

- |   |  |
|---|--|
| Y | Retrieve migrated or archived data sets so that they can be searched for the data set specified when MEMFIND is performed. |
| N | Don't use the form of the panel that provides a parameter input field.   |

---

OLIST display mode ==> (C=Class, V=Volume)

---

The right-most column of the OLIST panel can either display the object type or the volume. Specify which mode you want:

- |   |        |
|---|--------|
| C | Class  |
| V | Volume |

When a OLIST is on display, the PF key defined as RCHANGE (usually PF6) toggles between the two forms of the display.

To accept the values shown and end the display of the options panels, press the END key. To display the second options panel, which contains the Member Selection List GLOBAL EDIT processing options, press Enter.

SPIFFY displays a panel like the following and options are included afterwards.

```

SPF/E ----- SPIFFY OPTIONS -----
COMMAND ==>

Member Selection List GLOBAL command options:

STOP AFTER ==> 1 (Number of members to process successfully)
PROMPT AFTER ==> 9999 (Number of members to process before a prompt is issued)

Specify Y (Yes) or N (No) for the following options:

AUTOMATIC ==> N (Process without manually editing successful members?)
LINK ==> N (Process each command only if previous command succeeds?)
PRINT ==> N (Generate listing of each member changed and saved?)
EXCLUDE ==> N (Exclude failing members from selection list?)
LOCK ==> N (If LMF is installed, LOCK each saved member?)

Press ENTER for more options or the END key to exit.

```

## Member Selection List GLOBAL Command Options

---

```
STOP AFTER ==> (Number of members to process successfully)
```

---

In global EDIT, this controls the number of members to be processed successfully before stopping. This allows you to stop after finding a single member meeting particular specifications. You can set this field to any number between 1 and 9999.

---

```
PROMPT AFTER ==> (Number of members to process before prompt is issued)
```

---

In global EDIT and FINDTEXT, this controls the number of members to be processed before a prompt is offered to you. The prompt gives you a chance to cancel the rest of the GLOBAL processing of the library, or to change the value in this field. You can set this field to any number between 1 and 9999.

---

```
AUTOMATIC ==> (Process without manually editing successful members?)
```

---

In global EDIT, this controls whether or not you will be placed into an EDIT session of members for which the commands succeeded:

Y	Don't invoke an EDIT session for each successfully processed member. Proceed immediately to the next member to be processed.
---	--

- N            Invoke EDIT for each member for which the global EDIT command succeeded. You can review the changes, perform further editing, or cancel the changes. You can also terminate all pending processing.

---

LINK            ==>    (Process each command only if previous command succeeds?)

---

This controls whether each of the commands you specify on the GLOBAL prompt panel are to be considered separate, or are to be treated as a group. If LINK is set to NO, any one of them may fail, and the other commands will be processed. If LINK is set to YES, each of them must terminate successfully for *any* of the rest to be processed. If any command fails, the EDIT session for the member is canceled, so the previous commands, if any, have no effect (unless one of the previous commands was SAVE).

- Y            Process the commands as a group.  
N            Process the commands individually.

---

PRINT            ==>    (Generate listing of each member changed and saved?)

---

This controls whether or not members modified (and saved) under global EDIT are to be printed as specified in the print options.

- Y            Print each successfully processed member.  
N            Don't print the successfully processed members.

---

EXCLUDE            ==>    (Exclude failing members from selection list?)

---

This controls whether, when the global EDIT command has finished processing, members that were not successfully processed are still to be listed.

- Y            Exclude members that were not successfully processed.  
N            Don't change the member list.

---

```
LOCK          ==> (LOCK each saved member under LMF?)
```

---

LMF users only: This setting controls whether or not a LOCK is issued on each member that is saved under global EDIT.

Y	Lock the members.
N	Don't lock the members.

To accept the values as displayed, press the END key.

To display the third options panel, which contains the print processing options, press Enter.

SPIFFY displays the following panel:

```
SPF/E -----Print options-----
COMMAND ==>

Suppress page formatting ==> N (N=No, Y=Yes - file is already formatted)
Print changed lines in bold ==> N (N=No, Y=Yes)
Highlight program elements ==> Y (N=No, Y=Yes - emphasize recognized items)
Process mode ==> G (I=print immediately)
                    (G=Group requests for later printing)
                    (L=print direct to the ISPF LIST data set)

For process modes I and G:

CLASS ==> A (Sysout class)
DESTINATION ID ==> RMT270 (or remote station id)
WRITER name ==> (Output WRITER)
Number of copies ==> 1 (How many?)
Lines per page ==> 64 (page size)
Keep in HOLD queue ==> N (Y=Yes, N=No)
FORM number ==>
FCB name ==>

NOTE: Under process modes I and G, your USERID will be on the separator page.
Press ENTER for options menu, END to exit, CANCEL for installation defaults.
```

Following are the options for this control panel:

## Print Options

---

```
Print changed lines in bold ==> (N=No, Y=Yes)
```

---

This specifies whether or not you want lines in the current modification level of each member (that is, lines changed in the last EDIT session) to be highlighted by printing in bold print. (This makes them very easy to find.)

- |   |  |
|---|--|
| Y | Highlight lines in the current modification level. |
| N | Do not highlight any lines.                        |

---

```
Process mode ==>(I=print immediately)
(G=Group requests for later printing)
(L=print direct to ISPF LIST data set)
```

---

You can control how and where items you select for printing (such as individual members, the member list, and clipboards) are to be printed:

- |                  |  |
|------------------|--|
| I<br>(Immediate) | Each member or other item is printed to the printer separately, with separators between each.  |
| G (Group)        | Everything you specify for printing is accumulated in one print group until you issue the RELEASE command, issue the SET command and change the process mode to I or L, or end your session. The entire print group is printed together, without separators between individually printed items.<br>For example, in GROUP mode, to get a list of all members starting with "PAY", followed by a print-out of each such member, you would issue the commands:<br>FILTER PAY*<br>SAVE<br>P *<br>RELEASE |
| L (List)         | The print-out is directed to the ISPF LIST data set.<br>NOTE: If you direct the print-out to the ISPF LIST data set, you can print it using the ISPF command LIST.   |

The following options apply only if you have specified process mode I or G:

---

```
CLASS ==> (Sysout class)
```

---

This specifies the SYSOUT class if you are printing to a printer.

---

```
DESTINATION ID ==> (or remote station ID)
```

---

This specifies the SYSOUT destination ID (that is, the route code) of the printer.

---

Number of copies ===> (How many?)

---

This specifies how many copies you want to be printed.

---

Lines per page ===> (page size)

---

This specifies how many lines per page you want to print. (If Process mode is L [ISPF LIST data set], use ISPF option 0 [ISPF parameters] to control PAGESIZE of the ISPF LIST data set.)

---

Keep in HOLD queue ===> (Y=Yes, N=No)

---

This specifies whether or not you want the SYSOUT to be held.

- |   |  |
|---|--|
| Y | Put the generated SYSOUT in the HOLD queue.<br>NOTE: Use the TSO OUT command, SDSF, or another output browser to release held SYSOUTs. The jobname is your TSO userid. |
| N | The generated SYSOUT is immediately available (that is, is released).  |

---

FORM number ===>

---

This specifies the SYSOUT form number to be used for printing.

---

FCB name ===>

---

This specifies the SYSOUT FCB code to be used for printing.

To accept the values as displayed, press ENTER or the END key.

*Note: When invoking SET, you can specify which set of options you want to look at by specifying the parameter OLIST, MSL, OUTPUT (or PRINT), or GLOBAL. For example, display the third SET panel (which displays the options controlling print processing), you can enter the command*

**SET PRINT**

## APPENDIX B: PATTERNS

In a number of commands and fields where a name can be entered, SPIFFY also accepts a pattern. For example, in MSL, when a line command is entered as a main command, a pattern can be used instead of a member name, so that the command acts on all names matching the pattern. A pattern contains one or more wildcard characters, which allow it to match more than one name. The wildcard characters are the percent sign (“%”) and the asterisk “\*”. Any character in the data in the same position as a percent sign is considered to match it. (A blank in the data is not considered to match.) Any number of characters from the position of the asterisk to the right are considered to match the asterisk. The asterisk can be in any position. Trailing blanks match the asterisk. In addition, the underscore character (“\_”) is used to indicate a blank space. (Although blank spaces cannot appear in some fields, such as the member name field in an MSL, they can appear in the RENAME column of an MSL, where the feedback messages appear, and in load module attribute fields.)

The following examples illustrate how patterns work:

**Table 5.1: Pattern Matching Definitions**

Pattern	Contents of Field	Match	Reason
DEMO%0	DEMO10 DEMOZ0 DEMO DEMO	YES YES NO NO	Nothing in position 5 Last character not “0”
AB%D*	ABCD ABCDE AB1D234 AB ABC ABBB	YES YES YES NO NO NO	Nothing in position 3 Position 4 not “D” Position 4 not “D”
AB%	ABC AB1 AB ABCD BBB	YES YES NO NO NO	Nothing in position 3 More than three characters Position 1 not “A”
*	ABCDEFG	YES	Matches any name
%	A	YES	Matches any single-character name
_	(empty)	YES	
A_C	A C ABC	YES NO	Position 2 not blank
AB_	AB ABC	YES NO	Position 3 not blank



**Table 5.1: Pattern Matching Definitions**

Pattern	Contents of Field	Match	Reason
A*C	ABC	YES	
	AC	YES	
	BC	NO	Does not start with "A"
	AB	NO	Does not start with "C"
*A*B	AB	YES	
	\$ABC	YES	
	ABEND	YES	
	A23B4	YES	
	CCBD	NO	No "A" in string preceding "B"
	ZAREA	NO	No "B" in string following "A"

## APPENDIX C: MSL FEEDBACK MESSAGES

The RENAME field of the MSL displays descriptive information about the result of the process performed on the member:

**Table 5.2: MSL Feedback Messages**

Message	Meaning	Process
-BROWSED	The member was browsed.	B
-COPIED	The member was copied.	COPY
-COPY ER	An error occurred during a COPY operation.	COPY
-DELETED	The member in your selection list was deleted by you or another user.	All
-EMPTY	The member was selected for printing but was empty.	PRINT
-FREED	The member was freed.	K,LMF
-G:FAIL	GLOBAL failed for this member.	GLOBAL
-G:ERROR	You entered an invalid command under GLOBAL and ended processing without correcting it.	GLOBAL
-G:INUSE	GLOBAL was unable to process this member because it was in use.,	GLOBAL
-G:OK	GLOBAL succeeded for this member.	GLOBAL
-G:QUIT	GLOBAL terminated (QUIT executed).	GLOBAL
-IN USE	The member is in use by the indicated USERID.	E
-IN nnnn,	The member is in the library or libraries indicated.	H,WHERE
-INV NAM,	The member has an invalid name (it includes non-display characters).	All
-IO ERR	An input/output error occurred in reading the directory of the library or a member.	All
-MOVE ER	An error occurred during a MOVE operation.	MOVE
-NO AUTH	You have no authority to perform this operation.	All
-NO REPL	The member was not copied or moved because the member existed in the destination library and the REPLACE option was set to NO.	COPY, MOVE

**Table 5.2: MSL Feedback Messages**

<b>Message</b>	<b>Meaning</b>	<b>Process</b>
-NO SAVE	The member was not saved because CANCEL was issued or because no change was made to it.	E
-NO STAT	The member was not copied or moved because statistics were not available for either the source or the target.	COPY, MOVE
-NOT OLD	The member was not copied or moved because a member in the target library with the same name was not older than it.	COPY, MOVE
-NOT STD	The member has a non-standard directory entry.	All
-PRINT G	The member was printed in group mode.	PRINT
-PRINT I,	The member was printed in immediate mode.	PRINT
-PRINT L	The member was printed to the ISPF LIST data set.	PRINT
-PROMOTE	The member was promoted.	K LMF
-REVEALD	A member with the same name in a lower library was deleted from the list.	DELETE MOVE RENAME
-SAVED	The member was saved.	E
-STATS	The statistics of the member were created, removed, or changed.	STATS
-SUBMIT	The member was submitted as a batch job.	SUBMIT, U
-TOP GRP	The member was not promoted because it was already in the highest library.	LMF
-TXT FND	The member contains the specified text string.	FINDTEXT
-VIEWED	The member was viewed.	V
old-name	The original member name.	RENAME
Text	The text specified by the TAG command.	TAG
-function	The ISPF function called.	ISPEXEC
-command	The TSO command executed.	T

## APPENDIX D: MSL KEYWORDS, AND DEFAULT SORTING ORDER

The FILTER, LOCATE, and SORT commands operate on the fields displayed on the MSL panel. The keywords used to specify the fields are the corresponding column headings on the MSL panel. In addition, a few synonyms are acceptable for some fields.

MSL provides two different member selection list panels, one for text file libraries (that is, all types of libraries except load module libraries), and one for load module libraries.

### TEXT FILE LIBRARY PANEL

The field names, alternative acceptable names, meanings, and default sorting order are shown in the following table.

Field Name	Synonyms	Meaning	Default Sort Order
NAME	MEMBER M N	Member name	Ascending
RENAME		Contents of RENAME field (feedback messages, old names of renamed members, and tags)	Ascending
LIB	LIBRARY	Library number in concatenation sequence	Ascending
VV	VERSION	Version number	Ascending
MM	LEVEL	Modification level	Ascending
CREATED	CRE	Date of creation	Descending
CHANGED	CHA	Date and time of last modification	Descending
SIZE		Number of lines currently in member	Descending
INIT		Number of lines initially in member.	Descending
MOD		Number of lines changed in member	Descending
ID	ID USERID	ID of user that last modified member	Ascending

### LOAD LIBRARY PANEL

The load library panel field names, alternative acceptable names and meanings are shown in the following table:

Field Name	Synonyms	Meaning	Default Sort Order
NAME	MEMBER M N	Member name	Ascending
RENAME		Contents of RENAME field (feedback messages, old names of renamed members, and tags)	Ascending
LIB	LIBRARY	Library number in concatenation sequence	Ascending
SIZE		Size of load module (hexadecimal)	Descending
TTR		Relative track/record of start of load module	Ascending
ALIAS-OF	ALIAS	Name of member to which this member is aliased	Ascending
AC	APF	APF authorization code	Ascending
RENT		Reentrant	YES first
REFR		Refreshable	YES first
REUS		Reusable	YES first
TEST		Test	YES first
AMOD	AMODE	Addressing mode (31, 24, ANY)	Descending
RMOD	RMODE	Residency mode (24, ANY)	Descending
OVLY		Overlay format	YES first
LOAD		Only loadable	YES first
NXEC		Not executable	YES first
SCTR		Scatter load format	YES first
PAGE		Load on page boundary	YES first
EDIT		Cannot be reprocessed by linkage editor	YES first

**Note:** For the load module attributes *RENT*, *REFR*, *TEST*, *OVLY*, *LOAD*, *NXEC*, *SCTR*, *PAGE*, and *EDIT*, blank is equivalent to “NO”. For the load module attributes *AMOD* and *RMOD*, a blank value means that the linkage editor did not specify a value for this field. The underscore character (“\_”) can be used (with commands such as *FILTER*) to indicate a blank in these fields.

## APPENDIX E: INVOKING MSL FROM AN APPLICATION OR CLIST

MSL can be invoked by an application or CLIST. It must be called from a valid ISPF environment, using the ISPF Dialog Manager SELECT service. The format of the command should be as follows:

```
SELECT NEWAPPL(ISR) PGM(IPIMSL)
      PARM(FNCT, [DSN], [VOL], [RETURN])
```

*Example:*

WHAT	HOW
When an error occurs while invoking SPIFFY, you need SPIFFY to give you a return code of 8 instead of displaying the EDIT entry panel.	<pre>ISPEXEC SELECT PGM(IPIMSL)       PARM(E, 'JONES.TEST.COBOL', ,       Y) 'JONES.TEST.COBOL' is a library.</pre>

However invoked, on termination, control returns to the invoking application or CLIST.

The following is the description of the operands in the SELECT command:

**fct** This is the function code. It defines the default process. The values for the process are:

E	EDIT (This is the default value for the default process.)
V	VIEW
B	BROWSE

**dsn** This is the data set name. If specified as <<PROMPT>> (including the greater-than and less-than symbols as shown), the entry panel is always displayed. If it is not specified, a prompt is displayed unless the cursor is on a valid SPIFFY object name. The data set name can be specified in one of the following ways:

- PAYROL.JONES.COBOL, as a fully qualified name
- JONES.COBOL, as a partially qualified name

If this is a library, it invokes a member list of the library. If this is a sequential file, it simply invokes that file.

In a library name with a member name, e.g., 'PAYROLL.JONES.COBOL(ACCTMAIN)', it invokes the member ACCTMAIN in the library PAYROLL.JONES.COBOL. This form can be used with partially qualified library names.

In a library name with a pattern, e.g., 'PAYROLL.JONES.COBOL(ACCT\*)', it invokes a filtered member list of the library listing all members whose names start with 'ACCT'.

In a member name 'PAYROLL', it invokes the member PAYROLL in the current library, or the last library processed (or, if the screen has been split, the last library processed in the split).

In a pattern 'PAY', it invokes a filtered listing of the members matching the pattern in the current library, or the library processed (or, if the screen has been split, the last library processed in this split).

*Note: Access to cataloged data sets by DD name is fully supported when MSL is invoked in an application or CLIST. You can invoke an MSL on a pattern on the particular level of the current PANELLIB concatenation by specifying dsn as: @@DD.PANELLIB.#2(ACCT\*).*

**vol** This is the volume serial number. If it is specified, MSL looks for the data set only on the specified volume. Otherwise, it consults the catalog to find the data set.

**return** This operand decides whether or not to return to the calling application with a return code of 8 if an error occurs when invoking SPIFFY:

N	Display the entry panel if an error occurs. This is the default.
Y	Return to the calling application with a return code of 8 if an error occurs.

## APPENDIX F: INVOKING OLIST FROM AN APPLICATION OR CLIST

You can invoke OLIST from an application or CLIST. It must be called from a valid ISPF environment, using the ISPF Dialog Manager SELECT service.

You can create and display a temporary OLIST or a permanent OLIST. You can also display an existing OLIST, the default OLIST, or a selection list of OLISTs.

To invoke OLIST, issue a SELECT command in this form:

```
SELECT NEWAPPL(ISR) PGM(IPIPLST)
  PARM([PNAME[ , [LEVEL][ , [CMD][ ,EXIT]])
```

*Example:*

WHAT	HOW
Invoking the default OLIST with the default process	ISPEXEC SELECT NEWAPPL(ISR) PGM(IPIPLST)
Invoking the default OLIST with the process returning to the calling program on error	ISPEXEC SELECT NEWAPPL(ISR) PGM(IPIPLST) PARM(,,,Y)
Invoking the default OLIST with the default process of BROWSE	ISPEXEC SELECT NEWAPPL(ISR) PGM(IPIPLST) PARM(,,,B)
Creating and displaying a new OLIST named SYS1, listing all data sets starting with 'SYS1'	ISPEXEC SELECT NEWAPPL(ISR) PGM(IPIPLST) PARM(SYS1)
Creating and displaying a new OLIST named NEWLIST, listing all data sets starting with SYS1	ISPEXEC SELECT NEWAPPL(ISR) PGM(IPIPLST) PARM(NEWLIST,SYS1)
Displaying a <i>temporary</i> OLIST of all data sets starting with SYS1	ISPEXEC SELECT NEWAPPL(ISR) PGM(IPIPLST) PARM(SYS1.*) or, ISPEXEC SELECT NEWAPPL(ISR) PGM(IPIPLST) PARM(_TEMP_,SYS1)
Displaying a selection list of existing OLISTs	ISPEXEC SELECT NEWAPPL(ISR) PGM(IPIPLST) PARM(*)
Creating and displaying a OLIST named NEWLIST of all data sets to match the specification 'ACCOUNTS.%PAY*.COB*' with a default process of VIEW and with OLIST being terminated and returned to the caller on error	ISPEXEC SELECT NEWAPPL(ISR) PGM(IPIPLST) ISPEXEC SELECT NEWAPPL(ISR) PGM(IPIPLST) PARM(NEWLIST,ACCOUNTS.%PAY*.COB*,VIEW,Y)

In the SELECT command, e.g., **SELECT NEWAPPL(ISR) PGM(IPIPLST)**



**PARM**( [ **PNAME** [ , [ **LEVEL** ] [ , [ **CMD** ] [ , **EXIT** ] ] ] ) , the parms and other options can be described as follows:

**pname** The OLIST is to be displayed or created.  
 \* to display the List of Referenced Object Lists  
 \_TEMP\_ to create a temporary OLIST.

If “\*” or “\_TEMP” is omitted, the default OLIST is displayed.

**level** This is a fully or partially qualified data set level. The first level of a generic data set specification must be fully specified, but the following levels can be specified using the wildcards % and \* freely. If an existing OLIST is specified, the level is ignored.

If level is omitted, pname is checked to see if it occurs as a first-level qualifier. If it occurs as a first-level qualifier, it creates a OLIST prefilled with a list of all data sets using pname as the first-level qualifier. If it does not, it creates a OLIST with the ISPF libraries on the user’s EDIT entry panel.

**cmd** The values for the command are as follows:

B	BROWSE
E	EDIT
V	VIEW

If the values are omitted, the default process is defined as on the user’s SPIFFY Options panels.

This command can be specified as the following:

- PAYROL.JONES.COBOL, as a fully qualified name
- JONES.COBOL, as a partially qualified name

If this is a library, this command invokes a member list of the library. If this is a sequential file, it simply invokes that file.

In a library name with a member name, e.g., ‘PAYROLL.JONES.COBOL(ACCTMAIN)’, the command invokes the member ACCTMAIN in the library PAYROLL.JONES.COBOL. This form can be used with partially qualified library names.

In a library name with a pattern, e.g., ‘PAYROLL.JONES.COBOL(ACCT\*)’, this command invokes a filtered member list of the library listing all members whose names start with ‘ACCT’.

In a member name ‘PAYROLL’, this command invokes the member PAYROLL in the current library, or the last library processed (or, if the screen has been split, the last library processed in the split).

In a pattern ‘PAY’, this command invokes a filtered listing of the members matching the pattern in the current library, or the library processed (or, if the screen has been split, the last library processed in this split).

*Note: Access to cataloged data sets by DD name is fully supported when MSL is invoked in an application or CLIST. You can invoke an MSL on a pattern on the particular level of the current PANELLIB concatenation by specifying dsn as: @@DD.PANELLIB.#2(ACCT\*).*

**exit** It allows you to decide whether or not OLIST should be terminated on error:  
Y On error, return to the caller.  
N On error, remain in OLIST, where the user is able to correct the error (possibly by specifying a different OLIST). This is the default.

## APPENDIX G: INVOKING USER COMMANDS FROM MSL

The % line command in MSL is used to invoke user-written commands. It invokes CLISTS, REXX execs, or other TSO commands accessible from ISPF. The name of the command is specified in the RENAME column.

*Example:*

```

File  Display  Library  SCLM  Settings  Menu  Utilities  Test  Help  Exit
-----
SPF/E-BROWSE L1 --- SAMPLE.TEST.MSGS -----ROW 00001 OF 00013
COMMAND ==>>                                     SCROLL ==>> CSR
*FILTER*
      NAME      RENAME  LIB  VV.MM  CREATED      CHANGED      SIZE  INIT  MOD  USERID
% NEWSTUFF  MAILIT    1  01.05  95/03/09  96/02/06  11:31    17   14   0  LVL5002
_ RESTORE    1  01.00  95/02/09  96/02/09  15:24    32   33   0  LVL5002
_ SYSTEMS    1  01.01  96/11/06  96/02/06  13:49    27   29   0  LVL5002
_ TRAINS     1  01.47  91/01/10  96/02/09  10:37    315  187   0  LVL5002

```

The MAILIT command is used on the NEWSTUFF member. MAILIT must be available to ISPF for processing (SYSPROC, SYSEXEC, linklist TSO command, etc.). SPIFFY invokes the command with the data set name and the member name as the first parameter. In this example, the command is invoked as follows:

```
ISPEXEC SELECT CMD(MAILIT `SAMPLE.TEST.MSGS(NEWSTUFF)')
```

In addition, SPIFFY stores in the shared pool several ISPF variables that can be used by the invoked application. See *Appendix H: Adding Your Own Commands to MSL* in *SPIFFY User's Guide and Reference* for the list of available variables and their usage.

## APPENDIX H: INVOKING USER COMMANDS FROM OLIST

When a line command entered in OLIST is not a built-in line command, OLIST assumes it is a TSO command or CLIST/REXX exec. The invoked command is passed the data set name (with the member name, if specified) as a parameter. The user may also specify other parameters. If the command is preceded by a question mark, or SHOWCMD is set to ON, SPIFFY displays a prompt screen showing the command buffer before execution. The ? command prefix overrides built-in line commands, allowing you to execute installation commands with names like B, E, I etc.

When creating your own commands to be called from OLIST, remember that these must be available to ISPF (via SYSPROC/SYSEXEC or other normal module concatenation libraries).

An example of a command that uses the TSO XMIT command to transmit data sets is as follows:

```
CLIST NAME: DSENSEND
PROC 1 DSNAME TO(JONES01)
XMIT (&TO) DATASET(&DSNAME)
```

The command would be invoked from OLIST as shown below:

```
SPF/E OLIST (B) ----- ALLOCATION LIST FOR "ISPLLIB" ---- Row 1 to 3 of 3
Command   ==>                                     SCROLL ==> CSR
                                                *TEMPORARY LIST*
TSO PARMS . . .
Command  Member  Num. Data Set Names / Objects  Volume
-----
DSENSEND  ISR@PRIM  1'SPPE.V5R6M0.V58PLIB'
                2'ISPF.V5R6M0.SISPPENU'
                3'SYS1.LOCAL.PANELS'
                -----
                END OF LIST -----
```

To override the destination parameter in the CLIST, the TO(...) parameter can be specified in the TSO PARMS field as follows:

```
SPF/E OLIST (B) ----- ALLOCATION LIST FOR "ISPLLIB" ---- Row 1 to 3 of 3
Command   ==>                                     SCROLL ==> CSR
                                                *TEMPORARY LIST*
TSO PARMS . . . TO(JERRY)
Command  Member  Num. Data Set Names / Objects  Volume
-----
DSENSEND  ISR@PRIM  1'SPPE.V5R6M0.V58PLIB'
                2'ISPF.V5R6M0.SISPPENU'
                3'SYS1.LOCAL.PANELS'
                -----
                END OF LIST -----
```

## APPENDIX I: CALLING ENHANCED EDIT, VIEW, OR BROWSE FROM DIALOGS

You can dynamically invoke the SPIFFY enhanced EDIT, VIEW, or BROWSE function from a dialog.

To invoke EDIT with the SPIFFY enhancements, do one of the following:

- Specify !PIEMAC as the initial macro on the ISPEXEC EDIT statement.
- If you already have an initial macro on the ISPEXEC EDIT statement, issue ISREDIT !PIEMAC in your own initial macro.

To invoke VIEW, do one of the following:

- Specify !PIVMAC as the initial macro on the ISPEXEC EDIT statement.
- If you already have an initial macro on the ISPEXEC EDIT statement, issue ISREDIT !PIVMAC in your own initial macro.

*Note: If you are not using the SPIFFY Librarian or Panvalet support and if you invoke EDIT on non-standard libraries (e.g., Librarian files) or use the EDIF EDIT interface, use !PIPMAC instead of !PIEMAC or !PIVMAC.*

To invoke BROWSE, use the parameter PANEL(IPIBROB) on the ISPEXEC BROWSE statement.

## APPENDIX J: ADDING YOUR OWN COMMANDS TO MSL

The T (TSO) command is a convenient vehicle to add more commands to MSL. You can create Assembler Language TSO commands, CLISTs, or REXX EXECs that accept a data set name (with a member) as a first parameter to perform a number of different functions on a member, such as compiling a member or downloading or uploading a member to or from a PC.

When a user enters a T command, MSL issues a command to TSO in the format

```
command 'library-name(member)'
```

where **command** is as specified in the rename field (if T is issued as a line command), or is the second parameter of the T main command.

The following ISPF dialog variables are stored in the SHARED pool and are available to the TSO command, CLIST, or REXX EXEC being called:

Variables Always Available	
ZLLIB	Position of member in concatenation hierarchy
MEMBER	Member name
DIRTYPE	Type of member: S – ISPF statistics are available N – ISPF statistics are not available L – Load module
TYPE	Data set type (last qualifier)
IPIDSN1	Name of library 1 in concatenation hierarchy
IPIDSN2	Name of library 2 in concatenation hierarchy
IPIDSN3	Name of library 3 in concatenation hierarchy
IPIDSN4	Name of library 4 in concatenation hierarchy

Variables Available if ISPF Statistics are Available	
ZLVERS	Version number
ZLMOD,	Modification level
ZLCDATE	Creation date
ZLMDATE	Last modification date
ZLMTIME	Last modification time
ZLCNORC	Current number of records
ZLINORC	Beginning number of records
ZLMNORC	Number of records modified
ZLUSER	Used ID of user that last modified member

Variables Available for Load Modules	
ILMSIZE	Load module size
ILMAPF	Load module authorization code (AC)
ILMRENT	YES if reentrant
ILMREFR	YES if refreshable
ILMREUS	YES if reusable
ILMTEST	YES if link-edited with the TEST attribute
ILMAMOD	Load module AMODE
ILMRMOD	Load module RMODE

When entered as a main command, the T command requires a member name or pattern. If a TSO command, CLIST, or REXX EXEC creates a new member, MSL adds it to the member list. For example, if you create a TSO command, CLIST, or REXX EXEC called UPLOAD, you can issue the following command to upload a file from the PC into a new member called NEWNAME:

```
T NEWNAME UPLOAD
```

The essential elements of such a CLIST or REXX EXEC would look like this:

```
PROC 1 DSNAME
ALLOC REUSE FILE(OUT) SHR DA(&DSNAME)/* ALLOCATE OUTPUT FILE */
CALL 'DEMO.LOAD(DOUPLOAD)' 'UPLOAD'/* ASSUME THIS IS THE UPLOAD PROGRAM
*/
FREE FILE(OUT)/* FREE THE OUTPUT DDNAME */
```

When entered as a main command, the T command accepts patterns. You may want to QUIT the processing of members not yet processed if a return code from a TSO command, CLIST, or REXX EXEC indicates a severe error. To do so, it's necessary to issue the appropriate ISPEXEC command, like this:

```
PROC 1 DSNAME
ALLOC REUSE FILE(OUT) SHR DA(&DSNAME)/* ALLOCATE OUTPUT FILE */
CALL 'DEMO.LOAD(DOUPLOAD)' 'UPLOAD'/* ASSUME THIS IS THE UPLOAD PROGRAM
*/
IF (&MAXCC>8) THEN DO/* HANDLE SEVERE ERRORS */
WRITE SEVERE ERROR (RETURN CODE IS &MAXCC)
ISPEXEC SELECT PGM(IPIQUIT) PARM(N)/* ISSUE MSL "QUIT" */
END/* END DO */
FREE FILE(OUT)/* FREE THE OUTPUT DDNAME */
```

## APPENDIX K: ADDING YOUR OWN POINT-AND-SHOOT GENERAL COMMANDS

You can add general commands to ISPF. If you use the TSO shell provided by SPIFFY, the commands you add can make use of the point-and-shoot interface. For example, if you have (or create) a CLIST that compiles a data set, users will be able to specify the data set to be compiled simply by typing the command name on the command line, putting the cursor on the data set name, and pressing Enter. If a PF key is set to the command name, users will be able to invoke the command simply by placing the cursor on the data set name and pressing the PF key.

To add a general command, add an entry in ISPCMDS (the ISPF command table) or in an application command table (xxxxCMDS, where xxxx is the application ID). For example, assume that the CLIST named COMPILE accepts a source data set name as its first parameter. Add an entry like the following to the command table:

```
ZCTVERB    ZCTTRUNC    ZCTACT
COMPILE    0                SELECT PGM(IPITSO) PARM(-, %COMPILE
/)
```

SPIFFY replaces the slash (“/”) in the command parameter with the data set name that the cursor is on. (If the cursor is not on a valid name, no substitution is performed, and the slash is passed to the application.)



## APPENDIX L: PANEL EXTENSION LANGUAGE

The SPIFFY Panel Extension Language (PEL) provides new functionality to the ISPF panel language. PEL is implemented as a dynamic panel preprocessor. PEL reads panel members from the panel library, preprocesses the panel lines, and lets ISPF use the results. Using this technique, PEL provides several advantages:

- Common panel sections can be shared across multiple panels via the include member statement. This facility provides the means to design a common interface (for example, a pull-down menu) that can be used across multiple panels, applications, or the entire ISPF session. With centralization of common panel elements and the ability to change a member and have its effects reflected on all panels, installations benefit from reduced maintenance costs.
- Multiple panel versions can be dynamically generated based upon environmental conditions. With this facility, panels can be created with different lines used for different versions of ISPF, different groups of users, different logon procedures, different programs, and more. These versions can be maintained in the same panel library as they originate from the same source. Here again, installations benefit from reduced maintenance effort.
- Access to new variables not available in the standard panel language without writing code.
- Ability to create panels that co-exist in multiple ISPF environments. For example, while preparing the migration to a new version of ISPF, panel code can be written so that it does not affect users working on the previous version of ISPF, while allowing users who have already migrated to the new version take advantage of new facilities.

Users are provided with the ability to display or hide the action bars on panels.

The following panel uses PEL to display different lines depending on the presence of a preallocated DDNAME. It also demonstrates an INCLUDE statement and some PEL assignment statements.

```

)BODY
%----- LOCALLY WRITTEN UTILITIES
-----
%COMMAND ==>_ZCMD
+Current system:&SYS running MVS
&MVS &FMID
% 1 + SMFEXT - Browse SMF extracts
)) IF-DDNAME=OPERLIB
% 2 + SCHED - Scheduling system
)) ELSE
% 2 + SDSF - Display Jobs
)) IF-END
% 3 + HDF - Hardware Definitions
% X + EXIT - Return to main menu
)INIT
)) INC:SYSVARS
)PROC
&ZSEL=TRANS (&ZCMD
                1, ' PGM (SMFEXT)
PARAM (PROMPT, PANEL=SMPX12) '
)) IF-DDNAME=OPERLIB
                2, ' CMD (%SCD01) '
)) ELSE
                2, ' PGM (SDSF) '
)) IF-END
                3, ' CMD (%HDF) '
                x, ' EXIT' )
)END

```

The included member SYSVARS contains three lines:

```

)) ASSIGN :SYS=SYSID
)) ASSIGN :MVS=MVSLEVEL
)) ASSIGN :FMID=MVSFMID

```

As you can see, PEL checks for the presence of a preallocated DD name “OPERLIB”. If it is present, the menu will contain a job scheduling utility, and if not, it will contain SDSF. On a particular system, the panel could be generated as:

```

)BODY
%----- LOCALLY WRITTEN UTILITIES
-----
%COMMAND ==>_ZCMD
+Current system:&SYS running MVS
&MVS &FMID
% 1 + SMFEXT - Browse SMF extracts
% 2 + SCHED - Scheduling system
% 3 + HDF - Hardware Definitions
% X + EXIT - Return to main menu
)INIT
&SYS='SYST'
&MVS='SP4.3.0'
&FMID='HBB4430'
)PROC
&ZSEL=TRANS (&ZCMD
                1, ' PGM (SMFEXT)
PARAM (PROMPT, PANEL=SMPX12) '
                2, ' CMD (%SCD01) '
                3, ' CMD (%HDF) '
                x, ' EXIT' )
)END

```

The panel would be displayed as:

```

-----  LOCALLY WRIT-
TEN UTILITIES -----
-
  COMMAND ==>_ZCMD
Current system:SYST
running MVS SP4.3.0
HBB4430
  1  SMFEXT - Browse
SMF extracts
  2  SCHED - Scheduling system
  3  HDF   - Hardware
Definitions
  X  EXIT  - Return
to main menu

```

## STATEMENT SYNTAX

PEL statements are identified by left parenthesis in the first and second positions of the panel line.

Comment lines are identified by “)\*)” beginning in column one. These lines are ignored by ISPF.

Some PEL statements place a dependency on the availability of SPIFFY in the ISPF session. Some may be optional, and provide support for panel elements that are not needed when SPIFFY is not active. To allow use of PEL statements within panels that are sometimes processed without the SPIFFY environment, the leading left parentheses may be replaced with the tag “/\*<<spfe>>“. The alternate tag starts with the standard comment indicator, and is valid for non-BODY sections of the panel.

For example, these two lines provide the identical function:

```
) ) INC:OPERUTIL
```

```
/*<<SPFE>>INC:OPERUTIL
```

## WHEN PEL STATEMENTS ARE EVALUATED

PEL is a dynamic preprocessor. You need not run a special utility to activate the PEL statements. However, due to panel caching, PEL statements are evaluated the first time the user references a panel. Subsequent displays of the same panel reuse the previous evaluation. For example, after displaying the menu shown in the example above, the menu will show the same information even if the user frees or allocates the OPERLIB DD name. To cause the panel statements to be re-evaluated, perform the same actions as you would if the panel source had changed. For example: Run the ISPF session in Dialog Test mode. This is the least recommended method since running under Dialog Test incurs significant overhead.

- Use the SPIFFY panel testing facility to specify that the panel is being tested and should be constantly refreshed. This is a more efficient solution than running under Dialog Test because panel refreshing will occur only for the specified

panel. The SPIFFY panel testing facility is activated by clicking the Test option on the MSL or OLIST action bar and select Panel testing and diagnosis.

- Restart your ISPF session. You need not re-logon.

## ASSIGNMENTS

With PEL, you can set dialog variables to values that are not otherwise accessible. For example, you can set a variable to the program name specified in the PGM= statement on the logon procedure.

Each PEL assignment statement generates a single panel assignment statement where the assigned value is a character constant created by SPIFFY at the time the panel is evaluated. For example, the statement:

```
)ASSIGN:DEST=TSODEST
```

generates (in a specific installation) the following line:

```
DEST='REMOTE12'
```

Like any other assignment statement, PEL assignment statements are only valid in the sections where ISPF assignment statements are valid.

The following table lists the available assignments:

Keyword	Value Returned	Notes
APPL	ISPF application ID	Similar to ZAPPLID
CPUID	Current CPUID	CPU serial number
CPUMODE L	Current model	CPU model number
GUI	GUI workstation mode	Returns Y or N (based upon ZGUI variable)
LOGPGM	Logon procedure program	From PGM= statement in LOGON JCL.
MIGSYS	Name of migration system	As specified during SPIFFY customization
MIGVOL	Name of migration volume from SPIFFY customization	If none specified, the value from the DELVOL in ISRCONFIG is used.
MVSFMID	Current MVS FMID	Example: HBB4430
MVSLEVEL	Current MVS level	Example: SP4.3.0
OPER	Operator authority	From PSCBCTRL. Returns Y or N
PANEL	Name of current panel	Useful in included panels
PGM	Program invoking panel	From SELECT PGM()
SMS	Indicates if SMS is active	Returns Y or N
SMSLEVEL	Current SMS level	
SPFEVER	SPIFFY Version	Four character maintenance version (e.g., 5001)

Keyword	Value Returned	Notes
SRC.MGR	Checks which source manager is active (SCLM, LMF, or neither).	If SCLM activated for user (using SPIFFY customization). Returns S. Otherwise, if DD ISRCFIL is allocated to the user returns L. Otherwise returns N.
SYSID	The SYSTEMID	From CVTSNAME
TSODEST	Default destination	From PSCBDEST
TSOUNIT	Default allocation unit	From PSCBGPNM
VER	ISPF Version	Similar to part of ZENVIR

## CONDITIONAL STATEMENTS

PEL provide a set of conditional statements to allow inclusion or omission of panel lines.

The general structure of the conditional statement block is as follows:

```
) ) IF-CONDITION
```

(panel statements included if condition is true)

```
) ) ELSE
```

(panel statements included if condition is false)

```
) ) IF-END
```

The `) ) ELSE` construct is optional, but the `) ) IF-END` line is required. Up to 8 nested levels of IF statements can be specified.

## ISPF VERSION TESTING

```
) ) IF-VER<OP>ISPFVERSION
```

Where:

<op> is one of the comparison symbols =, <, or >

ispfversion is a three character specification of the ISPF version being tested

Example:

```
PROC
.
.
) ) IF-VER>3.2
      8,'PGM(MYPROG) PARM(A) SUSPEND'
) ) ELSE
      8,'PGM(MYPROG) PARM(A) '
) ) IF-END
.
.
)END
```

Since the SUSPEND keyword is only supported on ISPF versions above 3.2, a test is included to pass different statements based on the version of ISPF.

## ENVIRONMENT TESTING

PEL lets you check several environment values to conditionally pass panel lines to ISPF. This feature provides the ability to custom tailor panels for different groups of users based on userid, logon procedure name, the allocation of a DDNAME, or for different programs.

```
) ) IF -<ENVIRONMENT-KEYWORD>=<ENVIRONMENT-VALUE>
```

Where:

<environment-keyword> is one of the environment variables

<environment-value> is the value the environment variable is tested against.

The following table lists the supported environment fields:

Environment keyword	Valid environment values	Notes
APPL	current applied	From ZAPPILD
DD	DD name to be tested	True if DD allocated
GUI	Y or N	If running in GUI mode
HOTBAR	Y or N	Set by the user with the SET command (in MSL or PLIST).
LOGPGM	Logon proc program name	From PGM= on the logon JCL
MIGSYS	name of migration system or N/A if none specified	From SPIFFY customization.
MIGVOL	Migration system volser	From SPIFFY customization or ISRCONFIG
OPER	Y or N	From PSCBCTRL
PANEL	current panel	Used in included members
PGM	current program	From SELECT PGM()
SECTION	current panel section	Used in included members
SRC.MGR	SLBNY	If SCLM active for userid (as set by SPIFFY customization) If DD ISRCFIL is allocated If both L and S are true If neither S and L are true If either S or L are true
SYSID	System ID	From CVTSNAME
TSODEST	Default destination	From PDSCDEST
TSOUNIT	Default allocation unit	From PSCBGPNM
USERID	Current userid	

For example, assume that you want the system group (which uses the LOG\$\$SYS logon procedure) to have access to a special system utilities menu. You could change the main menu )BODY section to have the following lines:

```
) )IF-LOGONPROC=LOG$$SYS
    %Y + - SYSTEM UTILITIES
) )IF-END
```

Similarly, in the &ZSEL statement on the )PROC section:

```
) )IF-LOGONPROC=LOG$$SYS
    Y, 'PANEL(SYSUTIL) '
) )IF-END
```

As another example, assume that you include menu definition lines in an external member called MENUDEF1 that is included from both the main menu (ISR@PRIM) and the utilities menu (ISRUTIL). The following lines can be used in MENUDEF1 to change the description of the X command:

```
) )IF-PANEL=ISR@PRIM
    %X - TERMINATE ISPF USING LOG/LIST DEFAULTS
) )ELSE
    %X - RETURN TO PREVIOUS PANEL
) )IF-END
```

## SPIFFY SET OPTIONS TESTING

PEL lets you check some SPIFFY set options (which can be changed by the user via the SET command).

```
) )IF-<KEYWORD>=[Y | N]
```

Where <keyword> is one of the following:

<b>ACTIONBAR</b>	This keyword reflects the global action bar setting.
<b>ACTIONBAR.PLIST</b>	This keyword reflects the PLIST action bar setting as controlled by the SET command (see above).
<b>ACTIONBAR.DSLIST</b>	The DSLIST action bar setting (see above).
<b>ACTIONBAR.MSL</b>	The MSL action bar setting (see above).
<b>HOTBAR</b>	The SPIFFY HOTBAR settings (see above).

For example, the following lines will include an action bar only if the user did not disable action bar (by means of the SET command):

```
) )IF-ACTIONBAR=Y
) )INC:ACTBAR01
) )IF-END
```

## UNCONDITIONAL BRANCHING

Two statements allow you to define labels and branch to a label, bypassing lines in between:

```
) )JMP:<LABEL>
) )LBL:<LABEL>
```

where:

<label> is an 8 character label (padded with blanks if necessary). Labels have the same syntax rules as member names. They must start with alphabetic, @, \$, or #, and be followed by alphanumeric or \$, @, #.

*Example:*

```
) )JMP:LABEL1
      %Y + - SYSTEM UTILITIES
      THE ABOVE LINE IS IGNORED
) )LBL:LABEL1
```

*Note: SPIFFY will ignore all statements up to the first label statement matching the JMP statement label. You can therefore have multiple non-unique labels. The label specified in the JMP statement is searched for in the forward direction only.*

*Statements between the JMP and the matching LBL pair are never cached.*

## INCLUDING EXTERNAL MEMBERS

The ))INC:xxxx and ))INS:xxx statement are used to include external members into the processed panel. Up to eight levels of nesting are allowed.

```
) )INC:<MEMBER-NAME>
) )INS:<MEMBER-NAME>
```

where:

<member-name> is the name of the member to include.

*Example:*

```
) )INC:SYSOPT
```

The ))INS statement is for dialog testing purposes. It marks the panel that uses it in a special way that tells SPIFFY to reread it from disk the next time the panel is used. For performance reasons you should change the ))INS statements to ))INC statements before moving panels into a production library.

## PEL REQUIREMENTS

Panels pre-processed by the ISPF panel preprocessor (ISPPREP) are ignored by PEL. Panels that contain PEL statements cannot be pre-processed by the ISPF preprocessor. The performance penalty of not using the ISPF panel preprocessor is more than offset by the PEL caching mechanism used within SPIFFY.



The panels and referenced members (included members) must reside in the ISPPLIB library. LIBDEFs cannot be used.

The panels must be allocated to the ISPPLIB library using real allocation. Products (such as TSO/PLUS) that simulate real allocation but allocate the library in another address space cannot be used with PEL.

## PEL QUICK REFERENCE

Statement	Function
))ASSIGN:variable=KEYWORD	Assign value to variable
))ELSE	IF condition alternative
))IF-ACTIONBAR=Y-or-N	Test for ACTION BAR active
))IF-APPL=applid	Test for ZAPPLID
))IF-DDNAME=allocated-ddname	Test for allocated DD
))IF-END	IF block terminator
))IF-GUI=Y-or-N	Test if running in GUI mode
))IF-HOTBAR=Y-or-N	Test for HOTBAR active
))IF-LOGONPROC=logon-proc	Test LOGON PROC name
))IF-OPER=Y or N	Test for operator authority
))IF-PANEL=panel-name	Test displayed panel name
))IF-PGM=program-name	Test SELECT PGM() caller
))IF-TSODEST=destination	Test for destination
))IF-TSUNIT=unitname	Test for default unit name
))IF-UID=userid	Test TSO USERID
))IF-VER<v.r	Test ISPF version
))IF-VER=v.r	Test ISPF version
))IF-VER>v.r	Test ISPF version
))INC:member	Include member (with caching)
))INS:member	Include member (no caching)
))JMP:label	Branch to label
))LBL:label	Label definition
--++---1111+---3---4-	

## APPENDIX M: PERSISTENT TABLE LIBRARY

Persistent Table Library is a personal library that serves as a repository for SPIFFY persistent objects. Persistent Table Library can be dynamically allocated or disabled.

In the Persistent Table Library Options panel, Persistent Table Library provides the following options:

Command	Remarks
A	This command allows you to allocate an existing library or a new library.
B	This command allows you to back up the current table library and allocate space for a new library.
T	This command allows you to temporarily disable the library for the current section.
P	This command allows you to permanently disable the library.

### ALLOCATING A LIBRARY

SPIFFY recommends a dedicated library for storing its persistent tables. You may either specify an existing library or allocate a new library for this purpose. When you allocate a valid library, its name is stored in your profile and is automatically used as long as DD (IPITBLIB) is not included in your LOGON procedure.

SPIFFY suggests you use the library name of the existing permanent OLIST library, or if DD (PLSTLIBW) is missing, use a name and volume derived from your PROFILE library name.

You can disable the library or select a library by using the following commands in the main Command line:

Command	Remarks
D	Disable the current library.
S	Select a library. This is a default setting.

## BACKING UP THE TABLE LIBRARY

SPIFFY allows you to back up your persistent table library or allocate a larger library when your current library is running out of space. SPIFFY provides the following options:

```
SPF/E----- Persistent Table Management -----
COMMAND ==>

SPIFFY persistent table library just encountered an unrecoverable
error ( ABEND      ). In order to complete your request, a larger
library needs to be allocated.

If you elect to proceed with allocating a larger library, SPIFFY
will perform the following steps to ensure integrity of your data:
1) Rename library to: INTT055.SYSB.PLIST.IPITBLB0
2) Allocate a larger: INTT055.SYSB.PLIST.LIBRARY
3) Copy old library into the new one.
4) Resume operation with new library.

If you decline to proceed with the above, your currently used
persistent table will not be saved as requested.

Press ENTER to process or F3   to cancel.

Current Allocation
Data set name type : PDS
Allocated tracks   : 5           Block size . . . . : 3120
Maximum dir. blocks : 20        Number of members . : 1
```

