

IBM ISPF Productivity Tool for z/OS



# Installation and Customization Guide

*Version 7 Release 1 Modification 1*

**Note**

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 57.

**First Edition (July 2012)**

This edition applies to Version 7 Release 1 Modification Level 1 of IBM ISPF Productivity Tool (program number 5655-SPF and to all subsequent releases and modifications until otherwise indicated in new editions.

IBM welcomes your comments. For information on how to send comments, see “How to send your comments to IBM” on page 2.

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## Chapter 1. About this manual

This guide describes how to install and configure ISPF Productivity Tool. It is intended for the system administrator and operation personnel.

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.

This guide is divided into the following chapters:

**Chapter 1, “About this manual”**

Provides general information about this document.

**Chapter 2, “An overview of ISPF Productivity Tool,” on page 3**

Describes the features and capabilities of ISPF Productivity Tool and introduces the new features in the current version.

**Chapter 3, “ISPF Productivity Tool installation and customization,” on page 11**

Provides the installation procedures and explains how to configure ISPF Productivity Tool.

**The Appendixes**

The Appendixes, starting with Appendix A, “The installation tape,” on page 27 cover the installation-related topics and options.

As well as the information in this document, there is more product information available in the online tutorials, Help panels, Assist windows, and the structured Action Bar.

- To invoke the ISPF Productivity Tool tutorial, enter IPTHELP or IPT on any ISPF panel.
- To display all ISPF Productivity Tool command shortcuts, enter IPT? on any ISPF panel.
- To invoke the Online Help, press the HELP key (typically PF1) on any ISPF Productivity Tool panel.
- To display the Assist window, which is available in both the Member Selection List (MSL) and Object List (OLIST), type ASSIST or A on the command line.

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## Summary of changes, first edition (GC19-3847-00)

The steps to replace IEBCOPY with the ISPF Productivity Tool batch utility IQIBUTIL are provided in “Replacing IEBCOPY with IPT batch utility IQIBUTIL” on page 15.

The screens in Appendix I, “The customization wizard IQIWIZRD,” on page 45 have been updated to account for changes introduced in Version 7. Changes are marked with a vertical change bar in the left margin.

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## Chapter 2. An overview of ISPF Productivity Tool

This chapter introduces ISPF Productivity Tool's technology and lists the new features of each release.

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### Automatic integration into ISPF

ISPF Productivity Tool integrates tightly into ISPF whether you change the main menu or not. This tight integration ensures that the performance and productivity improvements that ISPF Productivity Tool offers are not limited to a specific option, but they are available throughout ISPF. Note that this tight integration does not allow activation of ISPF Productivity Tool using LIBDEFs. You should follow the installation instructions carefully and accurately.

ISPF Productivity Tool controls ISPF through a “front-end”. The front-end is conveniently named as ISPF, PDF, and ISPSTART, so that ISPF Productivity Tool gains control whenever you start ISPF. Internally, ISPF Productivity Tool invokes ISPF, and provides access to both ISPF and ISPF Productivity Tool services. The ISPF Productivity Tool installation procedures show how to activate ISPF Productivity Tool on a selected group of users without impacting other ISPF users, and how to widen the group of users having access to ISPF Productivity Tool.

The ISPF Productivity Tool front-ending ISPF does not require linking into the ISPF product modules or renaming the ISPF modules. With ISPF Productivity Tool, the original ISPF is left intact. ISPF Productivity Tool does not run authorized, and adheres to all MVS™ security standards.

The ISPF Productivity Tool front end to ISPF automatically deactivates itself when ISPF is run in batch. Other methods of bypassing the ISPF Productivity Tool front end are described in “Bypassing ISPF Productivity Tool (invoking standard ISPF)” on page 25.

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### The Customization Wizard

The customization of ISPF Productivity Tool options is an automated process controlled by the Customization Wizard. Information is presented in ISPF panels and is remembered across sessions. The Customization Wizard is also used to register other products to work with ISPF Productivity Tool. It may be invoked any time by the ISPF Productivity Tool-ISPF administrator.

For more information about the Customization Wizard, see Appendix I, “The customization wizard IQIWIZRD,” on page 45.

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### Object orientation and registering other products with ISPF Productivity Tool

One of the important ISPF Productivity Tool concepts is its object-oriented technology. The following sections explain how important to understand its role in enabling ISPF Productivity Tool to take advantage of other products installed in your system.

### Objects and object classes

The most common object is a data set. With ISPF Productivity Tool, the object class “data set” has several subclasses—different types of data sets, such as PDS, PDSE, VSAM, SEQ, Panvalet, and Librarian. ISPF Productivity Tool supports other object classes as well— DB2<sup>®</sup> tables, TSO commands, catalog levels, z/OS UNIX System Services files, and others.

ISPF Productivity Tool expands the concept of data set to objects so that ISPF functions and new ISPF Productivity Tool functions that work on data sets can be used to work on other object classes.

### Identifying objects

ISPF Productivity Tool includes an automatic object identifier for the data set class. For example, ISPF Productivity Tool automatically identifies VSAM files and knows which method to invoke for these files.

For other object classes, ISPF Productivity Tool uses special notation to identify the object class. For example, DB2 tables are denoted by a leading hyphen. MVS z/OS UNIX System Services files are specified by a leading slash, and workstation (PC) files are specified by enclosing them in double quotation marks.

Note that the leading dash, leading slash, and surrounding quotation marks are not considered part of the object name, and are stripped off before the object name is passed on for processing by the object method.

A list of supported objects, their notation, and function is provided in Appendix G, “Supported objects,” on page 41.

### Methods, OLE, and interfacing to other products

Each class is internally associated with a method that acts on the object based upon the action you specify. For example, when you browse a sequential file, the ISPF Productivity Tool registered method for that operation is to invoke the ISPF browse function.

For the user, the environment resembles Microsoft Windows OLE where by clicking on an object, the appropriate application is invoked and requested to perform the appropriate function. In a similar manner, what is invoked by ISPF Productivity Tool is controlled by a registration process. This process is defined when you customize ISPF Productivity Tool.

ISPF Productivity Tool comes with many built-in methods for different classes of objects. For example, the method for displaying a member list is the powerful ISPF Productivity Tool MSL (Member Selection List).

ISPF Productivity Tool provides an interface to third party products that can handle DB2 files. When you customize ISPF Productivity Tool, you are presented with a list of database administration tools that ISPF Productivity Tool supports and you register the one that is installed. This allows ISPF Productivity Tool to transparently interface to the DB2 database. You can specify the name of a database file right from option 2 (edit), or use the E(dit) line command in an ISPF Productivity Tool OLIST (Object List).

Similar to registering the VSAM editor/browser you have in your installation, the Customization Wizard lets you register other products—one for each object class.

## Object orientation and registering other products with ISPF Productivity Tool

The ISPF Productivity Tool open architecture lets you register your own method—a CLIST or REXX exec that would automatically gain control whenever an object is selected.

Therefore you can write your own interface to support objects for which you do not have the appropriate third-party product. A typical example might be someone who wrote their own CA-Librarian interface instead of using the ISPF Productivity Tool supported CA-ELIPS product.

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### What's new in version 7.1

Here are the changes to IPT. They are indicated in the text through a change bar “|” in the left margin.

#### OLIST enhancements

- New support for an optional “PUBLIC” OLIST library for storing site-wide common Object Lists. A public OLIST may only be modified by an authorized IPT administrator and can not be overridden by an unauthorized user.
- New support for an optional “READ-ONLY” OLIST library for storing site-wide common Object Lists. A read-only OLIST may only be modified by an authorized IPT administrator but it may be customized by a user and stored as a private permanent OLIST.
- Permanent OLIST library management has been enhanced to include and synchronize all user accessible OLISTs by priority of: PUBLIC, PRIVATE, and READ-ONLY libraries. The display of all “Permanent Object Lists” (“O\*”) supports all user accessible OLISTs and enables the user to update OLIST descriptions, define new “Dynamic OLIST” entries, import permanent OLISTs, and rename or delete private OLISTs.
- New line command “CLONE” (or “CLON”) provides a comprehensive menu for cloning any given NON-VSAM data set.
- New dynamic OLIST object type “DD=<ddname>” can be specified in an OLIST. When selected it displays an object list of all data sets allocated to <ddname> or of all currently allocated data sets (if blank).
- “COPY” line command supports sequential data sets of different attributes.
- New main command “FILLCLAS” (or “FC”) is an alias name of “FILLVOL” (“FV”). It checks the existence and attributes of each object of a given OLIST and updates all CLASS and VOLUME fields.
- New main command “LISTCLON” (or “LISTCL”) populates an OLIST with clone data set names matching a given pattern.
- New main command “LISTNVS” (or “LISTN”) populates an OLIST with NON-VSAM data set names matching a given pattern.
- New main command “SHOWARCH” (or “SHOWARC”) is an alias name of “SHOWMIG” (“SHOWM”). It controls the hiding (exclusion) of migrated dataset objects.
- “FREE” line command has been enhanced to allow for compress, release of data set free space, as well as consolidation of consecutive space extents.
- Executed CLIST and REXX EXECs can optionally receive a VOLSER parameter (in addition to the OBJECT NAME), based on an IPT site-wide customization.
- SHOWCMD ON status marker “\*SHOW\*” or SHOWCMD OFF status marker “\*EXEC\*” is included in each OLIST display to assist in CLIST execution.

#### MSL enhancements

- Enhanced main entry panel (main options 1,2,V) now supports an extended “ISPF Project” field. When IPT SCLM support is enabled, a new field for an “SCLM alternate project” is also included.

## What's new in version 7.1

- ISPF Extended Statistics are now fully supported by IPT even in a z/OS V1R10 and older versions. The "STATS" (or "Z") command can create or update a member's ISPF Statistics in "standard" and "extended" format.
- New line command "I" displays in detail the "standard" and "extended" ISPF statistics for a non-load-module member. It displays a load-module map for load-module member (like "L" line command).
- New main command "CLONE" (or "CLON") provides a comprehensive menu for cloning any library in the currently displayed member list concatenation.
- Main commands "COPY" and "MOVE" (line commands "C" and "M") can copy-merge multiple selected members into a sequential data set.
- Support for TSO commands and CLISTs has been enhanced to provide an easy to use interface for executing TSO functions via the line command as well as main command fields.
- New main command "UTIL" directly invokes the ISPF Utility Selection Panel from the member list display.
- New main command "SHOWCMD" (or "SHOWC") controls the prompt display of a TSO command (or CLIST) before execution.
- Executed CLIST and REXX EXECs can optionally receive a VOLSER parameter (in addition to the OBJECT NAME), based on an IPT site-wide customization.
- SHOWCMD ON status marker "\*SHOW\*" or SHOWCMD OFF status marker "\*EXEC\*" is included in each OLIST display to assist in CLIST execution.
- Member tagging has been revamped and significantly enhanced. Members may be easily tagged via the "+" line command or the TAG (also "+") main command.
- Most member related main and line commands come with a "tagged variation", that operates only on members with tags matching a given tag pattern.
- A new comprehensive member title management facility has been created. It enables the user to enter new member titles with optional user keys, and then modify or remove them. A new main command "SHOWTITL" (or "SHOWT") controls the member list title display mode.
- New line commands "(" and ")", prompt the user with an entry panel for displaying or updating the member title and user key.
- A new main command "TITLE" (or "TITL") provides the user complete control over the library member title list. It can STORE, EMPTY, REFRESH, IMPORT, and MIGRATE the member title list.
- A new main command "FILTTITL" (or "FIL(") can filter the member list by a given pattern of a member title.
- A new main command "FINDTITL" (or "F(") can locate the next occurrence of a member title matching a given pattern.
- A new main command "SORTTITL" (or "SORT(") can sort members in ascending or descending order of member title.
- A new main command "FILTUKEY" (or "FIL") can filter the member list by a given pattern of a member user keys.
- A new main command "FINDUKEY" (or "F") can locate the next occurrence of a member user key matching a given pattern.
- A new main command "SORTUKEY" (or "SORT") can sort members in ascending or descending order of member user keys.
- The "FIND" command has been enhanced to search for member names by pattern.
- The "SAVE" command has been enhanced to provide the option of storing or printing a member list with all associated titles and user keys.
- The "FILTER" command has been enhanced to support all variations of the following relation operators: EQUAL, GREATER-THAN, LESS-THAN, BEGIN-WITH, END-WITH, CONTAINED-IN, MATCHING-PATTERN, plus an optional NOT operator for all of supported relations.

- The new "HIDE" main command has been added to support an identical syntax as "FILTER" and assume an implied "NOT" of the specified relation.
- The "UNFILTER" main command has been enhanced to support a history of all active filtering commands.
- Revamped MSL online Assist facility which includes all updates to prior and new commands.
- Member lists can be fully displayed in a maximum screen size of 102 rows by 80 columns.

### EDIT/VIEW enhancements

- New main command "CLONE" (or "CLON") provides a comprehensive menu for cloning the currently being edited member library or sequential data set.

### Object name Point-and-Shoot enhancements

- IPT Object name Point-and-Shoot facility supports name strings that contain TSO variable &SYSUID as well as z/OS System Symbols.

### Command shortcuts

- New command shortcut "INAME" sets up a permanent screen name to current ISPF split and displays the ISPF "SWAPBAR".
- New command shortcut "OLCL" (or "OLCLONE") displays a temporary object list of all clone data sets, matching a given pattern.
- Command shortcut "OLDD" (or "OLDDNAM") displays a temporary object list of all data sets currently allocated to your TSO session in ascending order of DD names.
- New command shortcut "OLN" (or "OLNVSAM") displays a temporary object list of all NON-VSAM data sets, matching a given pattern.

### IPT SET user default updates

- Option to prefer native (generic) data set name patterns instead of the more limited DSLIST pattern convention.
- Include or remove the optional TSO command parameter in OLIST display.

### IQIWIZRD Customization Wizard updates

- Specify site-wide names of OLIST PUBLIC and READ-ONLY libraries.
- Specify site-wide clone data set name suffix (default ".CLONE")
- Specify site-wide member name (default "Z999TITL") of partitioned library member title list.
- Provide values for PEL supported dialog variables: UDLG1 UDLG2 UDLG3 UDLG4 .

### IPT Panel Extension Language (PEL)

The IPT Panel Extension Language (PEL) is now available for selected application panels. It provides support for improved productivity and control over panel definitions by allowing the panel developer to use:

- Common panel sections can be shared across multiple panels via the include panel member facility (like a COBOL COPY statement).
- Multiple panel versions can be dynamically generated based upon environmental conditions (via special IF/ELSE statements). 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.
- Ability to create panels that co-exist in multiple ISPF environments. Panel sections that are dependent on specific ISPF versions, may be dynamically enabled or disabled based on the current ISPF version.

## What's new in version 7.1

- Ability to control user application panels based on the customized values of up to four user defined dialog variables: UDLG1 UDLG2 UDLG3 UDLG4 .

### **IPT active status profile variable**

- Applications that need to verify whether IPT is active may now check whether profile variable IQIIPTON is present and contains a value "yes".

### **IPT batch utility**

This is a brand new component of IPT. It is implemented as a seamlessly integrated front-end to IBM's IEBCOPY utility. In addition to supporting all IEBCOPY standard functionality, it includes the following major enhancements:

- Less restrictive control statement syntax.
- Support dynamic allocation of input and output data sets via new keywords INDSN, INVOL, OUTDSN, OUTVOL.
- Support selection and exclusion of members matching patterns with wild cards characters "\*" (any string) and "%" (any single character).
- Support emptying a partitioned library via EMPTY control statement.
- Support deleting members by a DELETE control statement followed by any number of SELECT and EXCLUDE statements including member name patterns.
- Support renaming of members via the RENAME control statement followed by a number of SELECT statements including member name patterns. .
- Support aliasing of members via the ALIAS control statement followed by a number of SELECT statements including member name patterns. .
- Support user defined member title management (see IPT MSL support above).

### **z/OS level support/ISPF compatibility**

IPT has been tested and certified to run on z/OS Version 1 Release 13 and the corresponding release of ISPF (internally numbered 6.3). Requires a minimum of z/OS Version 1 Release 9.

- Full support for z/OS Extended Volume Architecture (EAV).
- Full support for ISPF Extended Statistics member directory entries.

### **Rolled-up maintenance**

All required, accumulated maintenance has been "sourced" and included in this release.

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## What's new in version 6.1

Here are the changes to IPT that are pertinent to installing and customizing IPT.

### **IQIWIZRD updates**

See Appendix I, "The customization wizard IQIWIZRD," on page 45 for details.

- Option to have IPT disabled by default at startup. Each user may dynamically override it with IPTON command shortcut to enable IPT.

**Note:** IPTON/IPTOFF saves the IPT enable/disable state in the user PROFILE.

- Specification of maximum size of permanent OLIST.
- Specification of maximum size of temporary OLIST.
- Specification of maximum size of Dataset-History list.
- Specification of temporary OLIST prompt threshold count.
- Option to suppress "FIND <string>" prompt after FINDTEXT or GLOBAL FIND.

- Specification of implicitly created OLIST library UNIT name.
- Specification of implicitly created utility work files UNIT name.
- Specification of a secondary archival volume name (for example ARCIVEM).
- Specification of maximum capacity of TSO-Shell Permanent and History command lists.
- Option to disallow accidental job submission via J line command of MSL.
- Option to disallow modifying of a member's ISPF statistics via STATS command.

### **IPT/ISPF logon procedure**

- Alias names IPIMSL, IPIPLST, IPIQUERY have been added to their corresponding IPT modules IQIMSL, IQIPLST, IQIQUERY.

### **z/OS level support/ISPF compatibility**

ISPF Productivity Tool has been tested and certified to run on z/OS Version 1 Release 10 and the corresponding release of ISPF (internally numbered 6.0). Requires a minimum of z/OS Version 1 Release 7.

### **Rolled-up maintenance**

All required, accumulated maintenance has been “sourced” and included in this version.

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## What's new in version 5.10

### **OLIST enhancements**

- New object classes recognized: BOOK (BookManager), SHELF (BookManager), ZONE (SMP/E).
- IBM BookManager invoked when selecting BOOK and SHELF objects.
- VSAM object handler invoked when selecting a VSAM PATH or ALTINDEX file.
- FINDTEXT command now fully supports the GLOBAL AUTO and EXCLUDE settings. All displayed datasets may be searched in one shot (like MSL GLOBAL).
- New command EMPTY, empties (with a confirmation) partitioned and sequential datasets.
- RIGHT (F11) and LEFT (F10) invoke DSLIST line command when the cursor is pointing at an OLIST row.
- FREE command requires a confirmation. This allows the user to invoke it on a range of datasets with full control.
- IBM FileManager/DB2 is supported as a DB2 object handler.
- Object names starting with "/", ".", "~" are recognized as z/OS UNIX objects with a class name of ZUNIX. Fully support them under z/OS v1.9 via ISPF z/OS UNIX API. For lower z/OS levels provide a downward compatibility via the OLIST "OE" (OpenEdition) interface.

### **MSL enhancements**

- New command EMPTY, empties (with a confirmation) some or all of the concatenated libraries.
- The name of EDIT initial macro is preserved as specified in the EDIT main menu screen. Automatically invoke this macro in all EDIT/VIEW sessions until changed by user to another name or blank.
- Supports (under z/OS v1.9) z/OS UNIX file names with absolute path names of up to 1023 characters in length.

## What's new in version 5.10

- Supports properly displaying member lists of libraries with huge number (6 digits) of members. The enhanced LOCATE command can be used to position the member list display at a 6-digit row number.

### Point-and-shoot enhancements

- Support z/OS UNIX object names as targets for a point-and-shoot.
- Support z/OS system symbols starting with "&".
- Support BookManager object names.

### Command shortcuts

- New command IPTCMDSDS allows to dynamically disable/enable selected IPT command shortcuts, without affecting any other IPT functionality. TLIB member IQIDCMDSDS provides an easy way to define the command names that are affected by this feature.
- New command shortcuts: OLBO, OLBK, OLSH, and OLZ, support the new object classes of: BOOK, SHELF, and ZONE.
- OLVS command shortcut also recognizes PATH and ALTINDEX datasets as VSAM objects.
- ISET command shortcut supports a parameter for setting the defaults of a specific function.

### Dataset history list

- The History-List now includes names of accessed VSAM and UNIX objects.

### IQIWIZRD updates

- Number of Dataset-History-List entries can be customized to a maximum of 999.
- IBM BookManager interface customization.
- IBM FileManager/DB2 interface customization.

### IPT/ISPF Logon Procedure

- Alias names SPF and SPIFFY have been added to IPT main module IQIMAIN.
- IQICMDOF DD name: triggers an "IPTCMD OFF" at IPT startup.
- IQIOFF DD name: triggers an "IPTOFF" at IPT startup.
- IQIPANEL DD name: should be used instead of IPIPANEL.

### Installation JCL

- Complete set of JCL skeleton jobs for managing a dedicated SMP/E global zone as a "Single Point of Maintenance".

### z/OS 1.9 support/ISPF compatibility

IPT has been tested and certified to run on z/OS Version 1 Release 9 and the corresponding release of ISPF (internally numbered 5.9).

### Rolled-up maintenance

All required, accumulated maintenance has been "sourced" and included in this version.

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## Chapter 3. ISPF Productivity Tool installation and customization

This chapter describes the requirements to install ISPF Productivity Tool, the installation procedures, and customization of ISPF Productivity Tool. The delivered product code must be installed and maintained using SMP/E as described in the Program Directory for IBM ISPF Productivity Tool V7.1.0, program number 5655-SPF, FMID HIQI710. The following figures list the target and distribution libraries (data sets) used by ISPF Productivity Tool, and their contents.

*Table 1. Distribution data set descriptions*

Library	Description
AIQICLBV	IPT CLIST library (variable blocked)
AIQICLIB	IPT CLIST library (fixed blocked)
AIQIINST	IPT installation and maintenance sample JCL library
AIQILOAD	IPT Linklist load library
AIQILPA	IPT LPA load library
AIQIMLIB	IPT ISPF-message library
AIQIPLIB	IPT ISPF-panel library
AIQISLIB	IPT ISPF-skeleton library
AIQITLIB	IPT ISPF-table library

*Table 2. Target data set descriptions*

Library	Description
SIQICLBV	IPT CLIST library (variable blocked)
SIQICLIB	IPT CLIST library (fixed blocked)
SIQIINST	IPT installation and maintenance sample JCL library
SIQILOAD	IPT Linklist load library
SIQILPA	IPT LPA load library
SIQIMLIB	IPT ISPF-message library
SIQIPLIB	IPT ISPF-panel library
SIQISLIB	IPT ISPF-skeleton library
SIQITLIB	IPT ISPF-table library

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### Installation requirements

The following system software is required for the installation and operation of ISPF Productivity Tool Version 7.1:

- z/OS Version 1 Release 10 or later operating system
- ISPF Version 6 Release 0 or later

## Installation requirements

Installing ISPF Productivity Tool does not require an IPL or authorized mode. Since ISPF Productivity Tool is invoked through libraries pointed to by the TSO LOGON procedure or CLIST, you can install it on a system-wide basis or only for selected programmers.

ISPF Productivity Tool code is fully reentrant. Most of ISPF Productivity Tool code resides above the 16- megabyte line. Most working storage that ISPF Productivity Tool uses is also acquired above the line.

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## Data set naming conventions

The names assigned to ISPF Productivity Tool libraries have the following structure:

- A first-level qualifier (Project). The default value used throughout this manual is IQI. You can change this value during the installation process.
- A middle-level qualifier (Group) specifying the ISPF Productivity Tool release level. The default value used throughout this manual is V7R1M0.
- A library qualifier (Type) specifying the ISPF Productivity Tool target library type. For example, the qualifier for the panel library is SIQIPLIB.

Using these naming conventions (Project.Group.Type), the name for the ISPF Productivity Tool message library for version 7.1.1 is IQI.V7R1M1.SIQIMLIB.

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## Creating ISPF Productivity Tool base (as delivered) environment

The ISPF Productivity Tool delivered code is designed to work above any already existing ISPF environment. The only requirement for creating an ISPF Productivity Tool base environment is to modify an existing TSO LOGON procedure as described below. Any additional customization can be done later after verifying that the ISPF Productivity Tool base environment is running as expected. The ISPF Productivity Tool installation process can be performed while ISPF users are active.

**Note:** Some installations prefer to use a CLIST to perform the same task. However, unless you have a dynamic STEPLIB capability, you cannot allocate STEPLIB through a CLIST or REXX EXEC. If you want to use a CLIST or REXX EXEC to allocate the ISPF Productivity Tool libraries, you have to place the IPT LPA load library in LPALIB. All the allocations required for ISPF Productivity Tool must be active before ISPF Productivity Tool is started. LIBDEFs can be used for applications called within ISPF Productivity Tool, but not for ISPF Productivity Tool itself.

**Note:** Some of the DD names required for ISPF Productivity Tool are new DD names. Do not confuse them with existing ISPF DD names.

The following JCL example illustrates the changes you should make to a copy of your LOGON procedure or you can incorporate the changes into a new LOGON procedure that you create:

```
//STEPLIB DD DISP=SHR,DSN=IQI.V7R1M0.SIQILPA           1
//        DD DISP=SHR,DSN=IQI.V7R1M0.SIQILOAD         2
//        DD .
//ISPLLIB DD DISP=SHR,DSN=IQI.V7R1M0.SIQILPA           1
//        DD DISP=SHR,DSN=IQI.V7R1M0.SIQILOAD         2
//        DD .
//SYSPROC DD ...
//        DD DISP=SHR,DSN=IQI.V7R1M0.SIQICLIB         3
//ISPMLIB DD ...
```

## Creating ISPF Productivity Tool base (as delivered) environment

```
//          DD  DISP=SHR,DSN=IQI.V7R1M0.SIQIMLIB          4
//ISPPLIB DD  ...
//          DD  DISP=SHR,DSN=IQI.V7R1M0.SIQIPLIB          5
//ISPSLIB DD  ...
//          DD  DISP=SHR,DSN=IQI.V7R1M0.SIQISLIB          6
//IQITLIB DD  DISP=SHR,DSN=IQI.V7R1M0.SIQITLIB          7
//IQIUTIN DD  DISP=NEW,UNIT=VIO,                          8
//          SPACE=(CYL,1,1),RECFM=FB,LRECL=80,BLKSIZE=4000
//IQIUTOT DD  DISP=NEW,UNIT=SYSALLDA,                      8
//          SPACE=(CYL,2,2),RECFM=FBA,LRECL=121,BLKSIZE=4840
//IQIUT03 DD  DISP=NEW,UNIT=VIO,SPACE=(3,1)               8
//IQIUT04 DD  DISP=NEW,UNIT=VIO,SPACE=(3,1)               8
//IQIPANEL DD  DISP=SHR,DSN=IQI.V7R1M0.SIQIPLIB(ISR@PRIM) 9
//IQISCLM DD  DUMMY                                       10
```

### 1 The LPA Load Library SIQILPA

This library must be in DD(STEPLIB) or installed in the LPA. If you do not change the TSO LOGON procedure, use a dynamic STEPLIB utility for the LPA load library. During initial ISPF Productivity Tool testing, put this library in DD(ISPLLIB).

**Important note:** The SIQILPA library must always be specified ahead of the corresponding ISPF SISPLPA library. This ensures that ISPF main entry points ISPF, ISPSTART, and PDF first run the ISPF Productivity Tool main program.

The ISPF Productivity Tool load modules can be moved to LPALIB or any other system library. For performance reasons, LPALIB is recommended. Since most of ISPF Productivity Tool resides above the line, extended LPA can be used.

### 2 IPT Load Library SIQILOAD

This library can be placed in DD(ISPLLIB) or DD(STEPLIB).

### 3 CLIST Library SIQICLIB or SIQICLBV

Add the CLIST library to the DD(SYSPROC) concatenation. It is recommended that the ISPF Productivity Tool CLIST library be placed first in the concatenation.

### 4 Message Library SIQIMLIB

Add the message library to the DD(ISPMLIB) concatenation.

### 5 IPT panel library SIQIPLIB

Add the panel library to the DD(ISPPLIB) concatenation. It is recommended that ISPF Productivity Tool panel library be placed first in the concatenation.

**Note:** ISPF Productivity Tool performs its own panel processing optimization. However, you can pre-process other panel libraries in the concatenation.

If you have software packages that simulate allocations (like TSOPLUS, TSORX), do not use these to simulate the ISPF Productivity Tool panel library allocation to ISPPLIB.

### 6 Skeleton Library IQISLIB

Add the skeleton library to the DD(ISPSLIB) concatenation.

### 7 Table Library SIQITLIB

Add a new statement for the table library with DD(IQITLIB). Do not confuse this DD name with ISPF's ISPTLIB.

## Creating ISPF Productivity Tool base (as delivered) environment

### 8 Utility work files

DD statements IQIUTIN, IQIUTOT, IQIUT03 and IQIUT04 are optional. If omitted, ISPF Productivity Tool dynamically allocates these files as temporary data sets, allocated to the UNIT name specified for allocating a new OLIST library (SYSALLDA by default).

### 9 Main panel

IQIPANEL is an optional DD statement. If specified, it provides the installation the ability to designate the name of the main panel that ISPF uses when ISPF, PDF, or ISPSTART is invoked without parameters. If any parameter (such as PANEL(name), PGM(xx), or CMD(xxx)) is specified, the IQIPANEL statement is ignored.

Example:

```
ALLOC DD(IQIPANEL) SHR DA('IQI.V7R1M0.SIQIPLIB(MYPRIM)')
```

ISPF Productivity Tool uses the member name specified with the DD name "IQIPANEL" as the name of the main panel to use, and MYPRIM as the default main panel name. The library used in the DD(IQIPANEL) is ignored; only the member name is inspected. The panel itself must reside in some library of the standard DD(ISPPLIB) concatenation.

In a common setup, the installation may have different main panels for different groups of users stored in one library concatenated to DD(ISPPLIB). The installation would then have a different IQIPANEL allocation for these groups, each having the appropriate member specified in the IQIPANEL allocation.

A special variation of IQIPANEL is a DD name IQIPANxx where xx stands for the current version of ISPF (namely IQIPAN59 for ISPF Version 5.9 and above). If ISPF Productivity Tool finds an IQIPANxx allocation, it overrides the IQIPANEL allocation. The purpose of the IQIPANxx allocation is to allow use of the same panel concatenation for different versions of ISPF.

### 10 SCLM activation DD name (optional)

ISPF Productivity Tool provides integrated SCLM support. If you choose to activate the ISPF Productivity Tool SCLM support for selected users, you need to allocate the DD(IQISCLM) for each user. This DD statement may specify a DUMMY file as follows:

```
//IQISCLM DD DUMMY
```

or

```
ALLOC DD(IQISCLM) DUMMY
```

The ISPF Productivity Tool base environment installation is now complete. You may start using the modified TSO LOGON procedure to run your ISPF under ISPF Productivity Tool control.

**Note:** To finish the full installation, you may need to further customize the ISPF Productivity Tool environment. The next two sections provide the detailed instructions.

---

## Special purpose optional DD statements

You may optionally add these DD statements to the IPT logon procedure or dynamically allocate them before executing IPT, in order to affect the results of IPT initialization:

### //STDISPF DD DUMMY

Causes IPT initialization to irrevocably pass control to ISPF without any remaining IPT functionality.

### //IQICMDOF DD DUMMY

Causes IPT initialization to automatically issue an IPT CMDS OFF command to disable all command shortcuts specified in member IQIDCMDS of library SIQITLIB.

### //IQIOFF DD DUMMY

Causes IPT initialization to automatically issue an IPT OFF command to disable normal IPT functionality. You subsequently activate all IPT functions by issuing a IPT ON (shortcut IPTON) command.

### //IQIPANEL DD DISP=SHR,DSN=<PDS1ib>(<PanName>)

Causes IPT initialization to use PanName as the primary menu panel name.

**Note:** The panel member must be found in the DD(ISPPLIB) concatenation.

### //IQIPAN5x DD DISP=SHR,DSN=<PDS1ib>(<PanName>)

Causes IPT initialization to use PanName as the primary menu panel name for ISPF version 5.x.

**Note:** The panel member must be found in the DD(ISPPLIB) concatenation.

**Example:** IQIPAN59 will be in effect only when running IPT under z/OS v1.9 (with ISPF v5.9).

### //IQISCLM DD DUMMY

When IPT is customized (see Appendix I, “The customization wizard IQIWIZRD,” on page 45) to conditionally support SCLM, this DD statement will cause enablement of the IPT SCLM interface.

---

## Replacing IEBCOPY with IPT batch utility IQIBUTIL

In order to transparently replace IEBCOPY with IQIBUTIL, without any changes to your IEBCOPY JCL nor to the EXEC PARM and SYSIN control statements, you must:

- Add alias name IEBCOPY to member IQIBUTIL in target library SIQILOAD. You may use IPT MSL "ALIAS" command for this action.
- Copy the customized member IQIDFLTS (see Appendix I, “The customization wizard IQIWIZRD,” on page 45) into any library that is included in the z/OS system PARMLIB concatenation list.
- Define target library SIQILOAD (or its copy) in the z/OS system LINKLIST.

With this in place, you may start executing IEBCOPY with all the additional EXEC PARM and SYSIN control statements to take full advantage of the IQIBUTIL advanced functionality.

---

## ISPF Productivity Tool single point of maintenance option

ISPF Productivity Tool is designed to be z/OS and ISPF release independent. It dynamically enables or disables any ISPF Productivity Tool functions that are dependent on certain z/OS or ISPF releases. As a result, you may consider maintaining a dedicated SMP/E global zone serving as a single point of ISPF Productivity Tool maintenance for all z/OS images of your enterprise.

---

### Customizing the ISPF primary menu panel

The primary menu panel customization is totally optional since the entire ISPF Productivity Tool functionality is available from any panel by entering main commands such as: OLIST, EDIT, VIEW, BROWSE, TSO.

Modify the ISPF main menu. See Appendix D, “Sample modified main menu panel,” on page 33 for a sample illustration. Changes to the main panel are made to a copy of your installation's main ISPF menu stored in the ISPF Productivity Tool panel library. In this way, the original panel is left intact and other users currently logged-on to ISPF Productivity Tool are not affected while the changes are being made. Perform the following procedure to modify the ISPF main menu:

1. Copy the panel to be changed (typically ISR@PRIM or ISR@MSTR) to the ISPF Productivity Tool panel library (IQL.V7R1M0.SIQIPLIB).

2. Invoke EDIT on the panel in the IPT panel library.

3. Change the title line to indicate that ISPF Productivity Tool is installed. For example, change the title

```
ISPF MAIN MENU
```

to

```
IPT/ISPF PRIMARY OPTION MENU
```

4. For consistency with other ISPF Productivity Tool panels, change the first five positions on the title line to the characters -IPT-.

**Note:** If the / character is defined as an attribute character, you may have to change the attribute character in the )ATTR section to another unused value and change the panel accordingly.

5. In the )PROC section, add the following line immediately after the ) PROC line, starting in column 1:

```
&WTRAIL=TRUNC(&ZCMD,'.') &WTRAIL=.TRAIL "
```

6. Add a new menu option for OLIST (The Object List). In the body section, add a description line:

```
0 OLIST - IPT Object/Data Set List
```

7. Optionally add VIEW or BROWSE to the main menu.

The ISPF function that invokes VIEW (typically main option 1) is specified by the “PGM(ISRBRO)” statement in the )PROC section. ISPF Productivity Tool automatically traps this call and invokes either BROWSE or VIEW. The choice taken by ISPF Productivity Tool may be defined by the Customization Wizard or by each user through the IPT SET command. Also, in each of those cases ISPF Productivity Tool displays a Member Selection List (MSL) main menu in which the user may override the default function for selected members. If you still would like to explicitly define a separate option for VIEW (or BROWSE), in the body section, add a description line:

```
V VIEW - Display and optionally change source data or listing
```

8. In the )PROC section, add the following lines to the options:

```
V,'PGM(IQIMSL) PARM(V,<PROMPT>) NEWAPPL(ISR) PASSLIB SCRNAME(VIEW)'  
O,'PGM(IQIPLST) PARM(-,&WTRAIL) NEWAPPL(ISR) PASSLIB NOCHECK SCRNAME(OLIST)'
```

**Note:** Choose an unused option number or letter for V.

9. Add a line to the body area of the panel informing users that the ISPF Productivity Tool general commands (BROWSE, EDIT, VIEW, OLIST, and

IPTHELP) are available on every ISPF panel. The ISPF Productivity Tool general commands are accessible from every panel without having to set up command table entries.

### Customizing ISPF Productivity Tool

After verifying that the ISPF Productivity Tool base environment is fully operational, you should run the ISPF Productivity Tool Customization Wizard in order to customize or at least review all ISPF Productivity Tool installation settings. Perform the following steps to customize your ISPF Productivity Tool:

#### Step 1

**Note:** Customization Wizard CLIST %IQIWIZRD updates SIQIPLIB member IQIDFLTS and SIQITLIB member IQITSVAL. The original copies of these members can always be restored from the corresponding distribution libraries AIQIPLIB and AIQITLIB. Alternatively, you may save the current customization settings by first copying those members into a backup source library. For more information about the customization wizard see Appendix I, “The customization wizard IQIWIZRD,” on page 45.

Logon to TSO using the modified LOGON procedure of your ISPF Productivity Tool base environment.

While in TSO READY mode, run the Customization Wizard by entering the following command:

```
%IQIWIZRD
```

Make sure that you have the following information available:

- The name of the ISPF Productivity Tool table library (for example, IQI.V7R1M0.SIQITLIB).
- The name of the ISPF Productivity Tool panel library (for example, IQI.V7R1M0.SIQIPLIB).

If you want PANVALET support using the PANVALET interface supplied with ISPF Productivity Tool:

- The name of the CA-PANVALET/ISPF source (not preprocessed) panel library.

The IQIWIZRD CLIST prompts for the name of your ISPF Productivity Tool table and panel libraries.

For the most part, the panels displayed by the Customization Wizard are self-explanatory. However, certain options require discussion. You can read about those options in the following sections or, if you prefer, you can proceed to Step 2. [XXX: Is this reference correct?]

#### IPT TSO shell

The IPT TSO shell keeps a history of TSO commands, CLISTs, or REXX EXECs issued by the user (up to 999) and displays them in the TSO Command Shell. For security reasons, you may want to exclude some commands from being recorded, for example, you may want to exclude commands that accept passwords in a visible form (“in the clear”). During customization, you are given the opportunity to add entries to a list of commands on which you specify whether recording is to be excluded. This allows you to turn recording on and off without removing entries from the list. If you turn off the recording, the list contains the PASSWORD and PROTECT commands with recording turned off when it is shipped.

## Customizing ISPF Productivity Tool

The IPT TSO shell can be activated or deactivated by each user.

### ISPF Productivity Tool Enhanced View Functionality

ISPF Productivity Tool offers enhancements to the VIEW function. You have a choice of SHARED VIEW and EXCLUSIVE VIEW modes, with the ability to enforce one of the two modes.

- **Shared VIEW:** VIEW that permits several users to work with the same file at the same time. Although this VIEW disables the SAVE command, a user can still save through the REPLACE command by using the same name of the member as a parameter to the REPLACE command.
- **Exclusive VIEW:** A VIEW that does ENQ on the file. Exclusive VIEW supports the SAVE command.

After choosing which view type to use as a default, you indicate whether users are permitted to override the default. If they can, the browse/edit/view entry panels as well as the options displayed by the SET command include an option that allows the user to select his own view mode.

For more information about the differences between these two view modes, see "Shared and exclusive VIEW" in the *IPT User's Guide*.

### Registering Object Class Support

During the customization process you need to specify which object classes you want to support. For each object class, you must register the supporting product. Here are some of the supported objects and their registered products. See Appendix I, "The customization wizard IQIWIZRD," on page 45 for the most up-to-date list of objects and interfaces.

#### Object Class: VSAM files

VSAM files supports the following products:

##### FileManager

IBM's advanced data file browse/edit/report facility.

##### FileAid

The Customization Wizard provides support for FileAid Version 6 (and below), and for FileAid Version 7 through the DataXpert interface. The FileAid interface provides access to VSAM files through browse (option 1), edit (option 2), DSLIST (option 3.4), and from OLIST.

##### DataXpert

The DataXpert interface is similar to the FileAid interface.

**Ditto** IBM's data file browse/edit/report facility.

##### MacKinney

ISPF Productivity Tool interfaces to the MacKinney VSAM utility.

##### Sample

ISPF Productivity Tool provides access to a sample VSAM browser that uses IDCAMS to browse VSAM files. This sample interface can be used to demonstrate the transparent interface to VSAM objects. The CLIST that is invoked for the sample VSAM browser can be used as template to write your own interface or provide support for a VSAM browsing product not listed here.

### User-Written

In addition to the sample VSAM browser, you can request that ISPF Productivity Tool invoke the IPIVSAM CLIST whenever a VSAM object is selected for browse, edit, or view. This provides you with the ability to create your own interface, or interface to a product not listed above.

### Object Class: Panvalet

It supports Panvalet/ISPF:

#### Panvalet/ISPF

Two types of interfaces are provided—a program interface, and a CLIST interface. The program interface is faster, but the CLIST interface provides the ability to modify the interface (for example add LIBDEF statements) or to support other products that interface to Panvalet libraries.

### Object Class: Librarian

Librarian supports CA-ELIPS.

#### CA-ELIPS

Similar to Panvalet ISPF, the librarian support provides a CLIST and a program interface.

### Object Class: DB2

DB2 supports the following products:

#### CA-Pro-Edit

An interface to CA-Pro-edit is provided.

#### CA-Pro-Alter

ISPF Productivity Tool uses the same interface used for CA-Pro-Edit.

#### FileManager-DB2

IBM's advanced DB2 browse/edit/report facility.

#### RC/UPDATE

Support for the Platinum Technology RC/UPDATE.

#### FileAid/DB2

An interfaces to this product is provided.

#### CDB/EDIT

An interface to this product is supported.

### Object Class: BOOK

BOOK supports IBM BookManager Book

#### IBM BookManager Book

An interface to IBM BookManager is provided.

### Object Class: SHELF

SHELF supports IBM BookManager Shelf

#### IBM BookManager Shelf

An interface to IBM BookManager is provided.

### Object Class: User-Objects

User-Objects supports User-Written.

## Customizing ISPF Productivity Tool

### User-Written

User-objects are installation defined. ISPF Productivity Tool invokes the CLIST/REXX exec or program of your choice to handle the user objects.

User-defined objects are specified with a leading greater-than sign (for example, >MYOBJECT)

A sample user-defined object interface is provided in CLIST IQI\$OUT. The defined object is a jobname, where the browse command is defined as browsing the held output, editing as editing the held output, and view is mapped into the job-status command. Another typical use is to define mail/messages as objects and provide interfaces to the mail system, where browse is defined as browsing the mail, and edit as creating/responding to mail.

### Specifying SESSION EXIT

The Customization Wizard lets you specify a SESSION EXIT. The purpose of this exit is to provide you with the ability to invoke programs (or CLISTs, or REXX execs) at the time ISPF starts, or whenever a new split is started. Unlike ISPF's initialization exit, the ISPF Productivity Tool session exit supports dialog manager commands (ISPLINK/ISPEXEC). A typical exit may be used to invoke an e-mail program to retrieve user's messages. Another possibility is to use the session exit to allocate the OLIST library. (See sample CLISTs IQICRPLS and IQICRTBL in SIQICLIB library.)

### COMPRESS Function Serialization Support

The Customization Wizard offers two types of serialization for the COMPRESS function. ISPF Productivity Tool supports the mode of operation called EXCLUSIVE CONTROL, which means it locks the user's access to the library to prevent any overlay when compressing a file.

ISPF Productivity Tool also supports an alternative approach called SHARED-WRITE. It allows compression of libraries shared among multiple ISPF users and avoid the MVS ENQ propagation problem.

When the Customization Wizard completes processing, it displays the message

```
INSTALLATION DEFAULTS WERE SAVED
```

If ISPF Productivity Tool is already activated, the changes affect all users who log on to ISPF Productivity Tool from this point on. Users already logged on are not affected until they log off and log on again.

**Note:** The installation default values are kept in the ISPF Productivity Tool panel and table libraries. If you use any caching mechanisms for these libraries (for example, VLF), you may have to refresh the look-aside buffers (for example, VLFNOTE) to reflect the changes.

**Note:** Most of these default values can be overridden by each user by using the IPT SET command, after which they are stored in the user's PROFILE library. As a result, users of prior ISPF Productivity Tool (or SPIFFY) versions may not be affected by any changes to those site-wide default settings.

**Step 2** ISPF Productivity Tool supports a large number of products from other vendors. You need to review environmental requirements to see if you

need to make any adjustments. See Appendix E, “ISPF Productivity Tool and other products,” on page 35 for details.

**Step 3** Make ISPF Productivity Tool available to users. To provide the LOGON procedure to users, copy or move the modified LOGON procedure back into the library from which users will access it.

**Note:** If you add a new LOGON procedure for existing users, you may have to use the TSO ACCOUNT command or your installation's security product, or both, to authorize the use of a new LOGON procedure.

ISPF Productivity Tool installation is complete. A TSO user who logs on to the modified LOGON procedure and enters ISPF operates under ISPF Productivity Tool. A new user of ISPF Productivity Tool sees the ISPF Productivity Tool tutorial displayed before the main ISPF panel. You can press END (PF 3) to exit the tutorial. If you have modified the main menu panel, the modified panel is displayed.

When ISPF Productivity Tool starts, it checks for the presence of the DD(IQITLIB). If that DD is missing, ISPF Productivity Tool invokes standard ISPF and disable all ISPF Productivity Tool functions.

### ISPF Productivity Tool general commands customization

This section explains how to customize the ISPF Productivity Tool commands that are dynamically defined to ISPF as general commands available from any panel.

#### ISPF Productivity Tool command shortcuts

There are 60 ISPF Productivity Tool command shortcuts that are normally defined as ISPF general commands. The verb of each of those commands can be either modified to a different (unique) command name or completely removed.

Member IQICMND5 of the IPT table library (SIQITLIB) controls all the necessary customization for ISPF Productivity Tool command shortcuts (see Appendix B, “Member IQICMND5,” on page 29). It is delivered with commented (\* in first column) statements for all supported command shortcuts.

To modify any shortcut, uncomment its entry and change the second and third tokens as follows:

- To completely disable a command shortcut, blank out second token (new verb) and third token (new shortcut).
- To just modify the verb of a particular command, replace the second token (new verb) and blank out the third token (new shortcut).
- To modify the verb and shortcut of a particular command, replace the second and third tokens as required.

For example:

- To disable the shortcut for command verb “EX9” specify a statement like  
EX9
- To replace the verb and shortcut for command verb “EFILE” with “EVSAM” (the verb) and “EVS” (the shortcut), specify a statement like  
EFILE EVSAM EVS

## ISPF Productivity Tool general commands customization

**Note:** Any valid changes to member IQICMND5 take effect the next time you logon to ISPF Productivity Tool and are reflected in the output of the IPT? command.

**Note:** If member IQICMND5 is found to have a syntax error during ISPF Productivity Tool initialization, the erroneous statement is skipped and user is notified with "User-specified command overrides error report placed in DD(IQILOGPR)". You should either remove or correct the statement in error.

Member IQIDCMDS of the IPT table library (SIQITLIB) controls the names of command shortcuts that can be dynamically disabled/enabled via the IPT CMDS (IPTCMD shortcut) command (see Appendix C, "Member IQIDCMDS," on page 31). It is delivered with the following command shortcut names: BR, ED, OL, VI. To include any other shortcut in this list, uncomment its entry in member IQIDCMDS.

### ISPF applications and ISPF Productivity Tool general commands

If an ISPF application invokes a main command with the name EDIT, BROWSE, VIEW, OLIST, QUIT or TSO, the ISPF Productivity Tool general command of that name is normally run, rather than the command of the application with the same name. You may handle this conflict in one of the following ways:

- Precede the command with a greater than (">") sign.

Example:

To have the command "EDIT" processed by an application rather than by ISPF Productivity Tool, enter the command:

```
>EDIT
```

- Disable the ISPF Productivity Tool command or commands within the application or applications in conflict.

Each ISPF Productivity Tool general command is controlled by a Dialog Manager variable:

Command	Variables
EDIT	&IPIGCOED
BROWSE	&IPIGCOBR
VIEW	&IPIGCOVI
OLIST	&IPIGCOPL
TSO	&IPIGCOTS
QUIT	&IPIGCOQT

If the variable is set to null (&Z), the general command is processed by ISPF Productivity Tool. If the variable is set to 'PASSTHRU', the general command is disabled, and is processed by the application.

To completely disable the IPT EDIT, BROWSE, and VIEW general commands, you must edit the first ISPF panel of the application as shown in the following examples:

To disable BROWSE as a ISPF Productivity Tool general command, modify the panel by entering the string:

```
)INIT  
&IPIGCOBR = 'PASSTHRU' /* DISABLE IPT BROWSE COMMAND FOR THIS  
PANEL */
```

## ISPF Productivity Tool general commands customization

To re-enable the BROWSE general command, modify the panel by entering the string:

```
)INIT  
&IPIGCOBR = 'PASSTHRU' /* DISABLE IPT BROWSE COMMAND FOR THIS  
PANEL */:
```

The ISPF Productivity Tool CLIST library contains an edit macro that automatically adds the control variables to the )INIT section of a panel. To disable one or more ISPF Productivity Tool general commands automatically, bring up the panel you want to modify in an EDIT session. On the command line, enter the command:

```
%IQIUGCMD
```

This command inserts statements disabling all five ISPF Productivity Tool general commands into the )INIT section of the panel. You can delete any of the statements corresponding to commands that do not need to be disabled, and then save the panel.

To enable one or more ISPF Productivity Tool commands, follow the same procedure, but enter the command:

```
%IQIUGCMD ENABLE
```

If you want the commands to be enabled on exit rather than on entry to the panel, move the inserted statements from the )INIT section to the )PROC section. Delete the unneeded statements and then save the panel.

**Note:** If an application invokes ISPF EDIT or BROWSE (called by the ISPEXEC EDIT or ISPEXEC BROWSE service), the commands EDIT, BROWSE and VIEW are passed to the application, whose responsibility is to process these commands. If an application explicitly invokes IPT EDIT, BROWSE, or VIEW from an Application or CLIST, the commands EDIT, BROWSE, and VIEW are processed by ISPF Productivity Tool.

### Migrating from IBM ISPF Productivity Tool Version 5.10 or 6.1

This section explains the activities involved in migrating an ISPF Productivity Tool version 5.10 or 6.1 environment into ISPF Productivity Tool version 7.1.

#### TSO LOGON procedure updates:

1. Ensure that all references to ISPF Productivity Tool target libraries in the various DD statements and CLISTs specify the selected names for ISPF Productivity Tool v7.1 target libraries. This includes such system library lists as LPA, LINKLIST, and APF.
2. Replace DD(IPITLIB) with DD(IQITLIB) for the SIQITLIB table library.
3. If present, replace DD(IPIPANEL) with DD(IQIPANEL) for specifying the ISPF primary menu panel name.

#### Run IQIWIZRD customization wizard:

1. Determine all required existing and additional IPT customization.

**Note:** You may first run the IPT v5.10 or v6.1 wizard (IQIWIZRD) under IPT v5.10 (or IPT v6.1) in order to determine all your previously selected customization options.

2. Execute the IPT v7.1 customization wizard under control of the IPT v7.1 logon procedure and specify all previously selected settings and any new required options.

## ISPF Productivity Tool general commands customization

3. Place all customized CLISTs for supported objects or Session- Initialization-Exit in the ISPF Productivity Tool v7.1 SIQICLIB and SIQICLBV libraries.

### Command shortcuts customization:

- Review for conflicts and update, if necessary, members IQICMNDs and IQIDCMDS of the SIQITLIB library in order to disable or rename certain command shortcut verb names.

---

## ISPF Productivity Tool maintenance

ISPF Productivity Tool maintenance is fully controlled by SMP/E. You should periodically review and apply all available maintenance as posted on the IBM ISPF Productivity Tool web-site at <http://www-306.ibm.com/software/awdtools/ispfproductivitytool/support/>

To determine the maintenance level of ISPF Productivity Tool at your installation, enter the following command on any ISPF Productivity Tool panel:

```
IPT VER
```

or shortcut IVER.

The initial screen displays the range of installed APARs. The scrollable list displays the date and maintenance level of each ISPF Productivity Tool module.

## Maintenance-specific commands

ISPF Productivity Tool Version 7.1 has a set of diagnostic commands that can help IBM support personnel perform problem investigations.

The commands related to maintenance are as follows:

- MAINT
- VER
- DIAG
- SNAP

These commands are invoked from any main command line of any panel. Each of them is prefixed with ISPF Productivity Tool.

Examples:

```
IPT MAINT  
IMAIN
```

The following explains each of these commands and how to use them.

### IPT MAINT

MAINT creates a report that contains information such as applied APARS, current ISPF Productivity Tool version levels, and module versions. This report should normally be sent with any ISPF Productivity Tool problem report ticket (PMR).

You may enter the command IPT MAINT (shortcut IMAINT) from the main command line of any panel. It creates an "IPT Maintenance Report" in SYSOUT data set DD(IQILOGPR) of your TSO session.

### IPT VER

This command displays the “IPT Maintenance Report” on your screen. You may enter the command IPT VER (shortcut IVER) from the main command line of any panel.

### IPT DIAG

The IPT DIAG command (shortcut IDIAG) lets you turn on the ISPF Productivity Tool tracing and function logging facility. By default ISPF Productivity Tool runs with the tracing facility disabled.

Occasionally, IBM support may ask you to run a failing scenario while the ISPF Productivity Tool tracing facility is active.

### IPT SNAP

The IPT SNAP command (shortcut ISNAP) provides you a snapshot of the current ISPF Productivity Tool in-core trace table (if active) or of the entire region of your TSO session.

Typically, when IBM support asks to run with ISPF Productivity Tool trace active, you are also asked to issue a SNAP command at the end of the failing scenario in order to output the in-core data into DD(IQITRSNP) of your TSO session so that it can be sent to IBM for further analysis.

## Bypassing ISPF Productivity Tool (invoking standard ISPF)

When ISPF Productivity Tool runs in batch, it automatically passes control to ISPF as if ISPF Productivity Tool were not installed.

Sometimes you may want to invoke ISPF directly without the ISPF Productivity Tool environment. There are several ways to invoke standard ISPF without ISPF Productivity Tool. Use one of the following methods to accomplish this task:

- Invoke ISPF (or PDF or ISPSTART) with the additional parameter STDISPF.

Example:

```
ISPF STDISPF
```

or

```
ISPF 2 STDISPF
```

- If you want to restrict a user to standard ISPF automatically, do not allocate IQITLIB to the user. If IQITLIB is not allocated, standard ISPF is invoked.
- If a group of users are sharing a procedure that allocates IQITLIB, you can still restrict a particular user to standard ISPF by adding a dummy DD name to the user's LOGON procedure. Add the DD name STDISPF as follows:

```
ALLOC DD(STDISPF) DA('NULLFILE')
```

ISPF Productivity Tool ignores the data set name and inspects only the DD name.

- Standard ISPF can also be invoked through its entry points ISRPCP or ISPICP:

```
ISPICP PANEL(ISR@PRIM)
```

or

```
ISRPCP
```



---

## Appendix A. The installation tape

The product distribution tape contains the following files in JES2 XMIT format. The file attributes are those of the resulting files when loaded onto disk and processed by the TSO RECEIVE command.

File	Library
Relative File 1	AIQIINST library: JCL and other members required to install and maintain IPT  File name: IBM.HIQI710.F1.XMIT RECFM=FB, LRECL=80, BLKSIZE=8800
Relative File 2	AIQICLIB CLIST library: CLISTs used by IPT in fixed-length format  File name: IBM.HIQI710.F2.XMIT RECFM=FB, LRECL=80, BLKSIZE=8800
Relative File 3	AIQICLBV library: same as File 2, but in variable-length format  File name: IBM.HIQI710.F3.XMIT RECFM=VB, LRECL=251, BLKSIZE=8800
Relative File 4	AIQILOAD library: IPT load modules for private use  File name: IBM.HIQI710.F4.XMIT RECFM=U, LRECL=0, BLKSIZE=6144
Relative File 5	AIQILPA library: IPT load modules for LPA  File name: IBM.HIQI710.F5.XMIT RECFM=U, LRECL=0, BLKSIZE=6144
Relative File 6	AIQIMLIB IPT message library  File name: IBM.HIQI710.F6.XMIT RECFM=FB, LRECL=80, BLKSIZE=8800
Relative File 7	AIQIPLIB IPT panel library  File name: IBM.HIQI710.F7.XMIT RECFM=FB, LRECL=80, BLKSIZE=8800
Relative File 8	AIQISLIB IPT skeleton library  File name: IBM.HIQI710.F8.XMIT RECFM=FB, LRECL=80, BLKSIZE=8800
Relative File 9	AIQITLIB IPT ISPF table library  File name: IBM.HIQI710.F9.XMIT RECFM=FB, LRECL=80, BLKSIZE=8800

## The installation tape

---

## Appendix B. Member IQICMNDS

This member is delivered in the ISPF Productivity Tool table library (SIQITLIB). All entries are initially commented out (\* in column 1).

```
*-----*
*  IBM ISPF Productivity Tool                               *
*  5655-SPF (C) Copyright IBM Corp. 1989,2012. All rights reserved. *
*-----*
*
*-----*
*              Main Command Substitution Table              *
*              =====*
*
* This member contains user-defined substitutions to all IPT standard *
* main commands that are inserted into the ISPF command table.      *
* There are only 2 types of lines:                                   *
*@* Comment line - any non-action text.                            *
*   Starts with "*" in column 1.                                    *
*@* Substitution line - specifies an IPT main command substitution. *
*   Starts with " ", ",", or an alphabetic character in column 1.   *
* Note: each substitution statement is initially commented out!     *
*
*              Substitution Line Syntax                      *
*              -----*
* Free form positional tokens delimited by any number of:          *
* blanks (" ") and or commas (",") up to and including column 72.  *
* In-line comment starts with " *" until end of line.              *
* Each record may contain only a single line (no continuation).    *
*
*              Substitution Line Positional Tokens           *
*              -----*
*#1) IPT delivered main command verb name.                          *
*#2) Customer specified verb name substitution.                     *
*#3) Customer specified command shortcut substitution.              *
*
*              Substitution Line Rules                       *
*              -----*
*@* Minimum token length is 2. This is the minimum length for IPT *
*   main command verbs and shortcuts.                               *
*@* Token-1 is mandatory and must match an IPT command verb.      *
*@* If only Token-1 is present, the IPT command gets disabled.    *
*@* If there are multiple substitution lines with identical Token-1, *
*   only the last one takes effect.                                 *
*@* If there are multiple substitution lines with identical Token-2, *
*   only the first one takes effect.                               *
*@* If Token-3 is present, it must be a valid prefix of the verb   *
*   name specified in Token-2.                                     *
*
*              Examples                                       *
*              -----*
* " BROWSE, EXAMINE, EXAM "                                         *
* meaning: substitute verb "BROWSE" with verb "EXAMINE" and shortcut *
*   "EXAM".                                                         *
*
* " QUIT   GIVEUP "                                                *
* meaning: substitute verb "QUIT" with verb "GIVEUP" with no shortcut.*
*
* " EX8           "                                                *
* meaning: disable command verb "EX8".                               *
*-----*
*
*VERB      NEW VERB SHORTCUT   *COMMENT
```

## Member IQICMND5

```

*-----
*IPT????? IPT????? IPT?      *DISPLAY IPT SHORTCUTS
*IPHELP  IPHELP  IPT        *IPT HELP
*IPTOFF  IPTOFF  IPTOF      *DISABLE IPT
*IPTON   IPTON   IPTON      *ENABLE IPT
*IPTCMDS IPTCMDS IPTCMD     *DISABLE/ENABLE IPT SHORTCUTS
*IPTNEWS IPTNEWS IPTNEW    *IPT NEWS
*IDIAG   IDIAG   IDIAG     *IPT DIAGNOSTICS
*INAME   INAME   INAM      *IPT SET SCREEN NAME
*ISET    ISET    ISET      *IPT SET OPTIONS
*ISNAP   ISNAP   ISNAP     *IPT SNAP
*IMAIN   IMAINT  IMAINT    *IPT MAINTENANCE REPORT
*IVERSON IVERSON IVER      *IPT VERSION REPORT
*IVSML   IVSML   IVSM      *IPT VIRTUAL STORAGE MANAGEMENT DISPLAY
*BROWSE  BROWSE  BR        *BROWSE DATA-SET
*EDIT    EDIT    ED        *EDIT DATA-SET
*VIEW    VIEW    VI        *VIEW DATA-SET
*BFILE   BFILE   BF        *BROWSE VSAM FILE
*EFILE   EFILE   EF        *EDIT VSAM FILE
*VFILE   VFILE   VF        *VIEW VSAM FILE
*O*      O*      O*        *SHOW ALL PERMANENT OBJECT-LISTS
*/       */      */        *POPULATE A NEW OBJECT-LIST
*OHIST   OHIST   OH        *DISPLAY HISTORY LIST OF ACCESSED DATASETS
*OLIST   OLIST   OLIS      *DISPLAY OBJECT-LIST
*OL      OL      OL        *DISPLAY OBJECT-LIST
*OL*     OL*     OL*      *SHOW ALL PERMANENT OBJECT-LISTS
*OL/     OL/     OL/      *POPULATE A NEW OBJECT-LIST
*OLDDNAME OLDDNAME OLDD    *DISPLAY ALLOCATED DATASETS BY DDNAME
*OLBASE  OLBASE  OLB      *LISTCAT BASE OF GENERATION
*OLBK    OLBK    OLBK     *LISTCAT BOOKMANAGER BOOKS
*OLBOOK  OLBOOK OLBO     *LISTCAT BOOKMANAGER BOOKS
*OLCAT   OLCAT   OLC      *LISTCAT MULTIPLE PATTERNS
*OLCLONE OLCLONE OLCL     *LISTCAT CLONE DATASETS
*OLDA    OLDA    OLDASD   *LIST DASD ONLINE VOLUMES
*OLE     OLE     OLE      *LISTCAT PDSE LIBRARIES
*OLPDSE  OLPDSE OLPDSE   *LISTCAT PDSE LIBRARIES
*OLGDG   OLGDG   OLG      *LISTCAT GDG DATASETS
*OLHIST  OLHIST  OLH      *DISPLAY HISTORY LIST OF ACCESSED DATASETS
*OLINFO  OLINFO  OLI      *LISTCAT + INFO
*OLMIG   OLMIG   OLM      *LISTCAT MIGRATED
*OLNVSAM OLNVSAM OLN      *LISTCAT NON-VSAM DATASETS
*OLPAGE  OLPAGE  OLP      *LISTCAT PAGE-SPACE DATASETS
*OLSHELF OLSHELF OLSH     *LISTCAT BOOKMANAGER SHELVES
*OLSYS   OLSYS   OLS      *LIST SYSTEM DATASETS
*OLTAPE  OLTAPE  OLT      *LISTCAT TAPE DATASETS
*OLVTOC  OLVTOC  OLV      *LISTVTOC DATASETS
*OLVSAM  OLVSAM  OLVS     *LISTCAT VSAM CLUSTERS
*OLZONE  OLZONE  OLZ      *LISTCAT SMP/E ZONES
*PLIST   PLIST   PLIST    *DISPLAY OBJECT-LIST
*EX????? EX????? EX?      *DISPLAY TSO PERMANENT COMMANDS
*EX=     EX=     EX=      *DISPLAY TSO MOST RECENT COMMAND
*EX1     EX1     EX1      *EXECUTE TSO PERMANENT COMMAND #1
*EX2     EX2     EX2      *EXECUTE TSO PERMANENT COMMAND #2
*EX3     EX3     EX3      *EXECUTE TSO PERMANENT COMMAND #3
*EX4     EX4     EX4      *EXECUTE TSO PERMANENT COMMAND #4
*EX5     EX5     EX5      *EXECUTE TSO PERMANENT COMMAND #5
*EX6     EX6     EX6      *EXECUTE TSO PERMANENT COMMAND #6
*EX7     EX7     EX7      *EXECUTE TSO PERMANENT COMMAND #7
*EX8     EX8     EX8      *EXECUTE TSO PERMANENT COMMAND #8
*EX9     EX9     EX9      *EXECUTE TSO PERMANENT COMMAND #9
*
*-----*
*  IBM ISPF Productivity Tool *
* 5655-SPF (C) Copyright IBM Corp. 1989,2012. All rights reserved. *
*-----*

```

## Appendix C. Member IQIDCMDS

This member is delivered in the ISPF Productivity Tool table library (SIQITLIB). The following command shortcuts are initially specified to be affected by the IPT CMDS command: BR ED OL VI.

```

*-----*
*  IBM ISPF Productivity Tool                               *
*  5655-SPF (C) Copyright IBM Corp. 1989,2012. All rights reserved. *
*-----*
*
*-----*
*              Command Shortcuts Disable/Enable Table      *
*              =====*
*
* This member contains names of IPT command shortcuts that will be *
* affected by the "IPT CMDS OFF/ON" (or "IPTCMD OFF/ON") command. *
* There are only 2 types of lines:                            *
*@* Comment line - any non-action text.                      *
*   Starts with "*" in column 1.                             *
*@* Command line - specifies an IPT command shortcut name.  *
*   Starts with " " or an alphabetic character in column 1. *
*
*              Restrictions                                  *
*              -----*
* Command shortcuts names starting with "IPT" can not be disabled. *
*
*              IQICMNS and IQIDCMDS Relationship            *
*              -----*
* The command shortcut names specified in this table apply to the *
* modified (via IQICMNS) command shortcut names.              *
*
*              IQIDMNS Default Setting                      *
*              -----*
* This table currently specifies the following affected shortcuts: *
* BR, ED, VI, OL.
*
*-----*
*SHORTCUT  *COMMENT
*-----*
*IDIAG     *IPT DIAGNOSTICS
*INAM      *IPT SET SCREEN NAME
*ISET      *IPT SET OPTIONS
*ISNAP     *IPT SNAP
*IMAIN     *IPT MAINTENANCE REPORT
*IVER      *IPT VERSION REPORT
*IVSM      *IPT VIRTUAL STORAGE MANAGEMENT DISPLAY
BR         *BROWSE DATA-SET
ED         *EDIT DATA-SET
VI         *VIEW DATA-SET
BF         *BROWSE VSAM FILE
EF         *EDIT VSAM FILE
VF         *VIEW VSAM FILE
*O*       *SHOW ALL PERMANENT OBJECT-LISTS
*/        *POPULATE A NEW OBJECT-LIST
OH        *DISPLAY HISTORY LIST OF ACCESSED DATASETS
*OLIS     *DISPLAY OBJECT-LIST
OL        *DISPLAY OBJECT-LIST
*OL*     *SHOW ALL PERMANENT OBJECT-LISTS
*/        *POPULATE A NEW OBJECT-LIST
*OLDD     *DISPLAY ALLOCATED DATASETS BY DDNAME
*OLB      *LISTCAT BASE OF GENERATION
*OLBK     *LISTCAT BOOKMANAGER BOOKS

```

## Member IQIDCMDS

```
*OLBO      *LISTCAT BOOKMANAGER BOOKS
*OLC       *LISTCAT MULTIPLE PATTERNS
*OLCL      *LISTCAT CLONE DATASETS
*OLDA      *LIST DASD ONLINE VOLUMES
*OLE       *LISTCAT PDSE LIBRARIES
*OLPDSE    *LISTCAT PDSE LIBRARIES
*OLG       *LISTCAT GDG DATASETS
*OLH       *DISPLAY HISTORY LIST OF ACCESSED DATASETS
*OLI       *LISTCAT + INFO
*OLM       *LISTCAT MIGRATED
*OLN       *LISTCAT NON-VSAM CLUSTERS
*OLP       *LISTCAT PAGE-SPACE DATASETS
*OLSH      *LISTCAT BOOKMANAGER SHELVES
*OLS       *LIST SYSTEM DATASETS
*OLT       *LISTCAT TAPE DATASETS
*OLV       *LISTVTOC DATASETS
*OLVS      *LISTCAT VSAM CLUSTERS
*OLZ       *LISTCAT SMP/E ZONES
*PLIST     *DISPLAY OBJECT-LIST
*EX?       *DISPLAY TSO PERMANENT COMMANDS
*EX=       *DISPLAY TSO MOST RECENT COMMAND
*EX1       *EXECUTE TSO PERMANENT COMMAND #1
*EX2       *EXECUTE TSO PERMANENT COMMAND #2
*EX3       *EXECUTE TSO PERMANENT COMMAND #3
*EX4       *EXECUTE TSO PERMANENT COMMAND #4
*EX5       *EXECUTE TSO PERMANENT COMMAND #5
*EX6       *EXECUTE TSO PERMANENT COMMAND #6
*EX7       *EXECUTE TSO PERMANENT COMMAND #7
*EX8       *EXECUTE TSO PERMANENT COMMAND #8
*EX9       *EXECUTE TSO PERMANENT COMMAND #9
*
*-----*
*  IBM ISPF Productivity Tool
*  5655-SPF (C) Copyright IBM Corp. 1989,2012. All rights reserved.
*-----*
```



## Sample modified main menu panel

```
6,'PGM(ISRPTC) SCRNAME(CMD) '  
7,'PGM(ISPYXDR) PARM(&ZTAPPLID) SCRNAME(DTEST) NOCHECK'  
9,'PANEL(ISRDIIS) ADDPOP'  
10,'PGM(ISRSCLM) SCRNAME(SCLM) NOCHECK'  
11,'PGM(ISRUDA) PARM(ISRWORK) SCRNAME(WORK) '  
0,'PGM(IQIPLST) PARM(-,&WTRAIL) NEWAPPL(ISR) PASSLIB NOCHECK SCRNAME(OLIST) '  
X,EXIT  
SP,'PGM(ISPSAM) PARM(PNS) '  
' , , , '  
' , , , '  
*, '?' )  
)PNTS  
FIELD(ZPS01001) VAR(ZCMD) VAL(0)  
FIELD(ZPS01002) VAR(ZCMD) VAL(1)  
FIELD(ZPS01003) VAR(ZCMD) VAL(2)  
FIELD(ZPS01004) VAR(ZCMD) VAL(3)  
FIELD(ZPS01005) VAR(ZCMD) VAL(4)  
FIELD(ZPS01006) VAR(ZCMD) VAL(5)  
FIELD(ZPS01007) VAR(ZCMD) VAL(6)  
FIELD(ZPS01008) VAR(ZCMD) VAL(7)  
FIELD(ZPS01009) VAR(ZCMD) VAL(9)  
FIELD(ZPS01010) VAR(ZCMD) VAL(10)  
FIELD(ZPS01011) VAR(ZCMD) VAL(11)  
FIELD(ZEXI) VAR(ZCMD) VAL(X) DEPTH(2) IMAGE(ISPEXIT) PLACE(L)  
FIELD(ZEXX) VAR(ZCMD) VAL(X)  
)END
```

---

## Appendix E. ISPF Productivity Tool and other products

While ISPF Productivity Tool enhances ISPF functions, it works with other products. This section explains how you should customize ISPF Productivity Tool if you have other products in your system.

---

### Security packages (RACF, ACF2, TOP SECRET)

ISPF Productivity Tool uses only documented system interfaces and does not bypass any standard security mechanisms that may be used by your installation. As a general rule, ISPF Productivity Tool does not require any change in the authorization rules you have already established for ISPF. Users should read authority for the libraries concatenated in the LOGON procedure.

Some security products, for example, ACF2 and Top Secret, control the commands that TSO users or ISPF users are allowed to issue. If access to any ISPF Productivity Tool command (for example, IPT or MSL) is denied, they must be added to the list of allowable commands.

---

### Program pathing

Some security packages offer the option of access to certain files only through restricted lists of programs, and sometimes only if the program names come from a particular library or calling path. The following paragraphs describes the program structure in ISPF Productivity Tool so that you can inform your security package appropriately.

If a user is invoking standard ISPF, the task structure is unchanged. If ISPF Productivity Tool is active, ISPF, ISPSTART, and PDF are aliases of ISPF Productivity Tool that are attached by the TMP. Internally, they reattach ISPF Productivity Tool. ISPF Productivity Tool then attaches ISRPCP (an entry point to ISPF itself). The following diagram illustrates this relationship:

ISRPCP (an alias of the IBM-supplied ISPF) starts ISPF normally, and then links to module IQIITH, which in turn displays the main panel or invokes the program or CLIST entered on the ISPF/PDF/ISPSTART command line.

When the user selects option 1 (BROWSE), 2 (EDIT), or 6 (TSO), ISPF Productivity Tool uses its own versions of ISRBRO, ISREDIT, and ISRPTC as follows:

**Note:** None of the ISPF Productivity Tool programs run in authorized mode.

User option	Original IFPF Module	IPT replacement
1 (BROWSE)	ISRBRO	IQIMSL
2 (EDIT)	ISREDIT	IQIMSL
6 (TSO)	ISRPTC	IQITSO

---

## ACF2

You need to customize ISPF Productivity Tool under ACF2. Customization of ISPF Productivity Tool depends on the following factors:

- The security features of ACF2 you use
- Where you want to place the ISPF Productivity Tool load modules
- What level of ACF2 you have installed.

Perform the following procedure to customize ISPF Productivity Tool as needed:

1. If your security specifications include a list of TSO commands that users are allowed to run, add the following commands to that list: IQIMAIN, IQIEXPN, ISPICP and ISRPCP.
2. Determine whether your installation uses program pathing rules that apply to the ISPF environment. If not, your installation of ISPF Productivity Tool under ACF2 is complete.
3. Consider whether it is acceptable to bypass some program path checking by specifying PATH(IGNORE) in the access rules. If you do so, your installation of ISPF Productivity Tool under ACF2 is complete.
4. Determine the GEN level of your ACF2 installation. If you have a GEN level below 9208, apply APARs TW95948 and TW95931 to CSECT ACF99@RB.
5. Apply USERMOD UM95948 to ACF99@RB.
6. If you do not require that the ISPF Productivity Tool load modules reside in a trusted library, add the NOSYSLIB keyword to the @RB macro definitions of the commands IQIMAIN, ISPF, PDF, and ISPSTART in ACF99@RB. Once you do so, your installation of ISPF Productivity Tool under ACF2 is complete.
7. If the ISPF Productivity Tool load modules are not in LPALIB or another system library, specify both the ISPF Productivity Tool LPA library and the IPT LOAD library in IEAAPFxx (in PARMLIB).

**Note:** MVS removes the authorization from the STEPLIB libraries if the STEPLIB includes the concatenation of any library that is not APF- authorized. If the ISPF Productivity Tool libraries are in STEPLIB and you have not specified NOSYSLIB for the ISPF Productivity Tool commands, make sure that all your STEPLIB libraries are marked as APF-authorized.

8. If the IBM commands ISPF, PDF, and ISPSTART are defined in member IKJTSoxx (in PARMLIB), define the command IQIMAIN in the same way. (If you are using an older version of TSO that uses CSECTs IKJEFTE2 and IKJEFTE8 instead of IKJTSoxx, include the command IPT in these CSECTs as you have included ISPF, PDF, and ISPSTART.) Once you do so, your installation of ISPF Productivity Tool under ACF2 is complete.

---

## TSO dynamic STEPLIB facility

The TSO Dynamic STEPLIB Facility can be used instead of the DD names STEPLIB and ISPLLIB in the TSO logon procedure to point to the IPT LPA load library (SIQILPA) and the IPT load library (SIQILOAD).

### Products with direct directory update protection

Some products (such as MIM-Multi-Image Manager) control which programs are allowed to update a library directory directly. The ISPF Productivity Tool command EXPDIR invokes such a program. To permit EXPDIR to work, you must add the name of the module it invokes, IQIEXDIR, to the list of programs that are authorized to update directory entries.

---

### PDSMAN

PDSMAN sometimes dynamically alters directory update requests in a nonstandard way. If you indicated during ISPF Productivity Tool installation that PDSMAN is installed and also specified a member name to ignore (such as \$\$\$SPACE), the EXPDIR command is handled by a CLIST named IQIXPDSM. See the documentation included in member IQIXPDSM of ISPF Productivity Tool CLIST library (SIQICLIB) for how to enable it to use the PDSMAN ALTERDIR statement, or to entirely disable the EXPDIR command.

---

### File transfer programs

Some file transfer programs expect ISPF option 6 (TSO) to display a panel with only one input field. The ISPF Productivity Tool TSO Command Shell enhances ISPF option 6 in a number of ways, modifying the panel in a way that causes some of these programs to fail. To access the original ISPF option 6 panel for use with a file transfer program, a user can enter the following command from any panel:

```
TSO /IS
```

or

```
TSO -TSO
```

The user can also enter the command /IS on the command line of the TSO Command Shell. Users can turn off the ISPF Productivity Tool TSO Command Shell and use the ISPF TSO shell instead.

If you have a workstation connection through the ISPF workstation program, you can use the OLIST XFER line command instead of your file transfer program.



---

## Appendix F. OLIST reference list

You can get a reference list of OLISTs by blanking out the name of the OLIST currently on display and pressing ENTER or, on any panel entering the command  
OLIST \*

(shortcuts O\* and OL\*).

The OLIST reference list only contains OLISTs that the user has created or invoked. When you copy OLIST members from other OLIST libraries into your active OLIST library, you must first validate and register such copied members before they can be used as OLISTs. To do so, a user should enter the following command when the OLIST reference list is on display:

VALIDATE

Once the user references a shared OLIST, it appears on that user's OLIST reference list.

**Note:** If the first line of the OLIST is a comment line (a line that starts with an exclamation mark), that comment appears as the description of the OLIST in the OLIST reference list.

## OLIST reference list

## Appendix G. Supported objects

The following table lists the objects supported by every ISPF Productivity Tool function:

Object type	Object identification	Supported product	Example
Sequential, PDS data sets	Standard data set syntax	None needed, built-in support.	ACCOUNTS.PAYABLE.COBOL PAYROL.NORtheast.TRANS
VSAM files	Standard data set syntax	FileManager, FileAid, Data-Xpert, Ditto, MacKinney VSAM utility, a sample browser. Open architecture supports installation written agents.	ACCOUNTS.MASTER.DATA
Panvalet or Librarian files	Standard data set syntax (requires OLE link during installation).	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	None needed, built-in support.	@DD.STEPLIB @DD.ISPPLIB.#2
SCLM hierarchies	Leading less-than sign	None needed, built-in support.	<PROJECT.DEVGROUP.TYPE
DSLIS or OLIS entries	Data set level with patterns (% or * included in the name)	None needed, built-in support.	SYS1.*LIB
z/OS UNIX System Services files	Leading forward slash, tilde or dot (not part of the name)	Automatically supported for MVS system that support z/OS UNIX System Services	/ROOT/TEST/ACCOUNTS-PAY/AP.C
z/OS UNIX System Services files	Leading right parenthesis (not part of the name)	None needed, built-in support.	)/samples/compile.c
PC File names	Name enclosed in double quotation marks		"C:\WINDOWS\SYSTEM\SPFE5.DLL"

## Supported objects

Object type	Object identification	Supported product	Example
User Defined	Indicated by greater-than sign	User defined process through open architecture.	>MY-OBJECT_is/HERE

The ISPF Productivity Tool OLIST also supports these additional objects:

Object type	Object identification	Examples
Comments	Leading exclamation mark	! This is a comment
Dynamic 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 commands	Leading plus sign (the command may include reference to another entry. Specify a slash followed by the entry number)	+LISTDS 'USER12.TEST.DATA' LABEL +RECEIVE +ISPEXEC SELECT PGM(MYPROG) PARM(A) +%MYTEST DSN(/2) TODSN(/3)
Prompt commands	Leading question mark (the command may include reference to another entry. Specify a slash followed by the entry number)	?LISTDS 'USER12.TEST.DATA' LABEL ?RECEIVE ?ISPEXEC SELECT PGM(MYPROG) PARM(A) ?%MYTEST DSN(/2) TODSN(/3)

---

## Appendix H. Invoking ISPF through an alternate program

With ISPF Productivity Tool installed, ISPF is invoked from its internal entry point ISRPCP. If you want ISPF Productivity Tool to invoke a program other than ISRPCP, allocate a DD as follows (where NEWNAME is the name of the program you want to invoke):

```
//SPFPNAME DD DSN=DSNAME(NEWNAME)
```

or

```
ALLOC FILE(SPFPNAME) DA('DSNAME(NEWNAME)')
```

The DSNAME can be any data set, for example, the panel library. ISPF Productivity Tool only inspects the member name.

**Note:** The program name cannot be ISPF, PDF or ISPSTART.

## Invoking ISPF through an alternate program

---

## Appendix I. The customization wizard IQIWIZRD

The customization wizard IQIWIZRD provides the means for a complete customization of ISPF Productivity Tool. Once you start the wizard, it is a matter of filling in the appropriate fields, and moving from one panel to the next. The following panels show you what is available in the wizard.

```
READY
%IQIWIZRD
```

```
PLEASE ENTER THE NAME OF THE -IPT- TABLE LIBRARY OR JUST PRESS ENTER TO EXIT.
EXAMPLE: IQI.SIQITLIB
```

```
====> IQI.V7R1M0.SIQITLIB
```

```
PLEASE ENTER THE NAME OF THE -IPT- TABLE LIBRARY OR JUST PRESS ENTER TO EXIT.
EXAMPLE: IQI.SIQITLIB
```

```
====> IQI.V7R1M0.SIQITLIB
```

```
PLEASE ENTER THE NAME OF THE -IPT- PANEL LIBRARY OR JUST PRESS ENTER TO EXIT.
EXAMPLE: IQI.SIQIPLIB
```

```
====> IQI.V7R1M0.SIQIPLIB
```

```
----- IBMIPT - Customization Wizard -----
COMMAND ==> 1
```

Please select which tasks you want to perform:

- 1 Customization      - Set up IBMIPT options and defaults.
- X EXIT                - Exit - do not customize, do not set up password.

Make selection and press the Enter key or press the END key to exit.

```
===== Web Link =====
http://www.ibm.com/software/awdtools/ispfproductivitytool
=====
```

Make your selections in the following screens and then:  
Press the Enter key to continue, or the END key to exit.

```
+ PREVIOUS DEFAULTS WERE UPDATED BY -IBM- ON 01/09/09 AT 13:02:29
```

## The customization wizard IQIWZRD

```

----- IBMIPT - Customization Wizard -----
COMMAND ==>

+-----+
| Welcome to the IBMIPT customization wizard. You will be presented with a |
| series of screens where you will fill in different customization options. |
|                                     |
| The selected options will determine which screens will be displayed, so |
| don't be surprised if you get different results when you run this utility |
| again with different selected options. |
|                                     |
| Some of the options you select will force a change on all IBMIPT users, |
| while others will only change their defaults. Those options that change |
| default values will only affect new IBMIPT users. Existing users have |
| their defaults already set in their ISPF profile. |
|                                     |
| Note that IBMIPT users can change their defaults via the SET command (by |
| entering "IPT SET" or shortcut "ISET" on any ISPF panel). |
|                                     |
| You may display a list of all command shortcuts by entering main command |
| "IPT?" from any ISPF panel. |
+-----+

```

```

----- IBMIPT - Customization Wizard -----
COMMAND ==> _____

Please select the options you would like to inspect or specify:
(some options are pre-selected by IBMIPT)

Select  Option                                     Notes
-----
S      DASD storage management                   Activate built-in support
S      Browse/View preferences                   Specify VIEW data integrity
S      Obtain info about -IPT- objects           Recommended for new installation
-      Install -IPT- session exits              Specify CLIST/REXX/module names
-      Change names of general commands        Rename -IPT- command names
-      Specify PDS compress options             Compress PDS integrity options
-      Session diagnostics options            Control PANELID and other options
S      User interface options                  Action bars, hotbars, etc.
N      Disable -IPT- at startup by default     Command IPTON manually enables IPT
S      Panel-Extension-Language options        Support for user defined panels

```

```

----- IBMIPT - Customization Wizard -----
COMMAND ==>

Verify Object List (OLIST) defaults (for first time IBMIPT users):
Default OLIST command          ==> B (B=Browse, E=Edit, V=View)
(When a line is selected by number, with the S line command, or with cursor)
Check edit recovery when list opens ==> N (Y=Yes, N=No)
Default cursor position        ==> M (M=Main command, L=Line command)
Show VOLSER of cataloged data-sets ==> Y (Y=Yes, N=No)
Insert VOLSER in OLIST invoked CLISTS ==> N (Y=Yes, N=No)
Native (generic) DSNAME patterns ==> Y (Y=Yes, N=No)
Maximum size of permanent OLIST ==> 2000 (Min=10 Max=99999)
Maximum size of temporary OLIST ==> 20000 (Min=10 Max=99999)
Maximum size of Dataset-History list ==> 100 (Min=10 Max=999)
Temporary OLIST prompt threshold ==> 1000 (Min=10 Max=99999)
(When threshold is reached user is prompted to stop or resume filling list)
Implicitly created OLIST library UNIT name ==> SYSALLDA
Implicitly created utility work files UNIT name ==> SYSALLDA
Default suffix qualifier for CLONE data sets ==> CLONE
Catalog search pattern rules    ==> 1 (0, 1, 2)
(0) Unrestricted dataset name patterns
(1) First character may not be a "wild card"
(2) High level qualifier may not have any "wild card" characters

```

----- IBMIPT - Customization Wizard -----  
 COMMAND ==>

IBMIPT searches for the OLIST (object list) library in the following order:

1. In the list of allocated files, for a DD name PLSTLIBW . If it is pre-allocated (before OLIST is invoked), IBMIPT will use it.
2. In the catalog. If a library by the name "qual1.PLIST.LIBRARY" is catalogued, IBMIPT will use it. "qual1" stands for the first level qualifier you specify on this screen.
3. In the list of allocated files, for a DD name IPITBLIB . If it is pre-allocated (before OLIST is invoked), IBMIPT will use it.

If IBMIPT cannot find the library pre-allocated or catalogued (as explained above), it will try to allocate a new PDSE library, using the name "qual1.PLIST.LIBRARY" with the UNIT name specified below.

Enter/Verify OLIST library defaults (as explained above):

```

PREFIX ("qual1")      ==> U      ( U USERID, P TSO PREFIX)
Allocation UNIT name ==> SYSALLDA (Unit name, blank for SYSALLDA,
                                or * for default TSO unit name)
  
```

IBMIPT also uses DD(IPITBLIB) for specifying a personal library as a repository of persistent tables, such as CUT/PASTE clipboards and the TSO-SHELL command lists. This library may be dynamically allocated at IBMIPT startup whenever DD(IPITBLIB) is omitted from the logon procedure.

----- IBMIPT - Customization Wizard -----  
 COMMAND ==>

When a user selects a permanent OLIST, IBMIPT searches for an ISPF table member with a similar name. The search is done in the following order:

1. The PUBLIC OLIST library that is allocated to DD name PLSTLIBP .  
 A public OLIST can only be imported for use and never be replaced by the user. He may modify it and save it as a PRIVATE OLIST with a different (non public) name.
2. The PRIVATE OLIST library that is allocated to DD name PLSTLIBW .  
 The user has complete control over his private OLISTS.  
 A private OLIST name can not be same as of a public OLIST or any of the following reserved names: "@DD", "@H", "@HH", "@L" . It is also not allowed to start with "@LIST" or "IQI" .
3. The READ-ONLY OLIST library that is allocated to DD name PLSTLIBR .  
 A read-only OLIST can be imported for use, modified and stored as a PRIVATE OLIST with the same (or different) name.

You may specify here the default names of the public and read-only OLIST libraries to be dynamically allocated by IPT when their corresponding DD statement is either omitted from the IPT logon procedure, or specifies a dummy data set.

```

PUBLIC OLIST library ==> IQI.OLIST.PUBLIC.LIBRARY
READ-ONLY OLIST library ==> IQI.OLIST.READONLY.LIBRARY
  
```

----- IBMIPT - Customization Wizard -----  
 COMMAND ==>

IBMIPT uses object-oriented technology to provide users with access to different classes of objects they commonly use. The most common object class is a data set. Within the DATA SET object class, IBMIPT supports several subclasses (for example sequential data sets, PDS data sets).

Each object class is internally associated with a "METHOD" - an access mechanism that indicates how IBMIPT should handle each class. This is similar to the "OLE" concept in Microsoft's Windows on the PC.

Some methods are provided internally by IBMIPT (for example the method that handles PDS libraries and display the MSL -the Member Selection List). Other methods are IBMIPT interfaces to third party products - for example the DB2-table class method requires a third party product that can browse or edit DB2 tables.

The following screens you will select which object classes should be supported by IBMIPT, and which methods each supports.

Press ENTER to proceed or the END key to return to the initial screen.

## The customization wizard IQIWZR

```
----- IBMIPT - Customization Wizard -----
COMMAND ==> _____

Select the optional object classes to be supported. Internal
object classes are already preselected. If you are unsure, select
all options to get more information about each one. You will be
able to de-select undesired option later.

Select  Object Class                               Notes
-----
S      Open Edition files (IQI$UNIX CLIST)         Requires z/OS UNIX Services
S      PC files (IQI$PC CLIST)                     Requires ISPF workstation
S      IBM BookManager data sets                  Interfaces to IBM BookManager
S      IBM SCLM support                           Activates built-in support
-      Panvalet libraries                         Interfaces to third party product
-      Librarian files                            Interfaces to third party product
-      PDSMAN libraries                           Activates built-in support
S      VSAM data sets                             Interfaces to third party product
S      DB2 tables                                 Interfaces to third party product
-      User defined objects                       Define your own interface
```

```
----- IBMIPT - Customization Wizard -----
COMMAND ==>
Specify DASD management products support:

Name of MIGRATION/ARCHIVAL system ==> HSM      (HSM, DMS, ASM2, ABR or BLANK)
Name of secondary ARCHIVAL system ==>          (ABR or BLANK)

Name of MIGRATION/ARCHIVAL volume ==> MIGRAT (e.g. MIGRAT, ARCIVE)
Name of secondary ARCHIVAL volume ==>

Name of "DELETE migrated" command ==> HDELETE (e.g. HDELETE)
(Command name, CLIST, or REXX EXEC to be used instead of the DELETE command
when a user tries to delete a migrated/archived data set in OLIST).

Notes: - If you leave this field BLANK, IBMIPT will recall/restore the
        data set and then display a confirmation screen (that displays the
        data set contents if the DSORG is PO or PS).
        - If you do specify a command, CLIST or REXX EXEC, IBMIPT will
          invoke that command after receiving a confirmation on a panel
          that only lists the name of the data set (no contents displayed).
```

```
----- IBMIPT - Customization Wizard -----
COMMAND ==>
IBMIPT VIEW FUNCTION CUSTOMIZATION:

IBMIPT provides two types of VIEW: SHARED-VIEW and EXCLUSIVE-VIEW .

EXCLUSIVE-VIEW is similar to EDIT - only one user can access the
file (member) at a time. Additionally, a confirmation screen will
be displayed before changes are saved back to the file.

SHARED-VIEW does not issue ENQ on the file, thus allowing others to
edit the file at the same time. Under SHARED-VIEW the save command
is disabled, but the REPLACE/CREATE commands can still be used.

Specify the type of VIEW for your installation:
VIEW TYPE ==> E (E=Exclusive, S=Shared)

Should users be allowed to override the above setting?
USER CAN OVERRIDE THE VIEW TYPE ==> Y (N=No, Y=Yes-Override is allowed)
```

----- IBMIPT - Customization Wizard -----

COMMAND ==>

DEFAULT PROCESS FOR MAIN PANEL OPTION 1 (BROWSE, VIEW)

The program used to invoke BROWSE on the ISPF main menu can have two modes - BROWSE or VIEW. The program ("ISRBRO") is invoked by a statement in the ")PROC" section of the panel: "PGM(ISRBRO)"

When PGM(ISRBRO) is invoked, IBMIPT displays an entry screen that includes a "DEFAULT ACTION ==>" field which provides the ability to set the action to B rowse, V iew, or E dit.

The "DEFAULT ACTION" settings on this screen determines how IBMIPT handle browse requests. This setting is easily overridden by users via the SET command which can be issued on the same panel.

The advantages of VIEW are the ability to change the file, to use CUT and PASTE, and to exclude lines. The disadvantage is that VIEW pre-loads the entire file and uses more resources.

Specify the default action when PGM(ISRBRO) is invoked:

DEFAULT ACTION ==> B (B=Browse, V=View)

----- IBMIPT - Customization Wizard -----

OPTION ==>

Please select data integrity option (for COMPRESS/EXPAND/FREE TRACK functions):

Integrity option ==> 2 (1 or 2)

1 EXCLUSIVE CONTROL:

IBMIPT will use ISPF's COMPRESS function to compress libraries (ISPF uses DISP=OLD for compression). IBMIPT will also use DISP=OLD for the expand directory and FREE tracks functions. The deficiencies of DISP=OLD are:

- The operation cannot be executed if other users/jobs access the file.
- To allow other users to access the file following the exclusive operation, any other function that is allocated to the file (browse, edit, etc.) must be terminated since MVS has upgraded all existing allocations to the file to DISP=OLD. Note that this problem currently exists in ISPF.

2 SHARED WRITE:

IBMIPT will use DISP=SHR with compress/expand, but will utilize the ISPF serialization protocol to ensure that no program that adheres to that protocol writes to the file while it is being processed. SHARED WRITE avoids the EXCLUSIVE CONTROL problems. SHARED WRITE does not introduce a new integrity exposure - programs that do not adhere to the ISPF protocol can always corrupt files by writing to the same file which ISPF performs a copy/save/create operation.

Specify name of COPY and COMPRESS program ==> IQIBUTIL (Default=IQIBUTIL)

----- IBMIPT - Customization Wizard -----

COMMAND ==>

You have indicated that you need to provide support for the IBMIPT Panel-Extension-Language (PEL) in certain user defined panels. All panel names starting with "IQI" are already PEL-eligible. You may enter here the panel name mask of your other PEL-eligible panels.

Following are the panel name mask rules:

- It may contain only alphanumerics, national symbols, and \* or % .
- First character cannot be numeric.
- There must be at least one alphanumeric character or national symbol .
- An \* will automatically be appended to a nonblank short mask.

PEL-eligible user panel name mask ==> \*AB%X\*

You may also specify values (alphanumeric) of PEL optional user dialog variables:

UDLG1 = 1 to be used in a ))IF-VAR.UDLG1=? statement  
 UDLG2 = 2 to be used in a ))IF-VAR.UDLG2=? statement  
 UDLG3 = 3 to be used in a ))IF-VAR.UDLG3=? statement  
 UDLG4 = 4 to be used in a ))IF-VAR.UDLG4=? statement

## The customization wizard IQIWZRD

```
----- IBMIPT - Customization Wizard -----
COMMAND ==>

Specify the default User Interface options for users who have not yet
used IBMIPT. (Enter Y for YES, N for NO):
Activate HOTBARS (on IBMIPT panels) ==> Y (Cursor sensitive command fields)
Globally activate action bars ==> Y (CUA style pulldown menus)
If action bars are globally active:
  Use action bars in edit/BROWSE ==> Y (Note:action bar takes 2 panel lines)
  Use action bars in MSL ==> Y (IBMIPT's Member Selection List)
  Use action bars in OLIST ==> Y (IBMIPT's Object list)
  Use action bars in DSLIST ==> Y (ISPF option 3.4)
Notes 1. Users can change these defaults. The recommended method of changing
       these options is by entering the IPT SET command on the main menu.
       2. Pre-processing ISPF panels will prevent IBMIPT from changing these
          options on ISPF panels. IBMIPT panels should never be pre-processed.
```

```
----- IBMIPT - Customization Wizard -----
COMMAND ==>

Specify the default for BROWSE/EDIT/VIEW main menu display of
reserved name @H :
Display OLIST of History-List ==> Y (Y=Yes, N=No)
Prompt with FIND command after a Global FIND ==> Y (Y=Yes, N=No)
Insert VOLSER in MSL invoked CLISTS ==> N (Y=Yes, N=No)

Specify the default User Interface options for CUT and PASTE
command handling :
  Cut and Paste Options ==> 1 (1, 2)
  (1) IPT CUT/PASTE CUT/PASTE commands are IPT's for all
      applications (ISPF, SDSF, OMVS, etc.)
  (2) ISPF CUT/PASTE CUT/PASTE commands are ISPF's for all
      applications

Specify the site-wide member name for storing library member titles:
Member title list name ==> Z999TITL
```

```
----- IBMIPT - Customization Wizard -----
COMMAND ==>

MSL (Member Selection List) is the IBMIPT built-in method of displaying
member lists in ISPF. MSL provides stacking of multiple commands,
filtering of the member list, global actions (global find, change,
edit), member-preview windows, and other powerful functions.
Specify below the following MSL defaults:
Disable STATS command: disallow to manually change ==> N (N=No, Y=Yes)
                       directory entry ISPF statistics data.
Disable J line command: disallow to submit a member ==> N (N=No, Y=Yes)
                       as a JCL JOB. To prevent from accidental submission.

User modifiable defaults (via the SET command of MSL)
Automatic preview: display top of member window ==> Y (N=No, Y=Yes)
                  following the Locate, Find, or FindText commands.
Enable special characters support in target member ==> N (N=No, Y=Yes)
                  names of line commands: Alias, Copy, Rename.
Enable support for IEBCOPY member name convention: ==> Y (N=No, Y=Yes)
accept "_" (x'6D') and "{" (x'C0') in a member name. Also implied by above.
```

```
----- IBMIPT - Customization Wizard -----
COMMAND ==>
```

IBMIPT has a built-in printing engine that directs printouts to a SYSOUT file without the intermediate ISPF LIST data set.

Users can direct their IBMIPT print requests to the ISPF list data set, or use IBMIPT's faster method.

When the IBMIPT method is selected, IBMIPT dynamically allocates a SYSOUT file using the specifications that reside in each user's profile. On the following screen you will specify the defaults for users who have not yet run under IBMIPT. Users who have already run under IBMIPT have their defaults saved in their ISPF profile.

To change the defaults, users can use the SET PRINT command (in MSL or OLIST).

```
----- IBMIPT - Customization Wizard -----
COMMAND ==>
```

In case IBMIPT print requests directed to the IBMIPT print engine rather than the ISPF LIST dataset, specify the SYSOUT allocation defaults (for users who have not yet used IBMIPT).

IBMIPT users can change these options via the SET command.

Enter/Verify SYSOUT attributes:

```
DESTINATION ID ==> (Node-id<.User-id>)
CLASS ==> A (or Sysout class)
Lines per page ==> 60 (page size)
Keep in HOLD queue ==> N (Y=Yes, N=No)
FORM number ==>
FCB name ==>
WRITER name ==> (Output WRITER)
```

```
----- IBMIPT - Customization Wizard -----
COMMAND ==>
```

IBMIPT provides an alternative TSO command shell that provides command history, permanent commands entries, execution of ISPF dialog manager statements, and substitution of data sets pointed by the cursor (create your own point-and-shoot commands).

For example, if a permanent entry number 5 is defined as:

```
%TRANSFER SYSB.JONES DSN(/)
```

then by entering "TSO 5" on any ISPF screen while placing the cursor on a data set name appearing on that screen would execute the

```
%TRANSFER command on the pointed data set.
```

The SET command is used to activate or deactivate the IBMIPT TSO command shell.

For users who have not yet used IBMIPT, indicate the desired defaults:

```
Use IBMIPT shell ==> Y (Y=Yes - Use the IBMIPT TSO shell, N=No)
Initial screen ==> H (H=History list, P=Permanent list)
Command list limit ==> 100 (History and Permanent maximum number of entries)
Automatic filling ==> Y (Y=Yes - Automatically fill permanent list, N=No)
```

## The customization wizard IQIWZRD

```
----- IBMIPT - Customization Wizard -----  
COMMAND ==>>  
  
Specify DSLIST (option 3.4) parameters:  
  
IBMIPT adds the ability to invoke OLIST (Object/dataset list) directly  
from the DSLIST panel. These object lists are faster and more powerful  
than the ISPF Data set list (DSLISL).  
  
The following option specifies the DEFAULT action taken on the DSLIST panel  
when the user presses the ENTER key with a blank "OPTION ==>>" field:  
  
Default action ==>> TP (DS=DSLISL, PL=Permanent List, TP=Temporary List)  
  
Notes: - Regardless of the selected default, users can select any other  
option by explicitly entering one of the other DSLIST  
panel options (like DS, V, PV, etc).  
- The default action may also be set by each user via the  
SET command on the DSLIST panel.
```

```
----- IBMIPT - Customization Wizard -----  
COMMAND ==>>  
  
SCLM is ISPF's Software Configuration and Library Manager. SCLM provides  
controlled edit capabilities within standard PDS libraries (with member locking,  
check-in/check-out), full development life cycle of applications (including  
a "MAKE"), and extensive reporting. SCLM is an integrated part of ISPF.  
  
IBMIPT can provide significant benefits to SCLM users by integrating SCLM  
support into the standard member list, DSLIST and OLIST. If your installation  
uses SCLM, it is recommended that you activate the SCLM support on this screen.  
  
Activate SCLM support ==>> Y Y =Yes - Support SCLM for all users  
N =No - Do not provide SCLM support  
D =Conditional support. SCLM will only be  
supported for users who at the time IBMIPT is  
started, have a preallocated DD "IQISCLM" .  
This DD can be allocated in the LOGON PROC/CLIST.  
Example: ALLOC DD(IQISCLM) DUMMY  
or //IQISCLM DD DUMMY
```

```
----- IBMIPT - Customization Wizard -----  
COMMAND ==>>  
  
Verify SCLM options:  
SCLM parameter prompt ==>> F Y =Yes - Whenever an SCLM library is accessed.  
N =No - Users must preset the parameters with  
the SCLMPARM command (in the Member List).  
F =A prompt screen is displays only on first time  
access to a specific library. Thereafter the  
previous parameters for that library are used.  
  
Note:the above option can be changed by individual users via the SET command.  
  
Override SCLMCHK value ==>> * (W=WARN, E=ERROR, N=NONE, *=no override)  
This setting allows you to override the value of the "SCLMCHK" field in  
ISRCONFIG (ISPF's configuration table). This field defines how edit should  
react when attempting to edit an SCLM-saved file without SCLM locking.  
  
SCLMCHK values (See ISPF Customization for more details):  
WARN -Display a warning message if edited project/member is SCLM controlled.  
NONE -No checking is done. No warning messages issued.  
ERROR -Reject editing of SCLM-saved members without SCLM or IBMIPT locking.
```

----- IBMIPT - Customization Wizard -----

COMMAND ==>

IBMIPT recognizes BookManager BOOK and BOOKSHELF data sets by their special suffixes. It may further verify certain attributes before passing control to BookManager.

Set BookManager interface EXEC name ==> IQI\$BMGR  
 Set BookManager BOOKSHELF defaults:  
 Data set name suffix ==> BKSHELF  
 Data set record format ==> VB (specify N to ignore)  
 Data set record length ==> 259

Set BookManager BOOK defaults:  
 Data set name suffix ==> BOOK  
 Data set record format ==> FB (specify N to ignore)  
 Data set record length ==> 4096

----- IBMIPT - Customization Wizard -----

COMMAND ==>

When IBMIPT detects a VSAM data set (in BROWSE, EDIT, VIEW, DSLIST, or object list), it may use an interface to process it. You may select which kind of VSAM support you want in your installation, if any. The table below shows what CLIST will handle the support you have selected.

VSAM interface ==> 2 (Select one of the following options)

Option	Invoked VSAM interface	Interface CLIST
0	None (IBMIPT will not handle VSAM files.) . . . . .	Not applicable
1	Installation-written VSAM interface . . . . .	IQIVSAM
2	IBM File Manager for z/OS . . . . .	IQI\$FMGR
3	File-Aid VSAM browser/editor(For Version 6 or below) .	IQI\$FAID
4	File-Aid VSAM browser/editor(Version 7.0). . . . .	IQI\$XPRT
5	File-Aid VSAM browser/editor(Version 8.0 or above) . .	IQI\$FAR8
6	Data-Xpert VSAM browser/editor . . . . .	IQI\$XPRT
7	MacKinney ISPF VSAM Utility . . . . .	IQI\$MCKN
8	IBM Ditto/ESA . . . . .	IQIDIT
9	Serena STARTOOL . . . . .	IQI\$STOL
10	VSAM RECORD BROWSER (A SAMPLE WORKING INTERFACE) . . .	IQIVBRO

NOTES:- Options 2-9 require a third-party product. If such a product uses LIBDEFS, include the LIBDEF statements in the interface CLIST.

----- IBMIPT - Customization Wizard -----

COMMAND ==>

When IBMIPT detects a data set name that starts with a hyphen (in BROWSE EDIT, VIEW, and the object list), it assumes that the text string following the hyphen is the name of a DB2 table. You may select which kind of DB2 support you want in your installation, if any. The table below shows what CLIST will handle the support you have selected.

DB2 interface ==> 9 (Select one of the following options)

Option	Description	CLIST
0	None (IBMIPT will not handle DB2 tables.) . . . . .	None
1	Installation-written DB2 interface . . . . .	IQIDB2
2	Computer Associates Pro-EDIT Version 5.0 or earlier . . . . .	IQI\$PRED
3	Computer Associates Pro-EDIT Version 5.1 or above . . . . .	IQI\$PR51
4	Computer Associates Pro-EDIT Version 7.0 or above . . . . .	IQI\$PR70
5	Platinum Technology's RC/UPDATE browser/editor . . . . .	IQI\$RCUD
6	Platinum Technology's RC/UPDATE browser/editor VER 2 or above .	IQI\$RCU2
7	Compuware's FileAID for DB2 table browser/editor . . . . .	IQI\$FAB2
8	CDB Software's CDB/EDIT table editor . . . . .	IQI\$CDBE
9	IBM File Manager/DB2 for z/OS table browser/editor . . . . .	IQI\$FMD2

NOTE: If you use LIBDEFS to invoke your DB2 editor, include the LIBDEF statements in the appropriate CLIST named above.

## The customization wizard IQIWIZRD

```
----- IBMIPT - Customization Wizard -----  
COMMAND ==>
```

You have indicated that you want to define user objects.

IBMIPT will assume that a data set name (in BROWSE, EDIT, VIEW, and OLIST) that starts with the greater-than sign (>) is a user object, and pass control to a CLIST (or REXX EXEC) to handle the object. A skeleton CLIST, indicating the available parameters, resides in the IBMIPT CLIST library under the name IQI\$USER.

Specify below the name of the user object handler:

CLIST/REXX EXEC name ==> IQI\$OUT (Leave BLANK for no user-object support)

NOTE: A sample object handler called IQI\$OUT is in the IBMIPT CLIST library.

```
----- IBMIPT - Customization Wizard -----  
COMMAND ==>
```

The customization wizard has completed the first phase of interviewing you for the installation options.

You can now proceed to finalize the customization process (press the ENTER key) or you may cancel (press the END key) and redisplay the initial screen.

```
-IPT- ----- TSO COMMAND SHELL - RESTRICT HISTORY RECORD Row 1 to 2 of 2  
COMMAND ==> SCROLL ==> CSR  
Main commands: CANCEL, DOWN, END, UP  
Line commands: I=insert, D=delete
```

TSO commands (or CLIST or REXX EXECs) specified here with the "No History" set to Y (YES) will not be recorded in the command history list of the TSO Command Shell (option 6).

Line	Command	No
COMMAND	or CLIST	History
-----	-----	-----
-	PASSWORD	Y
-	PROTECT	Y
-----	-----	-----

```
Specify Disposition of Log Data Set
Command ==>
Log Data Set (INTT125.SPFL0G1.LIST) Disposition:
Process Option . . . . 1. Print data set and delete
                       2. Delete data set without printing
                       3. Keep data set - Same
                           (allocate same data set in next session)
                       4. Keep data set - New
                           (allocate new data set in next session)
Batch SYSOUT class . .
Local printer ID or
writer-name . . . .
Local SYSOUT class . .

List Data Set Options not available

Press ENTER key to complete ISPF termination.
Enter END command to return to the primary option menu.

Job statement information: (Required for system printer)
==>
==>
==>
==>
```

INSTALLATION DEFAULTS WERE SAVED

## The customization wizard IQIWIZRD

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