



Interactive System Productivity Facility (ISPF)

ISPF Hidden Treasures and New Features



SHARE 115
Sessions 7547 & 7550

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Interactive Program Development Facility (ISPF)



Hidden Treasures and New Features in ISPF

- Data Set List
 - ▶ DSLIST Command
 - ▶ Recent Enhancements

- Member List
 - ▶ Recent Enhancements

- Edit
 - ▶ COMPARE Command
 - ▶ Recent Enhancements

- Connect Without GUI

- z/OS UNIX Support
 - ▶ Directory List Utility
 - ▶ Edit and Browse
 - ▶ ASCII Edit
 - ▶ UDLIST Command

2

Hidden Treasures/New Features | Sessions 7547 & 7550

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Hidden Treasures and New Features in ISPF...

- Multiple Screen Support
 - ▶ SWAPBAR
- Display System & User Id
- ISPF Client Gateway – ISPF from the Internet
- User Command Tables
 - ▶ ISPF Table Utility
- ISRDDN Utility
- Autotype Function
- ISRDTLCV macro
- Calendar with Notebook
- ISPF Productivity Tool

DSLISIT

- **DSLISIT** *personal_list_name* | *pattern*
 - ▶ If a list name exists by that name, a data set list will be built based on the entries in the list
 - ▶ If a list name does not exist, the parameter is treated as a pattern
- **APPEND** command from within Data Set List
 - ▶ Adds entries to the displayed list
 - ▶ specify a personal list name or a pattern
- **REFRESH** command from within Data Set List
 - ▶ Refreshes display to original list filter criteria
- **EXCLUDE** command and X line command from within Data Set List
 - ▶ Excludes data sets displayed in list
 - ▶ Shadow line displayed

New Data Set List Commands - z/OS 1.2

MEMBER command

- ▶ allows the partitioned data sets in the list to be searched for a specific member name or pattern
- ▶ Syntax: `Member string [X|EX|NX][RECALL1|RECALL2]`
- ▶ Message field identifies data sets containing the member(s)

SRCHFOR command

- ▶ Invokes SuperC to search the listed data sets for strings
- ▶ Syntax: `SRCHFOR [string]`
- ▶ Displays panel used to specifying options for SuperC
- ▶ Message field identifies data sets containing the string
- ▶ SuperC output written to data set
(default: `userid.SRCHDSL.LIST`)

Data Set List Enhancements

Enhanced SORT command (z/OS 1.7)

- ▶ Provides ability to sort a data set list in ascending or descending order
- ▶ Syntax: `SORT major-field [A|D] [minor-field] [A|D]`

Display Total Tracks Value (z/OS 1.9)

- ▶ New **Display Total Tracks** option added to the Data Set List Utility entry panel
- ▶ If selected, an additional header line showing the total tracks used by the data sets is displayed with the **Space** and **Total** views
- ▶ Pop-up window showing data collection progress displayed when calculating total tracks for a list of 50 or more data sets

Data Set List Enhancements. . .

▪Block Line Commands (z/OS 1.10)

- ▶ Allows Data Set List line commands to be entered in blocks
- ▶ A block of line commands is marked by entering two forward slash characters (*//*) at the start and end of the block
- ▶ The required line command is entered on the first or last line of the block, immediately following the two forward slash characters
- ▶ All line commands, including TSO commands, Clists and REXX execs can be executed as block commands

▪Include PREFIX in Dsname Level (z/OS 1.11)

- ▶ New **Prefix Dsname Level** option added to the Data Set List Utility entry panel
- ▶ If selected, ISPF will add the TSO prefix (if the user's TSO profile has PREFIX defined) as the first qualifier if the Dsname Level entered is not enclosed in quotes

New Member List Commands - z/OS 1.5

▪SRCHFOR command

- ▶ Invokes SuperC to search the listed members for strings
- ▶ Syntax: **SRCHFOR** [*string*]
- ▶ Displays panel used to specifying options for SuperC
- ▶ PROMPT column identifies members containing the string
- ▶ SuperC output written to data set
(default: **userid.SRCHML.LIST**)

▪SORT PROMPT command

- ▶ Sorts members with messages in the PROMPT column to the top of the member list
- ▶ Use after **SRCHFOR** command to group all members containing *string* at the top of the member list

Member List Enhancements

Enhanced SORT command (z/OS 1.7)

- ▶ Provides ability to sort a data set list in ascending or descending order
- ▶ Syntax: `SORT major-field [A|D] [minor-field] [A|D]`

New FILTER command (z/OS 1.8)

- ▶ Used to display only those members having an attribute matching a specified value
- ▶ Syntax: `FILTER [field operator value]`
 - `field` member list column name
 - `operator` EQ, NE, LE, LT, GE, or GT
 - `value` the comparison value
- ▶ Member List SRCHFOR command also enhanced to optionally display only those members containing the SRCHFOR string

Edit COMPARE Command

- ▶ Syntax: `COMPARE [member|data_set_name|NEXT]* [X] [SYSIN]]`
- ▶ Uses SuperC APIs to compare to data sets or members
- ▶ Changes are highlighted depending on if the change is new to the source (member or data set where COMPARE command was issued), only in the target, or common
- ▶ `NEXT` compares next member in hierarchy of ISPF library
- ▶ `X` excludes common lines except for a few around differences
- ▶ `SYSIN DD` has additional SuperC Process Statements

```

VIEW      PDFDEV.STG.GML(ISPCMD5) - 01.03      Changes are shown
Command ==> _____ Scroll ==> CSR
000052    altdescr="CMDE"
          =====
          <cmdact action="SELECT PGM(ISPCCMDE)">
          <cmdact action="SELECT PGM(ISPCCMDE) SUSPEND">
000054    .OAAAA
000055    <:-----COLOR ----->
000056    <cmd name=COLOR
000057    altdescr="INVOKE GLOBAL COLOR CHANGE UTILITY">
000058    <cmdact action=
          ----- 350 Line(s) not Displayed
000409    altdescr="Turn ISPF/TSO GUI WINDOW ON or OFF">
000410    <cmdact action="SELECT PGM(ISPTISM) PARM(TSOGUI,&amp;ZPARAM)">
  
```

Edit COMPARE Enhancement (z/OS 1.11)

- The SYSIN keyword on the COMPARE command is enhanced to support a sub-parameter

- ▶ User can specify the SuperC process statements data set name as a sub-parameter of the SYSIN keyword

Syntax: **SYSIN(dsn)**

- ▶ Alternatively, the user can request the display of a pop-up panel where the SuperC process statements data set name can be entered

Syntax: **SYSIN(/)**

New Edit Primary Commands - z/OS 1.6

▪ HIDE command

- ▶ Removes excluded line messages from the Edit/View display
- ▶ Line number underscored to indicate "hidden" line(s)
- ▶ Syntax: **HIDE X**
- ▶ **RESET** primary command has **HIDE** option to allow redisplay of excluded line messages
 - Syntax: **RESET HIDE**

▪ COLS command

- ▶ Causes a columns line to be displayed at the top of each Edit/View data screen (i.e. stays with the Edit/View display)
- ▶ Syntax: **COLS [ON|OFF]**

Other Edit Enhancements

▪ UNDO after SAVE (z/OS 1.9)

- ▶ Allows reversal of edit changes made prior to SAVE commands during the current edit session
- ▶ New KEEP option added to the edit SETUNDO command
 - Syntax:

```

                                +-STORAGE-+
>>---SETUNDO---+-----+-----><
      +-SETU-----+ +-RECOVER-|
                        +-ON-----|
                        +-OFF-----|
                        +-KEEP-----+

```

- Where:

KEEP Has the same effect as **STORAGE** and also prevents the SAVE command from clearing the UNDO buffers in storage

Other Edit Enhancements. . .

▪ Multiple Targets for MOVE/COPY (z/OS 1.10)

- ▶ Suffix of K (keep) can now be used with MOVE/COPY destination line commands **A**, **B**, **O** and **OO**
 - Enter **AK**, **BK**, **OK**, or **OOK** line commands to indicate a multiple target MOVE/COPY command
 - Enter 'final' destination line command (**A**, **B**, **O** or **OO**) to initiate the 'multiple target' MOVE/COPY
 - 'Final' destination must be after the line where the **AK**, **BK**, **OK**, or **OOK** command was entered

Other Edit Enhancements. . .

▪ New Edit Line Commands for HEX Display (z/OS 1.11)

- ▶ New edit line commands to display selected lines in hexadecimal format:

HX display a single line in hexadecimal format

HXX display a block of lines in hexadecimal format

- ▶ The **HX** and **HXX** line commands act as a toggle by switching a line's display format between normal and hexadecimal format

Connect Without GUI

▪ SETTINGS

- ▶ Workstation pulldown (or **GUIINIT**)

- Workstation connection
- Without GUI display

- ▶ Allows workstation commands

- FILEXFER**
- Edit on workstation
- SELECT WSCMD**

z/OS UNIX Directory List Utility (z/OS 1.8)

- Available as ISPF option 3.17
- Provides most of the functions supported by the ISHELL utility

```

Menu Utilities Options Help
z/OS UNIX Directory List Utility
Option ==>
blank Display directory list          P Print directory list
Pathname . . . Zu/pvandyk

Enter "/" to select option
/ Confirm File Delete
/ Confirm Non-empty Directory Delete

When the directory list is displayed, enter either:
"/" on the directory list line command field for the command prompt pop-up,
an ISPF line command, the name of a TSO command, CLIST, or REXX exec, or
"=" to execute the previous command.

Time zone WAT-8 is used to calculate the displayed date and time values.
F9=Swap      F10=Actions  F12=Cancel
    
```

z/OS UNIX Directory List Utility. . .

- Horizontal scrolling via the RIGHT and LEFT primary commands
- Column order and size can be customized via Options pull-down

```

Menu Utilities View Options Help
z/OS UNIX Directory List          Row 1 to 20 of 25
Command ==>                      Scroll ==> PAGE
Pathname . : /SYSTEM/etc

Command  Filename  Message  Type Permission Audit  Ext  Fmat  Owner
-----
.         .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
..        .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
.nfs     .nfsc     .         File  rw-r--r--  fff---  -g-  ----  IBMUSER
ant.conf .         .         File  rwxrwxrwx  fff---  -g-  ----  IBMUSER
bpa      .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
cmx      .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
dce      .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
dfs      .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
inetd.conf
inetd.pig .         .         File  rwxr-xr-x  fff---  -g-  ----  IBMUSER
ioepdcf .         .         Syml  rwxrwxrwx  fff---  -g-  ----  IBMUSER
ldap     .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
lloggmt  .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
log      .         .         File  rw-rw----  fff---  -g-  ----  IBMUSER
pkiserv  .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
profile  .         .         File  rwxr-xr-x  fff---  -g-  ----  IBMUSER
security .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
skrb     .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
spool    .         .         DIR  rwxr-xr-x  fff---  -g-  ----  IBMUSER
utmpx    .         .         File  rw-rw----  fff---  -g-  ----  IBMUSER

F1=Help      F2=Split  F3=Exit  F4=Expand  F5=Rfind  F7=Up      F8=Down
F9=Swap      F10=Left  F11=Right F12=Cancel
    
```

z/OS UNIX Directory List Utility. . .

- Primary commands available:
 - **EDIT** - edit a file in the current directory
 - **FIND** - find a string within a filename
 - **LEFT** - scroll the directory list columns to the left
 - **LOCATE** - locate a directory list entry based on the sort order
 - **REFRESH** - redisplay directory list with any changes that have occurred
 - **RESET** - redisplay list removing line commands and messages
 - **RIGHT** - scroll the directory list columns to the right
 - **SAVE** - write the directory list data to a data set
 - **SORT** - sort the directory list by the specified fields

z/OS UNIX Directory List Utility. . .

- Line commands available:

<ul style="list-style-type: none"> ▪ E - edit a file ▪ B - browse a file ▪ N - create a new file ▪ L - list a directory ▪ D - delete a file ▪ R - rename a file ▪ V - view a file (z/OS 1.9) ▪ EA - ASCII edit (z/OS 1.9) ▪ VA - ASCII view (z/OS 1.9) ▪ RA - REFLIST Add (z/OS 1.10) ▪ FS - File System (z/OS 1.11) 	<ul style="list-style-type: none"> ▪ CO - copy data out ▪ CI - copy data in ▪ I - display attributes ▪ MM - modify mode fields ▪ MX - modify extended attributes ▪ X - execute a command ▪ MO - Modify Owner (z/OS 1.11) ▪ MG - Modify Group (z/OS 1.11) ▪ MF - Modify Format (z/OS 1.11) ▪ UA - User Auditing (z/OS 1.11) ▪ AA - Auditor Auditing (z/OS 1.11)
--	--

z/OS UNIX Support Enhancements. . .

▪ Use ISPF Edit and Browse for z/OS UNIX Files (z/OS 1.9)

- ▶ Edit/View/Browse **“Other”** Data Set Name fields support entry of z/OS UNIX pathnames
 - z/OS UNIX Directory List displayed when pathname for directory entered in the **“Other”** Data Set Name field
- ▶ z/OS UNIX pathname can be specified as an operand with the following edit primary and macro commands
 - **COMPARE**
 - **COPY**
 - **CREATE**
 - **MOVE**
 - **REPLACE**
- ▶ **BROWSE**, **EDIT**, and **VIEW** services enhanced to support processing of z/OS UNIX files
- ▶ **FILEXFER** service enhanced to support the upload and download of z/OS UNIX regular files
- ▶ Personal data set lists enhanced to support the saving and retrieval of z/OS UNIX pathnames

z/OS UNIX Support Enhancements. . .

▪ Support for Editing ASCII Data (z/OS 1.9)

- ▶ ASCII edit automatically invoked for z/OS UNIX files tagged with CCSID 819 (US ASCII)
- ▶ ASCII edit can be selected for z/OS UNIX files not tagged by either:
 - Selecting the **Edit ASCII data** option on the Edit/View Entry panel
 - Using the z/OS UNIX Directory List Utility (option 3.17) **EA** line command
- ▶ File tagged with CCSID of 819 when saved
- ▶ ASCII edit available with the EDIT and VIEW services by using the new **ASCII** keyword parameter

New UDLIST Command – z/OS 1.10

- Used to display a z/OS UNIX Directory List (option 3.17) from any command line

Syntax: **UDLIST** [*personal_list_name* | *pathname*]

- If a personal list name is provided, a directory list will be built based on the pathname entries in the list
- Alternatively, the pathname for a directory can be specified
 - but most command lines are CAPS(ON) – cannot enter mixed-case pathnames
- If no parameter is specified with the **UDLIST** command a popup displays:

```

ISRPDUDB          Personal Data Set Lists for UDLIST          List 1 of 7
Command ---->          Scroll ----> CSR
Specify the pathname for a z/OS UNIX directory:
Name -----
Or select a personal data set list as a filter for UDLIST:
Name      Description                               Created      Referenced
-----      -
REFLIST   Last 30 referenced data sets             08/06/10     08/07/17 12:21
OS2QMLIB  OS2QMLIB                                           08/06/10     08/06/10 14:10
UNIXBOOK UNIX work files                                    07/05/11     08/02/20 13:54
UNIXISPF  UNIX Development Files/OSs                          07/08/22     08/02/20 13:51
WRKST11   UNIX Development Files/OSs                          07/05/22     07/08/22 15:16
UDLIST1   UDLIST1                                             07/05/11     07/08/22 15:16
DEMO      ISPF Demo List (SHARE)                             05/08/09     07/08/22 15:16
**End**

```

- Popup allows user to:
 - enter a mixed-case pathname
 - select a personal list

Directory List Enhancements – z/OS 1.11

- z/OS UNIX commands can be entered in the command field on the z/OS UNIX Directory List panel
 - Requires option **“Enter z/OS UNIX commands in Command field”** to be selected on the directory list options panel
 - Entering a / (forward slash) in the command field displays a panel with a command field 255 characters in length
- Default line commands can be defined for different file types
 - Default line command is processed when the cursor is placed in the line command field and the ENTER key is pressed
 - IBM-supplied default line commands:

Directory	L (List)
Regular file	B (Browse)
Character special	I
FIFO	I
Symbolic link	I
 - User can change default line commands on the **“z/OS UNIX Directory List Default Line Commands”** panel available from the **Options** pull-down

Using Multiple Screens

- ISPF allows up to 32 synchronously multi-tasking screens under one ISPF session
- Create new logical screens using:
 - ▶ **SPLIT [NEW]** command
 - reposition horizontal line separating 2 screens on 3270 display
 - new logical screen created when **NEW** specified
 - ▶ **START** command
 - creates new logical screen with different "initial dialog"
 - START PANEL(panel) | PGM(program) | CMD(command)**
[select_parameters]
| ISPF_command
| primary_option_menu_option
- Navigate screens using:
 - ▶ **SWAP [LIST | PREV | NEXT | screen name | n]**
command
 - ▶ ISPF Task List panel (invoked using **SWAP LIST** command)

ISPF Task List - Swap List Command

ISPF Task List
Active ISPF Logical Sessions

Screen names

"Other" screen

Current screen

```

Start a new screen
Start a new application
Application Name
-----
ID Name Panelid Applid Session Type
. 1 DSLIST ISRUDSLO ISR 3270
. 2 EDIT ISREDDE2 ISR 3270
. 3 WORK ISRWORK ISR 3270
. 4- DTEST ISPYXD1 ISR 3270
. 5+ SCLM FLMDMN ISR 3270
.
.
.

```

Panelid and Applid

SWAPBAR – z/OS 1.10

- Simplifies the task of swapping between ISPF logical screens
- Displays at the bottom of the physical screen point-and-shoot fields associated with each logical screen for the session
 - Use the point-and-shoot field to invoke the associated logical screen
 - Tip: Customize your terminal emulator to make the action of clicking the mouse to simulate:
 - 1) placing the cursor
 - 2) Pressing the ENTER key
- Enabled using the new SWAPBAR system command

Syntax: **SWAPBAR [ON|OFF]**

Display System and User Id – z/OS 1.7

- New ISPF command provided which allow the system name and/or user ID to be displayed on all ISPF panels
 - ▶ **SYSNAME [ON|OFF]** - Display | Remove system name
 - ▶ **USERID [ON|OFF]** - Display | Remove user ID

```

Menu  RefList  RefMode  Utilities  Workstation  Help
-----
ISDI VANDYKE          Edit Entry Panel
Command ==>

ISPF Library:
Project . . . . . PDFIDEV
Group . . . . . INI . . . . . SVT . . . . .
Type . . . . . GML
Member . . . . . (Blank or pattern for member selection list)

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

Workstation File:
File Name . . . . .

Options
Initial Macro . . . . . = Confirm Cancel/Move/Replace
Profile Name . . . . . = Mixed Mode
Format Name . . . . . = Edit on Workstation
Data Set Password . . . . . Z Preserve VB record length

```

ISPF Client Gateway - ISPF from the Internet

- The Gateway provides an interface for client (and z/OS UNIX) applications to run TSO and ISPF commands and services
- Runs in z/OS UNIX and is invoked upon a request for a TSO or ISPF command
 - ▶ TSO address space established
 - ▶ If an ISPF command is requested
 - ISPF data sets are allocated and an ISPF session is established
- Command requests and command output in XML format
- Gateway IVP provides a web page for entering TSO and ISPF commands
 - /usr/lpp/ispf/bin/ISPZIVP.html
 - /usr/lpp/ispf/bin/ISPZIVP.cgi
- Shipped with z/OS 1.10
 - ▶ Backfitted to z/OS 1.8 and 1.9 (APAR OA27190)

User Command Tables

- ISPF supports up to 3 user command tables (z/OS 1.5)
 - APPLID for User command tables are defined in the ISPF configuration table
 - Searched before Site and System command tables
- Many sites now define USER as the APPLID for a User command table
 - Speak to your systems programmer if your site does not
 - Allows users to define their own ISPF commands
 - User command table saved in a personal table data set in the ISPTLIB DD concatenation
- Creating and updating user command tables
 - Option 3.9 can be used to create a user command table
 - Requires table data set allocated to the ISPTABL DD
 - Option 3.9 cannot update a user command table if it is open to your ISPF session
 - Copy table to another member; use option 3.9 to update new member; copy updated member back
 - With z/OS 1.9, use option 3.16 (ISPF Table Utility)

ISRDDN Utility

- Fullscreen display of DD allocations
- Build a member list based on a DD
- Invocation: **SELECT PGM(ISRDDN)** - DDLIST command

```

Current Data Set Allocations                               Row 11 of 214
Command ==> _____ Scroll ==> CSR
Volume Disposition Rct DDname Data Set Name Actions: B E V M F C I Q
MVSSWD SHR,KEEP > - ISPILIB PDFTDEV.VANDYKE.GIF
MVSSWL SHR,KEEP > - PDFTDEV.STG.GIF
MVSSWJ SHR,KEEP > - PDFTDEV.INT.GIF
MVSSWK SHR,KEEP > - PDFTDEV.SVT.GIF
DMTCRT SHR,KEEP > - ISPLLIB VANDYKE.LOADLIB
MVSSW3 SHR,KEEP > - WDBDEV.LOAD
MVSSWK SHR,KEEP > - PDFTDEV.VANDYKE.LOAD
MVSSWF SHR,KEEP > - PDFTOOL.COMMON.LOAD
MVSSWF SHR,KEEP > - PDFTDEV.STG.LOAD
MVSSWM SHR,KEEP > - PDFTDEV.INT.LOAD
MVSSWD SHR,KEEP > - PDFTDEV.SVT.LOAD
MVSSWL SHR,KEEP > - PDFTOOL.FLMHSCAN.LOAD
S13L8R SHR,KEEP > - SYS1.DFQLLIB
S13L8R SHR,KEEP > - SYS1.DGTLIB
MVSSWD SHR,KEEP > - ISPLIB PDFTDEV.VANDYKE.MSGGEN
MVSSWD SHR,KEEP > - PDFTOOL.COMMON.MSGS
MVSSWD SHR,KEEP > - PDFTDEV.STG.MSGGEN
MVSSWJ SHR,KEEP > - PDFTDEV.INT.MSGGEN
  
```

- Browse (B), Edit (E), View (V), Free the entire DD (F), Compress a PDS (C), Provide additional data set information (I), Display list of users of jobs using a data set (Q)

ISRDDN - Primary Commands

- MEMBER name [string]**
 - scans allocations for a particular member
 - string** restricts the search to DDs with **string** in their name.
 - Uses CSVQUERY to locate load modules

```

Current Data Set Allocation                               Member was found
Command ==> _____ Scroll ==> CSR
Message
> - ISPILIB PDFTDEV.VANDYKE.GIF
> - PDFTDEV.STG.GIF
> - PDFTDEV.INT.GIF
> - PDFTDEV.SVT.GIF
> - ISPLLIB VANDYKE.LOADLIB
> - WDBDEV.LOAD
> - PDFTDEV.VANDYKE.LOAD
> - PDFTOOL.COMMON.LOAD
> - PDFTDEV.STG.LOAD
> - PDFTDEV.INT.LOAD
> - PDFTDEV.SVT.LOAD
> - PDFTOOL.FLMHSCAN.LOAD
> - SYS1.DFQLLIB
> - SYS1.DGTLIB
> - ISPLIB PDFTDEV.VANDYKE.MSGGEN
> - PDFTOOL.COMMON.MSGS
> - PDFTDEV.STG.MSGGEN
> - PDFTDEV.INT.MSGGEN
Member: ISPSUBS
Member: ISPSUBS
  
```

- ONLY string | EXCLUDE string**
 - to show or exclude DDs with **string** in their name



ISRDDN - Primary Commands...

- **SEARCH name**
 - ▶ Same as **MEMBER** but does not search DD's
- **LOAD name**
 - ▶ Explicitly loads a module
 - ▶ Uses ISPLLIB if available
 - ▶ Browses result
- **APF, LINKLIST (LI), PARMLIB, LPA (LP)**
 - ▶ toggle commands to add/remove pseudo-DD names
 - ▶ show the defined -
 - APF data sets
 - link-list data sets
 - PARMLIB data sets
 - LPA data sets



ISRDDN - Primary Commands...

- **CLIST**
 - ▶ creates a allocation CLIST in '**prefix.ISRDDN.CLIST**'
- **COUNT [string]**
 - ▶ counts the number of members in PDSs
- **DUP**
 - ▶ searches all the PDSs in the displayed list and LPA
 - ▶ displays list of duplicate names
- **ENQ**
 - ▶ Enqueues on system
- **CON**
 - ▶ Enqueue contention



ISRDDN - Browse of Control Blocks

- BROWSE STORAGE

- ▶ SEQUENTIAL FILE

- Allocated to DDNAME ISRDDN
 - Fixed or VB
 - Max length of 230
 - ♦ First string on line is control block name
 - Second string is locator string
 - Everything else ignored

```

ASCB  CVT?+C?   Addr space control blk
CVT   10.?     Comm Vector Table
TCB   CVT??    Task Control Block
  
```

- Disassembly support available with z/OS 1.9

NOTE: ISRDDN is now documented in the [ISPF User's Guide Volume I](#)



AUTOTYPE Function - z/OS 1.2

- AUTOTYPE function resolves a partial name in a panel **Library** or **Other Data Set Name** field
 - ▶ searches catalog or PDS directory to find names that match
- Most effective when assigned to a PF key
- Retrieves a maximum of 100 data set names and 700 member names
- Only available on panels enabled for AUTOTYPE
 - ▶ applications can use AUTOTYPE by making minor panel changes
 - ▶ DTL provides AUTOTYPE support



ISRDTLCV Macro

- Shipped in SISPEXEC library
- Converts the non-displayable characters in panel output from the DTL Conversion Utility (ISPDTLC) to editable characters
- Issue **ISRDTLCV** on edit command line of generated panel



Calendar Notebook

- **&ZKIT = LO**
 - ▶ Set in Primary Menu
 - ▶ Allows TBDISPL dialog for Calendar view
 - Keeps 15 lines of data for day selected
 - Day is highlighted to indicate note

ISPF Productivity Tool (IPT)

- **Extends the productivity of ISPF**
 - ▶ Seamless integration with ISPF
 - Enhanced functionality integrated into the standard ISPF member and data set list functions
 - ▶ Create and use Object Lists which can contain items such as
 - Data sets (PDS, sequential, VSAM, tape, migrated)
 - z/OS UNIX files
 - DB2 tables
 - APF, LPA, and linklist libraries
 - ▶ Minimize panel navigation and improve productivity
 - Shortcuts
 - IPT Commands
 - Extensive "Find" capabilities across multiple files
 - ✓ DBCS and Hexadecimal searches
 - ✓ Case sensitive searches
 - ✓ Limited to specific columns
 - Global "change" function across multiple members
 - ▶ Reduce keystrokes