



Configuring ISPF for Fun and Profit

NewEra Software - The zExchange
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Thomas Conley
Pinnacle Consulting Group, Inc.
59 Applewood Drive
Rochester, NY 14612-3501
P: (585)720-0012
F: (585)723-3713
pincons@rochester.rr.com



Abstract

Do you have a hard time configuring ISPF? Do you want to create the same ISPF look and feel for your users? Would you like to set up ISPF for better performance? If you answered 'YES' to any of these questions, this session is for you! Come to this session to learn how to configure ISPF for lean and mean operation. Teach ISPF to dance to your tune, for a change! In this session, the speaker will also include an online demonstration and a real-time ISPF configuration session.



Agenda

- ISPF Configuration History
- ISRCONFG - The “Old” Way
- ISPCCONF - The “New” Way
- ISPCCONF Dialog Setup
- Create and Compile the Keyword File
- Convert ISRCONFG to ISPCCONF
- (DON'T) Build SMP/E Usermod
- Recover Keyword File from ISPCFIGx



Agenda

- The WAC ISPF Configuration
- Summary
- Finally...



ISPF Configuration History

- In the past, ISPF Configuration was difficult because configuration data was stored in many places and code referencing it was inconsistent
 - ISRCONFIG load module
 - ISPSPROF system default table
 - ISREDIT edit profile table ZDEFAULT profile
 - Hard-coded defaults in various ISPF load modules



ISPF Configuration History

- Unfortunately, ISRCONFIG, ISPSPROF, and ISREDIT didn't control all ISPF configuration items
- Problems were difficult to diagnose because you never knew where ISPF would get the information
- Sometimes hard-coded default would override your explicit specification
- Configuring ISPF began with creating SMP/E usermod installing ISRCONFIG load module, but there were problems with this method



ISRCONFIG - The "Old" Way

- ISRCONFIG was placed in target ISP.SISPLPA by default, so without further SMP/E customization, ISPF defaults only took effect after IPL with CLPA
- ISRCONFIG did not create defaults for all ISPF settings, so ISPF configuration table members ISPSPROF and ISREDIT in ISP.SISPTENU had to be customized



ISRCONFIG - The "Old" Way

- ISPF administrator would perform these tasks to customize ISPSPROF and ISREDIT:
 - Execute each ISPF panel to change ISPSPROF settings (e.g. scroll values, etc.)
 - Run an edit session using profile ZDEFAULT to change ISREDIT settings
- An SMP/E usermod was then created to add updated ISPSPROF and ISREDIT to the system
- Unfortunately, some ISPF modules ignored ISRCONFIG, ISPSPROF, ZDEFAULT, etc., so they used their own hard-coded defaults



ISPCCONF - The "New" Way

- Since ISPF configuration was too complex and error prone, the ISPF Configuration Dialog, ISPCCONF, was introduced with OS/390 V2R8
- ISPCCONF was designed to combine ISRCONFG, ISPSPROF, and ISREDIT ZDEFAULT settings into single load module ISPCFIGU (VSAM configuration load module ISPCFIGV also created if VSAM keywords specified by ISPF administrator)



ISPCCONF - The "New" Way

- ISPCCONF is half the solution, the other half is ISPF code modified to honor ISPCCONF
- While ISPSPROF and ISREDIT are still distributed in ISP.SISPTENU, they are empty members only used as placeholders
- If you still want to use ISPSPROF and ISREDIT, they will override ISPCFIGU module, but this method is NOT RECOMMENDED
- Field-level help available so you can make correct configuration decision



ISPCCONF Dialog Setup

- To setup ISPCCONF dialog, allocate keyword file (text file of options) that will be used to generate load modules ISPCFIGU and ISPCFIGV containing ISPF defaults
- The keyword file must be PDS(E), and have minimum record length of 255 for variable format, or 251 for fixed format records
- For space, CYL,(1,1,45) should allow enough room and directory space to store multiple members for testing and backup purposes



ISPCCONF Dialog Setup

- ISPCCONF is default part of ISPF
- It can be executed by any user
- Be sure to secure LINKLIST, LPA, or any other candidate loadlib datasets to prevent unauthorized user from either accidentally or deliberately changing ISPF defaults



Create and Compile Keyword File

- After setting up ISPCCONF, you can proceed to creating and compiling keyword file
- Enter "TSO ISPCCONF" on command line or "ISPCCONF" from ISPF option 6
- The ISPF Configuration Utility menu is displayed, showing last keyword file you worked with
- NOTE: The following screen shots were taken from z/OS V2R1 system; some fields shown may not be applicable to lower levels of ISPF

Create and Compile Keyword File

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zPDT
File Edit Font Transfer Macro Options Window Help

                                ISPF Configuration Utility

Option ==> █

1 Create/Modify Settings and Regenerate Keyword File
2 Edit Keyword File Configuration Table
3 Verify Keyword Table Contents
4 Build Configuration Table Load Module
5 Convert Assembler Configuration Table to Keyword File
6 Build SMP/E USERMOD
7 Convert Configuration Table Loadmod to Keyword File

Keyword File Data Set
Data Set . . . 'IBMUSER.ISPF.KEYWORD.PDSE'
Member . . . . NEWERA

Configuration Table Assembler Source Data Set
Data Set . . .
Member . . . .

Output File Content for Keyword File
2 1. Include only non-default values
   2. Include defaults as comments
   3. Include all values

Current Configuration Table
Keyword File : IBMUSER.ISPF.KEYWORD( DEFAULT )
Identifier . : ISPCFIGU                      Level . . . : 480R8001
Compile Date : 2015/05/14                    Compile Time : 12:15

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```



Create and Compile Keyword File

- Menu displays current ISPF configuration table, keyword file that generated it, and date and time it was compiled
- Recommend default for Output File Content for Keyword File is option 2, “Include defaults as comments”
- All ISPF configuration options will be displayed in keyword file, with defaults commented out
- This clearly shows customized configuration items



Create and Compile Keyword File

- Enter dataset name and member name of keyword file
- Pick meaningful member name (e.g. date of keyword member, function like TEST or PROD, DEFAULT for regular options, etc.)
- Enter option 1, Create/Modify Settings and Regenerate Keyword File
- Hit enter to display Create/Modify ISPF Configuration

Create and Compile Keyword File

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File Edit Font Transfer Macro Options Window Help

Create/Modify ISPF Configuration Defaults loaded

Option ==> █

General ISPF Settings
1 Editor Settings
2 Edit/View/Browse VSAM Settings
3 PDF Exits and Other PDF Settings
4 ISPF Site-wide Defaults
5 ISPDFLTS, CUA Colors, and Other
  DM Settings

System Profile (ISPSPROF) Settings
6 Log and List Defaults
7 Terminal and User Defaults
8 Workstation Defaults
9 Workstation Download Defaults

Output Keyword File
Data Set . . . 'IBMUSER.ISPF.KEYWORD.PDSE'
Member . . . . NEWERA

Instructions:
Enter option to change configuration settings,
END or EXIT command to generate keyword file, or
CANCEL command to exit without keyword file generation
```



Create and Compile Keyword File

- Note the message “Defaults loaded”; this indicates creation of new keyword member NEWERA
- If modifying an existing keyword member, “Keyword file loaded” will be displayed instead
- Enter 1, Editor Settings, to bring up Modify PDF Edit Configuration Settings

Create and Compile Keyword File

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SHARE
File Edit Font Transfer Macro Options Window Help

Modify PDF Edit Configuration Settings

Command ==> _____ More: +

Miscellaneous Edit Settings
Maximum Number of Edit Profiles . . . . . 25
Maximum Number of Edit Clipboards . . . . . 11
Site-wide Initial Macro . . . . . _____
Maximum Initial Storage for Edit . . . . . 0 (Number of 1K Blocks)
Maximum Edit Clipboard Size . . . . . 0 (Number of 4K Pages)
Undo Storage Size . . . . . 0 (Number of 1K Blocks)
Text Flow Terminators . . . . . .:&<
Edit CUT Default Action . . . . . REPLACE (APPEND or REPLACE)
Edit PASTE Default Action . . . . . KEEP (DELETE or KEEP)

Enter "/" to select option
/ Allow Edit Highlighting
/ Default Editor to have Highlighting Enabled
/ Highlight Assembler Continuation Errors

/ Default Editor to have Action Bars Present
/ Warn on Trailing Blank Truncation
/ Allow Creation of CREATE/REPLACE Target Data Set
- Force ISRE776 if RCHANGE passed arguments
- Enable Extended Statistics

Edit Preserve Settings
Enter "/" to select option
- Preserve VB record length
- Force the Preserve VB record length Selection

Edit Recovery Data Set Settings | SCLM Warning Level

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Create and Compile Keyword File

- After modifying the PDF Edit Options, hit PF3 to return to Create/Modify ISPF Configuration Menu
- Select option 3 to Modify PDF Configuration Settings

Create and Compile Keyword File

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SHARE
File Edit Font Transfer Macro Options Window Help

Modify PDF Configuration Settings

Command ==> _____ More: +

PDF Exits
Data Set Allocation Program Exit . . . . . _____
Print Utility Program Exit . . . . . _____
Print Utility Command Exit . . . . . _____
Compress Program Exit . . . . . _____
Compress Command Exit . . . . . _____
Data Set List Filter Program Exit . . . . . _____
Member List Filter Program Exit . . . . . _____
Data Set Name Change Program Exit . . . . . _____
Data Set List Line Command Program Exit . . . . . _____
Activity Monitoring Program Exit . . . . . _____
Member List Line Command Program Exit . . . . . _____
Member List Line Command Command Exit . . . . . _____

PDF Data Set Characteristics

Outlist Utility
Record Length . . . 133
Block Size . . . . 13566
Primary Blocks . . . 200
Secondary Blocks . . 100

SuperC Block Sizes
List Data Set . . . . . 0
Update Data Set . . . . . 0
Profile Data Set . . . . . 0
Statements Data Set . . . . . 0
Listing Primary Quantity . . 50
Listing Secondary Quantity . 100
Update Primary Quantity . . . 15
Update Secondary Quantity . . 30

Move/Copy Settings
Enter "/" to select option
/ Allow Creation of Move/Copy Target Data Set

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Create and Compile Keyword File

- After modifying PDF Configuration Settings, hit PF3 to return to Create/Modify ISPF Configuration Menu
- Select option 4 for Modify ISPF Sitewide Defaults

Create and Compile Keyword File

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SHARE
File Edit Font Transfer Macro Options Window Help

Modify ISPF Sitewide Defaults

Command ==> _____ More: +

If you select any RESET fields in the sections: ISPF Site-wide Defaults, CUA
Color Settings, Log and List Defaults, Terminal and User Defaults, Workstation
Defaults, or Workstation Download Defaults you must increment the Sitewide
Defaults Version Level field to enable the RESET fields you have selected.
Increment only the last 3 digits of the Sitewide Defaults Version Level. ISPF
is always shipped with the Sitewide Defaults Version Level field set to 43000.
This value does not change with new versions or releases of ISPF.

Sitewide Defaults Version Level . . 43000

General settings
Enter "/" to select option
 Tab to Point and Shoot
/ Tab to Action Bars
  Use Session Manager
/ Jump From Leader Dots
/ Always Show Split Line
/ Long Messages in Pop-ups
  Edit PRINTDS Command
/ Restore Test/Trace Options
/ Display Panels in CUA Mode
/ Use Keylists
/ Show Pfkeys

Select Option 7.1 Dialog Test Panel
1 1. ISPYFP
  2. ISPYFPA
  3. ISPYFPB

Reset flags
Enter "/" to select option
_ Reset Tab to Point and Shoot
_ Reset Tab to Action Bars
_ Reset Use Session Manager
_ Reset Jump From Leader Dots
_ Reset Show Split Line
_ Reset Long Messages in Pop-ups
_ Reset Edit PRINTDS Command
_ Reset Restore Test/Trace Options
_ Reset Display Panels in CUA Mode
_ Reset Use Keylists
_ Reset Show Pfkeys
_ Reset LOG Data Set Process Option
_ Reset LIST Data Set Process Option
_ Reset Command Line Placement

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```



Create and Compile Keyword File

- After going through all ISPF options, hit PF3 (END) to save keyword file
- View screen displayed showing keyword file and all customized options
- Hit PF3 (END) to leave keyword file display
- Message "Keyword file saved" displayed on ISPF Configuration Utility menu

Create and Compile Keyword File

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SHARE
File Edit Font Transfer Macro Options Window Help

File Edit Edit_Settings Menu Utilities Compilers Test Help

VIEW          TCONLEY.ISPF.KEYWORD(SHAREPIT) - 01.00          Columns 00001 00072
Command ==> |          Scroll ==> CSR

***** ***** Top of Data *****
000001 /* ISPF Configuration table definition.  Generated by REXX ISPCMOD */
000002 /* Created 23:14:49 on 7 Aug 2014 */
000003 /* by user TCONLEY. */
000004 /* Defaults were included as comments. */
000005 /* */
000006 OUTLIST_BLOCK_SIZE          = 0
000007 EDIT_RECOVERY_BLOCK_SIZE    = 32760
000008 DSLIST_RM_ENABLED             = YES
000009 STATS_EXT_ENABLED            = YES
000010 VSAM_EDIT_ENABLED             = YES
000011 VSAM_BROWSE_ENABLED          = YES
000012 VSAM_VIEW_ENABLED           = YES
000013 STATS_EXT                   = ON
000014 RECOVERY                     = ON
000015 FORCE_RECOVERY                 = YES
000016 HILITE                        = ON
000017 HILITE_DOLOGIC                = ON
000018 HILITE_IFLOGIC                = ON
000019 HILITE_PAREN                  = ON
000020 HILITE_FIND                    = OFF
000021 TAB_TO_ACTION_BARS           = NO
000022 LOG_DATA_SET_DISPOSITION      = D
000023 LIST_DATA_SET_DISPOSITION     = D
000024 COMMAND_LINE_PLACEMENT       = ASIS
000025 USE_KEYLISTS                  = NO
000026 SHOW_PFKEYS                   = OFF
000027 SCROLL_DEFAULT                 = CSR

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Create and Compile Keyword File

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File Edit Font Transfer Macro Options Window Help

ISPFS Configuration Utility                                Keyword file saved

Option ==> █

1 Create/Modify Settings and Regenerate Keyword File
2 Edit Keyword File Configuration Table
3 Verify Keyword Table Contents
4 Build Configuration Table Load Module
5 Convert Assembler Configuration Table to Keyword File
6 Build SMP/E USERMOD
7 Convert Configuration Table Loadmod to Keyword File

Keyword File Data Set
Data Set . . . 'IBMUSER.ISPF.KEYWORD.PDSE'
Member . . . . NEWERA

Configuration Table Assembler Source Data Set
Data Set . . .
Member . . . .

Output File Content for Keyword File
2 1. Include only non-default values
   2. Include defaults as comments
   3. Include all values

Current Configuration Table
Keyword File : IBMUSER.ISPF.KEYWORD( DEFAULT )
Identifier . : ISPCFIGU                      Level . . . . : 480R8001
Compile Date : 2015/05/14                    Compile Time : 12:15

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```



Create and Compile Keyword File

- Option 2 Edit Keyword File Configuration Table *NOT RECOMMENDED*; use ISPCCONF menu to create syntactically correct keyword file
- Option 3 Verify Keyword Table Contents ensures syntactically correct keyword file
- Option 4 Build Configuration Table Load Module creates ISPCFIGU and ISPCFIGV modules from the keyword file
- Entering '4' brings up following pop-up menu

Create and Compile Keyword File

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zPDT
File Edit Font Transfer Macro Options Window Help

                                ISPF Configuration Utility
                                Build Configuration Table Load Module

Command ==> _____

Input Keyword File Data set
Data Set . . . 'IBMUSER.ISPF.KEYWORD.PDSE'
Member . . . . NEWERA_____

Output Configuration Table Load Module Data Set
Data Set . . . . _____

Optional fields (leave blank for ISPF to use defaults)
Object data set . . . . _____
Configuration member . . . . _____ (Defaults to ISPCFIGU)
VSAM member . . . . . _____ (Defaults to ISPCFIGV)

2. Include defaults as comments
3. Include all values

Current Configuration Table
Keyword File : IBMUSER.ISPF.KEYWORD(DEFAULT)
Identifier . : ISPCFIGU           Level . . . . : 480R8001
Compile Date : 2015/05/14       Compile Time : 12:15

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```



Create and Compile Keyword File

- Recommend linklist load library for easy installation and maintenance in production; new defaults can be set with "F LLA,REFRESH" MVS command
- Testing with user loadlib before production will be shown in demo later
- Use default values for everything else
- Hit Enter to generate load modules
- Note message "Load module built"

Create and Compile Keyword File

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zPDT
File Edit Font Transfer Macro Options Window Help

ISPFS Configuration Utility                                Load module built

Option ==> █

1 Create/Modify Settings and Regenerate Keyword File
2 Edit Keyword File Configuration Table
3 Verify Keyword Table Contents
4 Build Configuration Table Load Module
5 Convert Assembler Configuration Table to Keyword File
6 Build SMP/E USERMOD
7 Convert Configuration Table Loadmod to Keyword File

Keyword File Data Set
Data Set . . . 'IBMUSER.ISPF.KEYWORD.PDSE'
Member . . . . NEWERA

Configuration Table Assembler Source Data Set
Data Set . . .
Member . . . .

Output File Content for Keyword File
2 1. Include only non-default values
   2. Include defaults as comments
   3. Include all values

Current Configuration Table
Keyword File : IBMUSER.ISPF.KEYWORD( DEFAULT )
Identifier . : ISPCFIGU                      Level . . . . : 480R8001
Compile Date : 2015/05/14                    Compile Time : 12:15

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```



Convert ISRCONFG to ISPCCONF

- Option "5" on ISPCCONF menu converts ISRCONFG to keyword table
- Not really relevant today, but if you have ISRCONFG source laying around and you've never run ISPCCONF...
- Assembler source for ISRCONFG MUST be assembler source
- ISRCONFIG usermod with JCL and SMP/E wrapped around it will not be recognized by ISPCCONF



(DON'T) Build SMP/E USERMOD

- Unfortunately, option "6", Build SMP/E USERMOD, is not suitable for use
- The FMID, target, and DLIB datasets must be specified manually, and are not checked for accuracy
- While syntactically correct USERMOD is built, ++DATA and ++PROGRAM elements ISPCFIGx are not shipped by ISPF
- USERMOD will not notify you of regression when ISPCCONF maintenance is applied



(DON'T) Build SMP/E USERMOD

- Dialog uses superseded USERMODs, but USERMODs are RESTORED and re-APPLY'd, not superseded
- A PRE field should be supplied for prerequisite ISPF maintenance, but you have to add that manually
- Do not use USERMOD option; rely on ISPF service to issue HOLDDATA for PTFs requiring ISPCCONF to rebuild ISPCFIGx
- Open a PMR if they forget!



Recover Keyword File from ISPCFIGx

- New for z/OS V2R1, OA42680 added new option 7, Convert Configuration Table Loadmod to Keyword File
- Keyword file can be recovered if (when?) ISPF keyword file is lost or misplaced
- Very hot requirement!

Recover Keyword File from ISPCFIGx

```
zPDT
File Edit Font Transfer Macro Options Window Help

                                ISPF Configuration Utility

Option ==> █

1 Create/Modify Settings and Regenerate Keyword File
2 Edit Keyword File Configuration Table
3 Verify Keyword Table Contents
4 Build Configuration Table Load Module
5 Convert Assembler Configuration Table to Keyword File
6 Build SMP/E USERMOD
7 Convert Configuration Table Loadmod to Keyword File

Keyword File Data Set
Data Set . . . 'IBMUSER.ISPF.KEYWORD.PDSE'
Member . . . . NEWERA

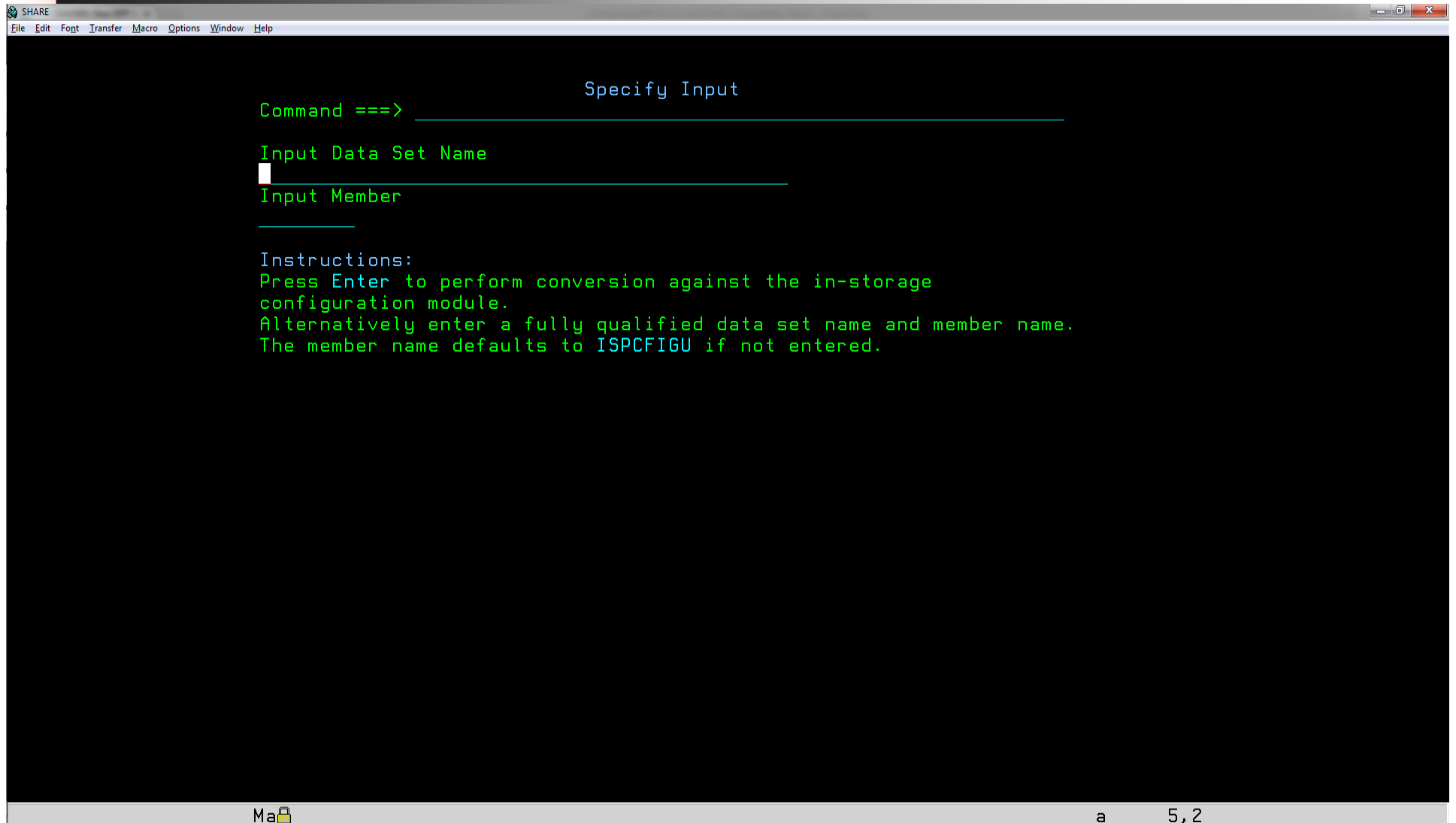
Configuration Table Assembler Source Data Set
Data Set . . .
Member . . . .

Output File Content for Keyword File
2 1. Include only non-default values
   2. Include defaults as comments
   3. Include all values

Current Configuration Table
Keyword File : IBMUSER.ISPF.KEYWORD( DEFAULT )
Identifier . : ISPCFIGU                      Level . . . . : 480R8001
Compile Date : 2015/05/14                    Compile Time : 12:15

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Recover Keyword File from ISPCFIGx



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SHARE
File Edit Font Transfer Macro Options Window Help


                               Specify Input

Command ==> _____

Input Data Set Name
|_____

Input Member
|_____

Instructions:
Press Enter to perform conversion against the in-storage
configuration module.
Alternatively enter a fully qualified data set name and member name.
The member name defaults to ISPCFIGU if not entered.
```

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Recover Keyword File from ISPCFIGx

- Enter specific load module dataset and member name, or simply hit Enter to decompile ISPCFIGx module(s) in memory

Recover Keyword File from ISPCFIGx

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zPDT
File Edit Font Transfer Macro Options Window Help

File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT          IBMUSER.ISPF.KEYWORD.PDSE(NEWERA) - 01.01          Columns 00001 00072
Command ==> |          Scroll ==> CSR
*****
=NOTE=       ***** Top of Data *****
=NOTE=       THIS IS AN EDIT SESSION.
=NOTE=       PRESS PF3 TO SAVE THE FILE.

000001 /*
000002 /* SOURCE DETAILS :
000003 /* KEYWORD FILE :
000004 /* IBMUSER.ISPF.KEYWORD(DEFAULT)
000005 /* IDENTIFIER : ISPCFIGU          LEVEL . . . : 480R8001
000006 /* COMPILE DATE : 2015/05/14    COMPILE TIME : 12:15
000007 /*
000008 /*
000009 /* CONVERSION DATE/TIME : 2015/07/28 00:57
000010 /* OUTPUT FILE :
000011 /* 'IBMUSER.ISPF.KEYWORD.PDSE(NEWERA)'
000012 /*
000013 /*
000014 ACTION_BAR_SELECTED_CHOICE          = 600
000015 ACTION_BAR_SEPARATOR_LINE          = 600
000016 ACTION_BAR_UNSELECTED_CHOICE      = 720
000017 ACTION_MESSAGE_TEXT                = 220
000018 ACTIVITY_MONITORING_PROGRAM_EXIT    = NONE
000019 ALLOCATE_BEFORE_UNCATALOG            = NO
000020 ALLOW_DATA_SET_CREATION_FOR_CREATE_REPLACE = YES
000021 ALLOW_DATA_SET_CREATION_FOR_MOVE_COPY  = YES
000022 ALLOW_EDIT_HIGHLIGHTING              = YES
000023 ALLOW_SUBMIT_FROM_BROWSE             = YES
000024 ALLOW_SUBMIT_FROM_VIEW                = YES
000025 ALLOWED_ALLOCATION_UNITS               = ANY
000026 APPLID_FOR_SITE_COMMAND_TABLE       = SIT1
000027 APPLID_FOR_USER_COMMAND_TABLE       = USR1
000028 ASPECT_RATIO                          = 0
000029 AUTOLIST                              = OFF
000030 AUTONUM                                = OFF
000031 AUTOSAVE                               = ON
000032 AUTOSAVE_PROMPT                     = PROMPT
000033 BLOCK_SIZE_FOR_TEMPORARY_CNTL_DATA_SETS = 0
000034 BLOCK_SIZE_FOR_TEMPORARY_LIST_DATA_SETS = 0
000035 BLOCK_SIZE_FOR_TEMPORARY_WORK_DATA_SETS = 0
000036 BROWSE_FTP_ERRORS                    = YES

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```



Recover Keyword File from ISPCFIGx

- Resulting keyword file is simply alphabetical list of ISPF options
- In normal keyword file, options are grouped by function, with descriptive comments
- To create more usable keyword file, use this recovered keyword file to generate new keyword file
- Select option 1 from the ISPCCONF main menu to load recovered keyword file

Recover Keyword File from ISPCFIGx

```
zPDT
File Edit Font Transfer Macro Options Window Help

Create/Modify ISPF Configuration      Keyword file loaded

Option ==> █

General ISPF Settings                System Profile (ISPSPROF) Settings
1 Editor Settings                    6 Log and List Defaults
2 Edit/View/Browse VSAM Settings     7 Terminal and User Defaults
3 PDF Exits and Other PDF Settings   8 Workstation Defaults
4 ISPF Site-wide Defaults            9 Workstation Download Defaults
5 ISPDFLT, CUA Colors, and Other
  DM Settings

Output Keyword File
Data Set . . . 'IBMUSER.ISPF.KEYWORD.PDSE'
Member . . . . NEWERA

Instructions:
Enter option to change configuration settings,
END or EXIT command to generate keyword file, or
CANCEL command to exit without keyword file generation
```




Recover Keyword File from ISPCFIGx

- Note the “Keyword file loaded” message
- To generate the new keyword file, enter the END command (PF3 in most sites)

Recover Keyword File from ISPCFIGx

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zPDT
File Edit Font Transfer Macro Options Window Help

File Edit Edit_Settings Menu Utilities Compilers Test Help

VIEW          IBMUSER.ISPF.KEYWORD.PDSE(NEWERA) - 01.00          Columns 00001 00072
Command ==>
***** Top of Data *****
000001 /* ISPF Configuration table definition. Generated by REXX ISPCMOD */
000002 /* Created 01:00:26 on 28 Jul 2015 */
000003 /* by user IBMUSER. */
000004 /* Defaults were included as comments. */
000005 /*
000006 OUTLIST_BLOCK_SIZE = 0
000007 OUTLIST_PRIMARY_QUANTITY = 2
000008 OUTLIST_SECONDARY_QUANTITY = 1
000009 EDIT_RECOVERY_BLOCK_SIZE = 32760
000010 DSLIST_RM_ENABLED = YES
000011 UNDO_STORAGE_SIZE = 1024
000012 STATS_EXT_ENABLED = YES
000013 RECOVERY = ON
000014 FORCE_RECOVERY = YES
000015 FORCE_SETUNDO = YES
000016 HILITE = ON
000017 HILITE_DOLOGIC = ON
000018 HILITE_IFLOGIC = ON
000019 HILITE_PAREN = ON
000020 HILITE_FIND = OFF
000021 TAB_TO_ACTION_BARS = NO
000022 LOG_DATA_SET_DISPOSITION = D
000023 LIST_DATA_SET_DISPOSITION = D
000024 COMMAND_LINE_PLACEMENT = ASIS
000025 USE_KEYLISTS = NO
000026 SHOW_PFKEYS = OFF
000027 SCROLL_DEFAULT = CSR
000028 SCROLL_MAX = 9999999
000029 DISPLAY_EMPTY_MEMBER_LIST = YES
000030 DISPLAY_EMPTY_MEMBER_LIST_PATTERN = YES
000031 STATUS_AREA_DEFAULT = CAL
000032 LIST_DATA_SET_RECORDS_PER_BLOCK = 231
000033 LOG_DATA_SET_BLOCK_SIZE = 0
000034 BLOCK_SIZE_FOR_TEMPORARY_CNTL_DATA_SETS = 0
000035 BLOCK_SIZE_FOR_TEMPORARY_LIST_DATA_SETS = 0
000036 BLOCK_SIZE_FOR_TEMPORARY_WORK_DATA_SETS = 0
000037 ISPCTL0_BLOCK_SIZE = 0
000038 USE_ADDITIONAL_QUAL_FOR_PDF_DATA_SETS = YES

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```

Recover Keyword File from ISPCFIGx

```
zPDT
File Edit Font Transfer Macro Options Window Help

File Edit Edit_Settings Menu Utilities Compilers Test Help

VIEW          IBMUSER.ISPF.KEYWORD.PDSE(NEWERA) - 01.00          Columns 00001 00072
Command ==>          Scroll ==> CSR
000039 ISPF_TEMPORARY_DATA_SET_QUALIFIER      = S&SYSNAME
000040 PROFILE_SHARING                          = YES
000041 USE_ALTERNATE_DIALOG_TEST_PANEL           = 2
000042 ACTION_BAR_SEPARATOR_LINE                 = 600 /*Yellow Low None */
000043 APPLID_FOR_USER_COMMAND_TABLE              = USR1
000044 APPLID_FOR_SITE_COMMAND_TABLE              = SIT1
000045 RETRIEVE_COMMAND_STACK_SIZE               = 4096
000046 ENABLE_XTIOT                               = YES
000047 LOG_MESSAGE_ID                             = YES
000048 LOG_PAGES_PRIMARY_QUANTITY                  = 0
000049 LOG_PAGES_SECONDARY_QUANTITY                = 0
000050 LIST_PAGES_PRIMARY_QUANTITY                 = 1
000051 LIST_PAGES_SECONDARY_QUANTITY              = 2
000052 SCREEN_FORMAT                             = DATA
000053 TERMINAL_TYPE                              = 3278T
000054 NUMBER_OF_PFKEYS                          = 24
000055 DEFAULT_MESSAGE_ID                         = ON
000056 DEFAULT_PRIMARY_PANEL                      = ISR@PRIM
000057 DEFAULT_LIBDEF_PROCESSING_OPTION           = STACK
000058 /*-----*/
000059 /*          The following values match the ISPF Defaults          */
000060 /*-----*/
000061 /*-----*/
000062 /*          PDF EXITS          */
000063 /*-----*/
000064 /*DATA_SET_ALLOCATION_PROGRAM_EXIT           = NONE          */
000065 /*PRINT_UTILITY_PROGRAM_EXIT                = NONE          */
000066 /*PRINT_UTILITY_COMMAND_EXIT               = NONE          */
000067 /*COMPRESS_UTILITY_PROGRAM_EXIT            = NONE          */
000068 /*COMPRESS_UTILITY_CLIST_EXIT              = NONE          */
000069 /*DATA_SET_LIST_FILTER_PROGRAM_EXIT        = NONE          */
000070 /*MEMBER_LIST_FILTER_PROGRAM_EXIT          = NONE          */
000071 /*DATA_SET_NAME_CHANGE_PROGRAM_EXIT        = NONE          */
000072 /*DATA_SET_LIST_LINE_COMMAND_PROGRAM_EXIT  = NONE          */
000073 /*ACTIVITY_MONITORING_PROGRAM_EXIT         = NONE          */
000074 /*MEMBER_LIST_LINE_COMMAND_PROGRAM_EXIT    = NONE          */
000075 /*MEMBER_LIST_LINE_COMMAND_COMMAND_EXIT    = NONE          */
000076 /*-----*/
000077 /*          DATA SET ALLOCATION SETTINGS          */
/*-----*/

MMA          0.0          a          4,15
```



Recover Keyword File from ISPCFIGx

- Note that new keyword file has flowerbox documentation around major sections
- Defaults now commented out, if that was specified on ISPCCONF main menu
- Enter END (PF3) again to save keyword file

Recover Keyword File from ISPCFIGx

```
zPDT
File Edit Font Transfer Macro Options Window Help

ISPFC Configuration Utility                                Keyword file saved

Option ==> █

1 Create/Modify Settings and Regenerate Keyword File
2 Edit Keyword File Configuration Table
3 Verify Keyword Table Contents
4 Build Configuration Table Load Module
5 Convert Assembler Configuration Table to Keyword File
6 Build SMP/E USERMOD
7 Convert Configuration Table Loadmod to Keyword File

Keyword File Data Set
Data Set . . . 'IBMUSER.ISPF.KEYWORD.PDSE'
Member . . . . NEWERA

Configuration Table Assembler Source Data Set
Data Set . . .
Member . . . .

Output File Content for Keyword File
2 1. Include only non-default values
   2. Include defaults as comments
   3. Include all values

Current Configuration Table
Keyword File : IBMUSER.ISPF.KEYWORD( DEFAULT )
Identifier . : ISPCFIGU                      Level . . . . : 480R8001
Compile Date : 2015/05/14                    Compile Time : 12:15

M 0.2 a 2,14
```



The WAC ISPF Configuration

- Following is WAC (World According to Conley) method for configuring ISPF
- Recommendations for settings to improve ISPF performance and usability
- If these settings work for you and you agree with them, great!
- If not, don't hesitate to do something else if it's appropriate for your installation (Your Mileage May Vary!)



The WAC ISPF Configuration

- Option 1, Editor Settings
 - Enter 1024 for Undo Storage Size to enable SETUNDO KEEP (undo changes across SAVE)
 - Enter "/" for Enable Extended Statistics
 - Change edit recovery dataset blocksize to 32760 for better performance and space utilization
 - For edit options, enter "/" on STATS EXT for extended statistics, RECOVERY ON (safety, recovery, investment protection), uncheck NUMBER ON and change NULLS to NULLS ON ALL (increase user productivity in EDIT)



The WAC ISPF Configuration

- Option 1, Editor Settings (cont'd)
 - Consider entering "/" to force RECOVERY ON setting (this is the only ISPF config parm that I recommend forcing or overriding)
 - In Edit Highlighting, enter "/" for HILITE ON, Highlight DO/END logic, Highlight IF logic, and Match parentheses (user productivity, but higher overhead; testing shows about an 8X increase in service units for HILITE, but there's no user-visible degradation)
 - Uncheck highlight FIND strings (personal preference, a lot of hits on one screen make data hard to read)



The WAC ISPF Configuration

- Option 2, Edit/View/Browse VSAM Settings
 - By default, VSAM Edit/View/Browse disabled
 - Command defaults set for IBM's File Manager
 - If you have VSAM Edit/View/Browse tool, enter its commands here to enable Edit/View/Browse for VSAM



The WAC ISPF Configuration

- Option 3, PDF Exits and Other PDF Settings
 - Specify 0 (zero) for Outlist Utility Block Size to get SDB OUTLIST datasets
 - Specify "/" for Enable RM/Tape Commands, and specify appropriate RM/Tape Command and APPLID for your Tape Management System software (defaults are set for IBM's Removable Media Manager - DFSMSrmm)
 - If running storage manager other than HSM, modify the Volume for Migrated Data Sets and Delete Command for Migrated Data Sets fields for correct values



The WAC ISPF Configuration

- Option 4, ISPF Sitewide Defaults
 - Uncheck Tab to Action Bars, uncheck Use Keylists, uncheck Show Pfkeys
 - Set Select Option 7.1 Dialog Test Panel to ISPYFPA, set Command Line Placement to Asis, set Scroll Default to CSR, set Status Area Default to Calendar
 - New for z/OS V2R1, change Maximum Scroll Value to 9999999
 - For Empty Member List support, check Allow Empty Member List and Allow Empty Member List (nomatch)



The WAC ISPF Configuration

- Option 4, ISPF Sitewide Defaults (cont'd)
 - Set List Data Set Records per Block to 231 for a 3390 (LRECL 121 * 231 = 27951, half-track for a 3390)
 - Specify 0 (zero) for all ISPF dataset blocksizes to get SDB
 - For LOG Data Set Process Option and LIST Data Set Process Option, specify "3" to Delete Without Printing (eliminates LOG/LIST prompt upon exiting ISPF)
 - Enter "/" for Use Additional Qualifier for PDF Output Data Sets



The WAC ISPF Configuration

- Option 4, ISPF Sitewide Defaults (cont'd)
 - For multisystem and multiple logon support, specify SYS&SYSNAME Additional Temporary Data Set Qualifier to create LPAR-unique temporary dataset names and eliminate need for ISPF exit 16
 - Specify "/" for Multi-logon Profile Sharing (required to support OSMF's multiple ISPF window facility)
 - To enable multiple logon support, create shared ISPF profile dataset and modify logon exec to allocate it



The WAC ISPF Configuration

- Option 4, ISPF Sitewide Defaults (cont'd)
 - For more information regarding multiple logon, refer to my article in Enterprise Systems Journal:
[Simultaneous Logons to Multiple LPARs in a Sysplex](#)
 - New for z/OS V2R1, you can enter an initial command for ISPF to process



The WAC ISPF Configuration

- Option 5, ISPDFLTS, CUA Colors, and Other DM Settings
 - New for z/OS V2R1, Enable XTIOT support in ISPF (requires NON_VSAM_XTIOT in DEVSUPxx)
 - Set SITE for Site Command Table 1
 - Set USER for User Command Table 1
 - Set Retrieve Command Stack Size to 4096
 - Set the Default Primary Panel to ISR@PRIM
 - Set the Default LIBDEF Processing Option to STACK
 - Change Action Bar Separator Line to color to Yellow (6)



The WAC ISPF Configuration

- Option 6, Log and List Defaults
 - Create valid Log/List job cards
 - Set the Log Primary and Secondary Quantity to 0
 - Enter "/" for Message ID
 - Set the List Primary and Secondary Quantity to 1



The WAC ISPF Configuration

- Option 7, Terminal and User Defaults
 - Set Screen Format to MAX (take advantage of larger screen sizes), set Terminal Type to "6" for 3278T (better character set for square brackets, etc.)
 - Set Number of Keys to "2" for 24
 - Enter "/" for Message Identifier field to assist debugging



The WAC ISPF Configuration

- Option 8 Workstation Defaults can remain unchanged
- Option 9 Workstation Download Defaults can remain unchanged
- That's the WAC ISPF Configuration!



DEMO TIME!

- Create ISPCFIGU module in private user loadlib and test for completeness
 - Generate ISPCFIGU module in user loadlib
 - Return to READY
 - Rename existing profile dataset (assumes LOGON exec or exec invoking ISPF allocates new profile so ISPCFIGU will populate new defaults)
 - Issue TSOLIB command to activate the user loadlib
 - Issue CLIST to allocate new profile dataset and invoke ISPF



DEMO TIME!

- Synchronize your watches
- Time me
- GO!



Summary

- Discussed ISPF Configuration History
- Reviewed ISRCONFG method for customizing ISPF
- Introduced ISPCCONF dialog for customizing ISPF
- Demonstrated how to Create and Compile keyword file
- Showed how to convert from ISRCONFG to ISPCCONF
- Discussed Miscellaneous Topics such as SMP/E usermod



Summary

- Discussed recovery of a keyword file from ISPF Configuration Load Module
- Discussed WAC (World According to Conley) method for configuring ISPF



Finally...

- I'm interested in hearing about your ISPCCONF experiences, positive or negative; if you encounter any unique situations or problems using ISPCCONF to configure ISPF, please let me know about them by sending an Email to pinncons@rochester.rr.com