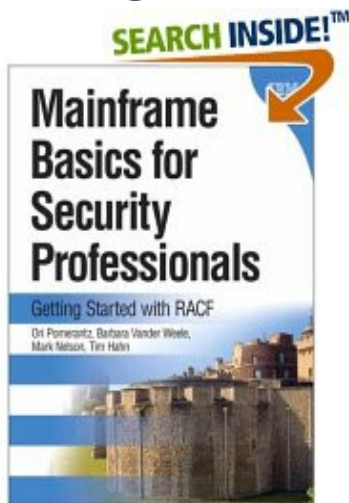# The Utility Belt: ISRDDN

NY RACF® Users Group
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ISRDDN Overview

- **Contained within ISPF is a debugging tool, ISRDDN, which can be used in TSO to:**

    - Examine the datasets allocated to a DD name
    - Browse storage that is accessible to non-authorized callers
    - Identify the 'fetch location' for a module loaded by the user
    - Find the data sets which contained a specific member
    - Identify I/O errors caused by mixed record format allocations
    - Find who is allocated specific data sets
    - Identify member names or LPA load modules are duplicated in the user's current allocations
    - Find empty datasets in data set concatenations

Getting into ISRDDN

- **ISRDDN is invoked from any place in ISPF where you can enter a TSO command**

```
   Menu   List   Mode   Functions   Utilities   Help
--------------------------------------------------------------------------
                                ISPF Command Shell
Enter TSO or Workstation commands below:

===>   isrddn



Place cursor on choice and press enter to Retrieve command

=>
=>
=>
=>
=>
=>
=>
=>
=>
=>
 F1=Help      F2=Split     F3=Exit      F7=Backward  F8=Forward   F9=Swap
F10=Actions  F12=Cancel
  *CMD
```

First ISRDDN Panel

- **The first/home ISRDDN panel is a list of the DD names allocated to the TSO session and the data sets allocated to those DDNAMES**

```
                        Current Data Set Allocations            Row 1 of 122

  Volume     Disposition Act  DDname     Data Set Name   Actions: B E V M F C I Q
             NEW,DEL     >     $ASM       NULLFILE (Dummy)
             NEW,DEL     >     $CLIST     NULLFILE (Dummy)
             NEW,DEL     >     $CNTL      NULLFILE (Dummy)
             NEW,DEL     >     $LIST      NULLFILE (Dummy)
             NEW,DEL     >     $LOAD      NULLFILE (Dummy)
             NEW,DEL     >     $OBJ       NULLFILE (Dummy)
             NEW,DEL     >     $PLS       NULLFILE (Dummy)
             NEW,DEL     >     $TEXT      NULLFILE (Dummy)
  SPOOL1     SHR,KEEP    >     HASPINDX   ISF.HASPINDX
  ZD113B     SHR,KEEP    >     ISPILIB    ISP.SISPSAMP
             MOD,DEL     >     ISPLIST    ---------- J3DR Subsystem file ------------
  ZD113B     SHR,KEEP    >     ISPLLIB    GIM.SGIMLMD0
  ZD113B     SHR,KEEP    >                SYS1.DFQLLIB
  ZD113B     SHR,KEEP    >                SYS1.DGTLLIB
  ZD113B     SHR,KEEP    >                SYS1.SCBDHENU
             MOD,DEL     >     ISPLOG     ---------- J3DR Subsystem file ------------
  ZD113B     SHR,KEEP    >     ISPMLIB    SYS1.SERBMENU
 Command ===>                                              Scroll ===>
  F1=Help    F2=Split   F3=Exit    F5=Rfind   F7=Up      F8=Down     F9=Swap
 F10=Left   F11=Right  F12=Cancel
   *CMD
```

First ISRDDN Panel...

- Scrolling to the right shows more data set information

```
                       Current Data Set Allocations            Row 1 of 122

Blksz Lrecl RCFM Org  Act DDname     Data Set Name   Actions: B E V M F C I Q
                  PS   >   $ASM       NULLFILE (Dummy)
                  PS   >   $CLIST     NULLFILE (Dummy)
                  PS   >   $CNTL      NULLFILE (Dummy)
                  PS   >   $LIST      NULLFILE (Dummy)
                  PS   >   $LOAD      NULLFILE (Dummy)
                  PS   >   $OBJ       NULLFILE (Dummy)
                  PS   >   $PLS       NULLFILE (Dummy)
                  PS   >   $TEXT      NULLFILE (Dummy)
 4096  4096 F    DA   >   HASPINDX ISF.HASPINDX
27920    80 FB   PO   >   ISPILIB  ISP.SISPSAMP
                      >   ISPLIST  ---------- J3DR Subsystem file -------------
32760    ** U    PO   >   ISPLLIB  GIM.SGIMLMD0
32760    ** U    PO   >            SYS1.DFQLLIB
32760    ** U    PO   >            SYS1.DGTLLIB
32760    ** U    PO   >            SYS1.SCBDHENU
                  PS   >   ISPLOG   ---------- J3DR Subsystem file -------------
27920    80 FB   PO   >   ISPMLIB  SYS1.SERBMENU
Command ===>                                          Scroll ===> PAGE
 F1=Help    F2=Split   F3=Exit   F5=Rfind   F7=Up      F8=Down    F9=Swap
F10=Left   F11=Right  F12=Cancel
  *CMD
```

First ISRDDN Panel...

- **Scrolling to the right shows more data set information**

```
  Open        SMS ENQWait  Act DDname   Data Set Name   Actions: B E V M F C I Q
                        >       $ASM     NULLFILE (Dummy)
                        >       $CLIST   NULLFILE (Dummy)
                        >       $CNTL    NULLFILE (Dummy)
                        >       $LIST    NULLFILE (Dummy)
                        >       $LOAD    NULLFILE (Dummy)
                        >       $OBJ     NULLFILE (Dummy)
                        >       $PLS     NULLFILE (Dummy)
                        >       $TEXT    NULLFILE (Dummy)
                        >       HASPINDX ISF.HASPINDX
                        >       ISPILIB  ISP.SISPSAMP
  Cl=A                  >       ISPLIST  ---------- J3DR Subsystem file -------------
  Open                  >       ISPLLIB  GIM.SGIMLMD0
  Open                  >                SYS1.DFQLLIB
  Open                  >                SYS1.DGTLLIB
  Open                  >                SYS1.SCBDHENU
  Cl=A                  >       ISPLOG   ---------- J3DR Subsystem file -------------
  Open                  >       ISPMLIB  SYS1.SERBMENU
  Command ===>                                              Scroll ===> PAGE
   F1=Help    F2=Split   F3=Exit    F5=Rfind   F7=Up      F8=Down     F9=Swap
  F10=Left   F11=Right  F12=Cancel
    *CMD
```

ISRDDN Overview

- **Commands Available**

    - B Browse the first sixteen data sets or a single data set.
    - E Edit the first sixteen data sets or a single data set.
    - V View the first sixteen data sets or a single data set.
    - M Show an enhanced member list for the first sixteen data sets or a single data set.
    - F Free the entire DDNAME.
    - C Compress a PDS using the existing allocation.
    - I Provide additional data set information.
    - Q Display list of users or jobs using a data set.

Pseudo-DD names

▪ **You can look at APF, PARMLIB, and LPA information with these commands:**

- **APF**: Include or remove a pseudo-ddname of APFLIST which contains a list of APF libraries.
- **LPA**:Include or remove pseudo-ddnames LPALIB and LINKLIST which contain LPA libraries and Link List libraries respectively.
- **PARMLIB:** Include or remove a pseudo-ddname of PARMLIB which contains a list of PARMLIB libraries.

Member Lists

▪ **Placing an action character ("b" for browse in this example) next to a DD name creates something very interesting...**

```
                        Current Data Set Allocations          Row 262 of 338

   Volume   Disposition Act DDname   Data Set Name   Actions: B E V M F C I Q
   SL7430   SHR,KEEP    >   SYSEXEC  TIPS.TSO.REXX
   SL2B06   SHR,KEEP    >            TIPS.AUTOXREF.REXX
   SL120B   SHR,KEEP    >            TIPS.ASMXREFM.EXEC
   SL732D   SHR,KEEP    >            TIPS.AXEA.REXX
   SL2B00   SHR,KEEP    >            MASTSSI.COMMON.REXX
   SL730F   SHR,KEEP    >            TIPS.NEWTOOLS.REXX
   SL1355   SHR,KEEP    >            TIPS.MCLUSERS.REXX
   SL732A   SHR,KEEP    >            TIPS.XEDIT.CLIST
   SL3602   SHR,KEEP    >            TIPS.GENCMD.V512CLIB
   PRIPKA   SHR,KEEP    >   SYSHELP  SYS1.HELP
   PPP001   SHR,KEEP    >            SYS1.TCPIP.TCPHELP
   PRIPKA   SHR,KEEP    >            SYS1.SEDGHLP1
   SL7437   SHR,KEEP    >            TIPS.TSO.HELP
   SL7432   SHR,KEEP    >            TIPS.MCLUSERS.HELP
            NEW,DEL     >   SYSIN    ---------- Allocated to the terminal -------
            NEW,DEL     >   SYSPRINT ---------- Allocated to the terminal -------
   SL2B0D   SHR,KEEP    > b SYSPROC  RACFDEV.IPCS.CLIST
   SL7436   SHR,KEEP    >            RACFDEV.ISPF.CLIST
   PRIPKA   SHR,KEEP    >            SYS1.ISP.SISPCLIB
   SYSAQ1   SHR,KEEP    >            SYS1.TSO.CLIST
   SYSLBX   SHR,KEEP    >            SYSTOOLS.CLIB
   PRIPKA   SHR,KEEP    >            SYS1.EOY.SEOYCLIB
   SYSAQ4   SHR,KEEP    >            EMG.V2R1M0.EMGCLIB
   PRIPKA   SHR,KEEP    >            SYS1.REXX.SFANCMD
   PRIPKA   SHR,KEEP    >            SYS1.REXX.SEAGCMD
   PRIPKA   SHR,KEEP    >            SYS1.DGTCLIBV
   PRIPKA   SHR,KEEP    >            SYS1.HRFCLST.CLIST
   Command ===>                                      Scroll ===> PAGE
     *ISRDDNP
```

Member Lists...

- … a member list for all members in all data sets! "Lib" indicates which library contains the member

```
   Menu   Functions   Utilities   Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
BROWSE    RACFDEV.IPCS.CLIST                          First 16 Data Sets
   Name      Prompt   Lib    Size    Created          Changed            ID
. $$$COIBM            14      24    1990/03/15  1990/03/15 16:00:00    ORIGINA
. $CONVERT             2      65    1983/12/19  1984/09/18 12:52:00    BIBOLET
. $VERIFY              2      31    1983/06/24  1987/01/12 12:22:00    BIBOLET
. #ALLOC              13
. #ASAPI2             13     104    2001/05/03  2001/05/04 11:50:19    GREAGOR
. #BANKDO             13      32    1993/03/23  1993/03/23 15:55:45    DCRPROC
. #BANKSET            13     209    1993/02/25  1993/03/03 10:59:08    DCRPROC
. #BROWSE             13      63    1988/09/26  1991/05/29 08:37:00    D15BWL1
. #DISKR              13      90    1988/09/26  1991/05/29 08:37:00    D15BWL1
. #DISKW              13      66    1988/10/27  1991/05/29 08:37:00    D15BWL1
. #DRVITMS            13      83    1990/04/02  1993/01/27 14:46:19    GREAGOR
. #EDIT               13      55    1988/10/27  1991/05/29 08:38:00    D15BWL1
. #PDSCOMP             2     183    1988/09/02  1989/04/13 10:14:00    TGBYRNE
. #SETCLVL            13      14    1986/09/08  1986/09/08 18:25:00    D24AJD1
. #SETLLIB            13     195    1999/02/17  1999/02/17 15:04:05    D15RAS1
. #TEMP               13       9    1987/05/14  1987/05/14 09:22:00    BOYLE
. #TRACER             13       8    1987/05/14  1987/05/14 09:22:00    BOYLE
. #VSAMSET            13      68    1985/11/15  1986/04/10 16:14:00    D24AJD1
. @ADC370B             3      21    1996/10/04  1996/10/04 10:03:40    AMOLLOY
. @ADC370F             3      21    1996/10/04  1996/10/04 10:06:20    AMOLLOY
. @BOOKI               3
. @BOOKM               3
. @CCPLUSB             3      16    1999/03/17  1999/05/14 15:33:23    JWELLS
. @CCPLUSF             3      16    1999/05/14  2001/12/11 10:28:06    SLMC
. @COBOLSF             3
. @COB2                3
Command ===>                                          Scroll ===> HALF
```

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Looking at a Load Module

- **The LOAD command attempts to load a module into storage.**

```
                        Current Data Set Allocations              Row 1 of 122

   Volume    Disposition Act DDname    Data Set Name   Actions: B E V M F C I Q
             NEW,DEL     >   $ASM      NULLFILE (Dummy)
             NEW,DEL     >   $CLIST    NULLFILE (Dummy)
             NEW,DEL     >   $CNTL     NULLFILE (Dummy)
             NEW,DEL     >   $LIST     NULLFILE (Dummy)
             NEW,DEL     >   $LOAD     NULLFILE (Dummy)
             NEW,DEL     >   $OBJ      NULLFILE (Dummy)
             NEW,DEL     >   $PLS      NULLFILE (Dummy)
             NEW,DEL     >   $TEXT     NULLFILE (Dummy)
   SPOOL1    SHR,KEEP    >   HASPINDX  ISF.HASPINDX
   ZDR21B    SHR,KEEP    >   ISPILIB   ISP.SISPSAMP
             MOD,DEL     >   ISPLIST   --------- J41R Subsystem file ------------
   ZDR21B    SHR,KEEP    >   ISPLLIB   GIM.SGIMLMD0
   ZDR21B    SHR,KEEP    >             SYS1.DFQLLIB
   ZDR21B    SHR,KEEP    >             SYS1.DGTLLIB
   ZDR21B    SHR,KEEP    >             SYS1.SCBDHENU
             MOD,DEL     >   ISPLOG    --------- J41R Subsystem file ------------
   ZDR21B    SHR,KEEP    >   ISPMLIB   SYS1.SERBMENU
   ZDR21B    SHR,KEEP    >             GIM.SGIMMENU
   Command ===> load iefbr14                                    Scroll ===> PAGE
    F1=Help    F2=Split   F3=Exit    F5=Rfind    F7=Up       F8=Down    F9=Swap
    F10=Left   F11=Right  F12=Cancel
```

Looking at a Load Module...

- **… if successful, ISRDDN shows the module statistics....**

```
-------------------------------------------------------------.  122
|                    CSVQUERY Results                IEFBR14 |
|                                             More:      +   | Q
| Module IEFBR14  was found to be already loaded. Note that  |
| invocations of this program name may pick up another copy from |
| STEPLIB or a LIBDEF'ed data set or from a tasklib such as ISPLLIB. |
| Tab to a box and press enter to view the module in storage. |
|    +------------------------+                               |
|    | PLPA resident          |                               |
|    | Module address:00D6E000 |                              |
|    | Module size:   00000008 |                              |
|    | Reentrant              |                               |
|    | Serially reusable      |                               |
|    | Not loadable only      |                               | -----
|    | Authorized library     |                               |
|    | Not Authorized program |                               |
|    +------------------------+                               |
|                                                             |
|                                                             | -----
|                                                             |
|                                                             |
| Command ===>                                                | PAGE
|  F1=Help    F2=Split   F3=Exit    F9=Swap   F12=Cancel      |
'-------------------------------------------------------------'
```

Looking at a Load Module...

- ... and the "object code."

```
   BROWSE     IEFBR14.PLPA.Start:00D6E000.Size:00000008  Line 00000000 Col 001 080
******************************** Top of Data *********************************
     +0 (00D6E000)   1BFF07FE 00000000                      * ........          *
****************************** Bottom of Data ********************************











   Command ===>                                              Scroll ===> PAGE
    F1=HELP      F2=SPLIT      F3=END      F4=RETURN    F5=RFIND     F6=RCHANGE
    F7=UP        F8=DOWN       F9=SWAP     F10=LEFT     F11=RIGHT    F12=RETRIEVE
```

Looking at a Load Module...

- **You can ask ISRDDN to "disassemble" the load module with the DISASM command**

```
   BROWSE    IEFBR14.PLPA.Start:00D6E000.Size:00000008  Line 00000000 Col 001 080
******************************** Top of Data *********************************
     +0 (00D6E000)   1BFF07FE 00000000                        * ........            *
***************************** Bottom of Data ********************************














  Command ===> DISASM                                             Scroll ===> PAGE
   F1=HELP      F2=SPLIT      F3=END       F4=RETURN    F5=RFIND    F6=RCHANGE
   F7=UP        F8=DOWN       F9=SWAP      F10=LEFT     F11=RIGHT   F12=RETRIEVE
```

Looking at a Load Module...

- **You will be asked if you are authorized to do this...**

```
 BROWSE    IEFBR14.PLPA.Start:00D6E000.Size:00000008  Line 00000000 Col 001 080
******************************* Top of Data *********************************
     +0 (00D6E000)   1BFF07FE 00000000                    *  ........          *
***************************** Bottom of Data ********************************


           .----------------------------------------------------------.
           |                    *** WARNING ***                       |
           |                    *** WARNING ***                       |
           |                                        More:     +       |
           |                                                          |
           |  Before using this function you must be aware of and     |
           |  respect the intellectual property rights of others.     |
           |  You are not authorized to use this function to          |
           |  disassemble, copy or create assembly listings           |
           |  or disassembled Assembler Language source code          |
           |  in violation of any contractual or other legal          |
           |  obligation. You are authorized to use this function     |
           |  only for code for which you have verified you have       |
           |  the right to perform disassembly.                       |
           |                                                          |
           |  Only type YES to proceed if you believe you have the     |
 Command ===>  | F1=HELP       F2=SPLIT      F3=END        F4=RETURN  | PAGE
  F1=HELP      | F5=RFIND      F6=RCHANGE    F7=UP         F8=DOWN    | GE
  F7=UP        '----------------------------------------------------------' EVE
```

Looking at a Load Module...

- **You may have to scroll down to enter "YES"...**

```
 BROWSE     IEFBR14.PLPA.Start:00D6E000.Size:00000008  Line 00000000 Col 001 080
****************************** Top of Data *******************************
     +0 (00D6E000)   1BFF07FE 00000000                      * ........          *
****************************** Bottom of Data ****************************


                  .------------------------------------------------------.
                  |                    *** WARNING ***                    |
                  |                    *** WARNING ***                    |
                  |                                         More:    -    |
                  |  You are not authorized to use this function to      |
                  |  disassemble, copy or create assembly listings       |
                  |  or disassembled Assembler Language source code      |
                  |  in violation of any contractual or other legal      |
                  |  obligation. You are authorized to use this function |
                  |  only for code for which you have verified you have  |
                  |  the right to perform disassembly.                   |
                  |                                                      |
                  |  Only type YES to proceed if you believe you have the|
                  |  legal right to view the disassembled code.          |
                  |    Type YES to proceed . . . YES                     |
                  |    Disassemble from offset . 00000000                |
 Command ===>     |  F1=HELP      F2=SPLIT     F3=END       F4=RETURN    | PAGE
  F1=HELP         |  F5=RFIND     F6=RCHANGE   F7=UP        F8=DOWN      | GE
  F7=UP           '------------------------------------------------------' EVE
```

Looking at a Load Module...

▪ **...and if you say "yes", your module is disassembled.**

```
 BROWSE    IEFBR14.PLPA.Start:00D6E000.Size:00000008  Line 00000000 Col 001 080
****************************** Top of Data ******************************
(00D6E000)      +0   1BFF         A0000000 SR    R15,R15
(00D6E002)      +2   07FE                  BR    R14
(00D6E004)      +4   0000 0000             DC    X'00000000'
***************************** Bottom of Data *****************************




















 Command ===>                                           Scroll ===> PAGE
  F1=HELP      F2=SPLIT      F3=END       F4=RETURN    F5=RFIND     F6=RCHANGE
  F7=UP        F8=DOWN       F9=SWAP      F10=LEFT     F11=RIGHT    F12=RETRIEVE
```

Browsing Storage

- **ISRDDN allows you to browse storage within your address space**
  - Storage must be accessible to a key 8, non-authorize, problem state program
  - Command syntax is similar to TSO TEST/TESTAUTH
  - Can list arrays using the ARRAY format instruction
  - Can chain together lists using the CHAIN command
  - Can format lists of pointers using the ARRAYP

- **Some interesting storage locations:**
  - CVT: 10.?
  - RCVT: 10.?+3E0?
  - List of General Resource Classes: 10.?+3e0?+BC

Browsing Storage

- **BROWSE let's you look at storage in your address space, accessible by non-authorize programs**

```
                    Current Data Set Allocations            Row 1 of 122

 Volume     Disposition Act DDname    Data Set Name   Actions: B E V M F C I Q
            NEW,DEL    >    $ASM      NULLFILE (Dummy)
            NEW,DEL    >    $CLIST    NULLFILE (Dummy)
            NEW,DEL    >    $CNTL     NULLFILE (Dummy)
            NEW,DEL    >    $LIST     NULLFILE (Dummy)
            NEW,DEL    >    $LOAD     NULLFILE (Dummy)
            NEW,DEL    >    $OBJ      NULLFILE (Dummy)
            NEW,DEL    >    $PLS      NULLFILE (Dummy)
            NEW,DEL    >    $TEXT     NULLFILE (Dummy)
 SPOOL1     SHR,KEEP   >    HASPINDX  ISF.HASPINDX
 ZDR21B     SHR,KEEP   >    ISPILIB   ISP.SISPSAMP
            MOD,DEL    >    ISPLIST   ---------- J41R Subsystem file ------------
 ZDR21B     SHR,KEEP   >    ISPLLIB   GIM.SGIMLMD0
 ZDR21B     SHR,KEEP   >              SYS1.DFQLLIB
 ZDR21B     SHR,KEEP   >              SYS1.DGTLLIB
 ZDR21B     SHR,KEEP   >              SYS1.SCBDHENU
            MOD,DEL    >    ISPLOG    ---------- J41R Subsystem file ------------
 ZDR21B     SHR,KEEP   >    ISPMLIB   SYS1.SERBMENU
 ZDR21B     SHR,KEEP   >              GIM.SGIMMENU
 Command ===> browse 10.?+3e?                               Scroll ===> PAGE
  F1=Help    F2=Split   F3=Exit    F5=Rfind    F7=Up       F8=Down    F9=Swap
 F10=Left   F11=Right  F12=Cancel
```

Browsing Storage

- **Offset, address, hex data, and EBCDIC representation of the hex data is shown. Offset +BC in the RCVT is the class descriptor table.**

```
 BROWSE      STORAGE..Start: 00FBB578                                  10.?+3E0?
 ******************************** Top of Data ********************************
        +0 (00FBB578)    D9C3E5E3 00AE4368 00AE43C0 083BF000   * RCVT.......{..0. *
       +10 (00FBB588)    00000000 083B4000 00000000 00000000   * ...... ......... *
       +20 (00FBB598)    00000000 00F02A28 0000BE90 00AE43F0   * .....0.........0 *
       +30 (00FBB5A8)    00000000 103D000C D9C1C3C6 C4D9E5D9   * ........RACFDRVR *
       +40 (00FBB5B8)    4BD9C1C3 C6F3F1C4 40404040 40404040   * .RACF31D         *
       +50 (00FBB5C8)    40404040 40404040 40404040 40404040   *                  *
       +60 (00FBB5D8)    40404040 E2E8E2F1 4BE4C1C4 E2404040   *     SYS1.UADS     *
       +70 (00FBB5E8)    40404040 40404040 40404040 40404040   *                  *
       +80 (00FBB5F8)    40404040 40404040 40404040 40404040   *                  *
       +90 (00FBB608)    E2D7D6D6 D3F13000 00030E1E 80BE7DFC   * SPOOL1........'. *
       +A0 (00FBB618)    00000000 00000000 00BC0920 08000000   * ................ *
       +B0 (00FBB628)    00000000 00000000 00000000 00FBD330   * ..............L. *
       +C0 (00FBB638)    00B118F8 00BF2000 00000000 00000000   * ...8............ *
       +D0 (00FBB648)    00000000 80B06D88 863BB000 00000000   * ......_hf....... *
       +E0 (00FBB658)    084330B0 00CE5E48 00C05B08 00000000   * ......;..{$..... *
       +F0 (00FBB668)    01000000 00000000 00000000 00000000   * ................ *
      +100 (00FBB678)    00000000 00000000 00000000 00000000   * ................ *
      +110 (00FBB688)    00000000 00000000 00000000 00000000   * ................ *
      +120 (00FBB698)    00000000 00000000 00000000 00000000   * ................ *
 Command ===> browse   10.?+3e0?+BC?                          Scroll ===> PAGE
```

Browsing Storage

- **Data which is stored as an array of data values can be shown formatted into entries using the ARRAY keyword. Consider the list of classes at 10.?+3e0? +BC? Each entry is 1C bytes long. We can format that with ARRAY 200 1C**

```
 BROWSE     STORAGE..Start: 00FBD330                    Line 000000 10.?+3E0?+BC?
 ******************************** Top of Data *********************************
      +0 (00FBD330)     001C49D9 E5C1D9E2 D4C2D9D9 C1C3C6E5   * ...RVARSMBRRACFV *
     +10 (00FBD340)     C1D9E227 F0F00102 022383E0 001C4AD9   * ARS.00....c\..¢R *
     +20 (00FBD350)     C1C3C6E5 C1D9E2D9 E5C1D9E2 D4C2D908   * ACFVARSRVARSMBR. *
     +30 (00FBD360)     F0E00192 02238478 001C01E2 C5C3D3D4   * 0\.k..d....SECLM *
     +40 (00FBD370)     C2D940E2 C5C3D3C1 C2C5D304 F0F00102   * BR SECLABEL.00.. *
     +50 (00FBD380)     02238510 001C3AE2 C5C3D3C1 C2C5D3E2   * ..e....SECLABELS *
     +60 (00FBD390)     C5C3D3D4 C2D94008 C0E00192 022385A8   * ECLMBR .{\.k..ey *
     +70 (00FBD3A0)     001C05C4 C1E2C4E5 D6D340C7 C4C1E2C4   * ...DASDVOL GDASD *
     +80 (00FBD3B0)     E5D6D306 E0E0007A 02238640 001C27C7   * VOL.\\.:..f ...G *
     +90 (00FBD3C0)     C4C1E2C4 E5D6D3C4 C1E2C4E5 D6D34006   * DASDVOLDASDVOL . *
     +A0 (00FBD3D0)     E0E000E2 022386D8 001C06E3 C1D7C5E5   * \\.S..fQ...TAPEV *
     +B0 (00FBD3E0)     D6D34040 40404040 40404006 E0E00062   * OL          .\\.. *
     +C0 (00FBD3F0)     02238770 001C07E3 C5D9D4C9 D5C1D3C7   * ..g....TERMINALG *
     +D0 (00FBD400)     E3C5D9D4 C9D5D308 E0E0005A 02238808   * TERMINL.\\.!..h. *
     +E0 (00FBD410)     001C2AC7 E3C5D9D4 C9D5D3E3 C5D9D4C9   * ...GTERMINLTERMI *
     +F0 (00FBD420)     D5C1D308 E0E000C2 022388A0 001C08C1   * NAL.\\.B..h....A *
    +100 (00FBD430)     D7D7D340 40404040 40404040 40404008   * PPL             . *
    +110 (00FBD440)     C0E0011E 02238938 001C09E3 C9D4E240   * {\....i....TIMS  *
    +120 (00FBD450)     404040C7 C9D4E240 40404008 E0E00102   *    GIMS    .\\.. *
 Command ===> array 200 1C                              Scroll ===> PAGE
  F1=HELP      F2=SPLIT      F3=END      F4=RETURN    F5=RFIND     F6=RCHANGE
  F7=UP        F8=DOWN       F9=SWAP     F10=LEFT     F11=RIGHT    F12=RETRIEVE
```

Browsing Storage...

- **The formatted result:**

```
BROWSE     STORAGE..Start: 00FBD330                    Line 00000001 Col 001 080
      +1 (00FBD330)   001C49D9 E5C1D9E2 D4C2D9D9 C1C3C6E5  * ...RVARSMBRRACFV *
         (00FBD340)   C1D9E227 F0F00102 022383E0           * ARS.00....c\     *

      +2 (00FBD34C)   001C4AD9 C1C3C6E5 C1D9E2D9 E5C1D9E2  * ..¢RACFVARSRVARS *
         (00FBD35C)   D4C2D908 F0E00192 02238478           * MBR.0\.k..d.     *

      +3 (00FBD368)   001C01E2 C5C3D3D4 C2D940E2 C5C3D3C1  * ...SECLMBR SECLA *
         (00FBD378)   C2C5D304 F0F00102 02238510           * BEL.00....e.     *

      +4 (00FBD384)   001C3AE2 C5C3D3C1 C2C5D3E2 C5C3D3D4  * ...SECLABELSECLM *
         (00FBD394)   C2D94008 C0E00192 022385A8           * BR .{\.k..ey     *

      +5 (00FBD3A0)   001C05C4 C1E2C4E5 D6D340C7 C4C1E2C4  * ...DASDVOL GDASD *
         (00FBD3B0)   E5D6D306 E0E0007A 02238640           * VOL.\\.:..f      *

      +6 (00FBD3BC)   001C27C7 C4C1E2C4 E5D6D3C4 C1E2C4E5  * ...GDASDVOLDASDV *
         (00FBD3CC)   D6D34006 E0E000E2 022386D8           * OL .\\.S..fQ     *

      +7 (00FBD3D8)   001C06E3 C1D7C5E5 D6D34040 40404040  * ...TAPEVOL       *
         (00FBD3E8)   40404006 E0E00062 02238770           *    .\\....g.     *
Command ===>                                              Scroll ===> PAGE
 F1=HELP      F2=SPLIT     F3=END       F4=RETURN    F5=RFIND     F6=RCHANGE
 F7=UP        F8=DOWN      F9=SWAP      F10=LEFT     F11=RIGHT    F12=RETRIEVE
```

ENQs...

- **The ENQ Command Lets you look at the ENQs on your system. The default view is for SYSDSN for your current user ID.**

```
                        System ENQ Status                       Row 1 of 104

            Scroll LEFT or RIGHT to see type or system name.

Major name prefix . . .  SYSDSN     (SYSDSN, SPFEDIT, etc)
Minor name prefix . . .                                              (dsn etc)
Address id prefix . . .  NOTAUTH    (Job name, User id, etc)
System prefix . . . . .             (System name)
   Major         Minor                                           Job Name
+----------+-------------------------------------------------------+----------+
| SYSDSN   | AOP.SAOPEXEC                                          | NOTAUTH  |
| SYSDSN   | AOP.SAOPMENU                                          | NOTAUTH  |
| SYSDSN   | AOP.SAOPPENU                                          | NOTAUTH  |
| SYSDSN   | CBC.SCCNUTL                                           | NOTAUTH  |
| SYSDSN   | CSF.SCSFCLI0                                          | NOTAUTH  |
| SYSDSN   | CSF.SCSFMSG0                                          | NOTAUTH  |
| SYSDSN   | CSF.SCSFPNL0                                          | NOTAUTH  |
| SYSDSN   | CSF.SCSFSKL0                                          | NOTAUTH  |
| SYSDSN   | CSF.SCSFTLIB                                          | NOTAUTH  |
| SYSDSN   | EOX.SEPHCLB1                                          | NOTAUTH  |
| SYSDSN   | EOX.SEPHMSG1                                          | NOTAUTH  |
Command ===>                                              Scroll ===> PAGE
 F1=Help    F2=Split   F3=Exit    F5=Rfind   F7=Up     F8=Down    F9=Swap
F10=Left   F11=Right  F12=Cancel
```

ENQs...

- **The ENQ Command Lets you look at the ENQs on your system. The default view is for SYSDSN for your current user ID.**

```
                          System ENQ Status                        Row 1 of
1

          Scroll LEFT or RIGHT to see type or system name.

Major name prefix . . . SYSZRACF  (SYSDSN, SPFEDIT, etc)
Minor name prefix . . .                                              (dsn etc)
Address id prefix . . .                  (Job name, User id, etc)
System prefix . . . . .                  (System name)
   Major      Minor                                              Job Name
+----------+-------------------------------------------------------+----------+
| SYSZRACF | RACF       'D9C1C3C6'X                                | RACF     |
+----------+-------------------------------------------------------+----------+




Command ===>                                                Scroll ===> PAGE
 F1=Help     F2=Split    F3=Exit     F5=Rfind    F7=Up      F8=Down    F9=Swap
F10=Left    F11=Right   F12=Cancel
```

The Utility Belt: ISRDDN

NY RACF® Users Group
15 October 2013

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