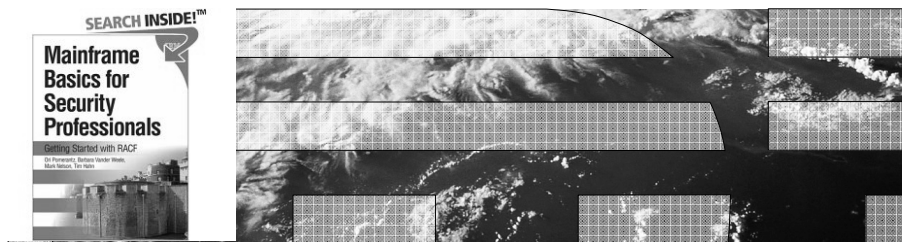# As Cool as ICE!

Lab Instructions

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SEARCH **INSIDE!**™

Mainframe
Basics for
Security
Professionals

Getting Started with RACF
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Background

- **The "As Cool As ICE" lab demonstrates:**
  - How to unpack the RACFICE package
  - How to execute all of the RACF reports
  - How to add fields to a report
  - How to add selection criteria to a report
  - Changing a threshold

- **Each of you has a user ID of the form SHARBnn**
  - "nn" is a number that I've assigned to your workstation
  - All user IDs have the same password ("firstpw")

- **You will be using read-only SMF Unload and RACF Database Unload Utility output**
  - Note: NOT REAL WORLD!

- **This is a guided tour… please let your tour guide (me) know if you are having any problems.**

Step 1: LOGON

- **You should be sitting at a IBM Personal Communications Manager (PCOMM) session that looks like this:**

```
Enter Your Userid:
Password:                        New password:
Application:tso
Application Required. No Installation Default
```

- **When prompted, enter your user ID (SHARBnn)**

Step 1: LOGON…

- **Next, you'll see the traditional TSO/E logon panel. Enter your password.**

```
------------------------------ TSO/E LOGON ----------------------------------

   Enter LOGON parameters below:              RACF LOGON parameters:

   Userid    ===> SHARB09

   Password  ===> firstpw                     New Password ===>

   Procedure ===> SHARE                       Group Ident  ===>

   Acct Nmbr ===> SHR

   Size      ===>

   Perform   ===>

   Command   ===> ISPF

   Enter an 'S' before each option desired below:
            -Nomail       -Nonotice     S -Reconnect      -OIDcard

 PF1/PF13 ==> Help    PF3/PF15 ==> Logoff    PA1 ==> Attention    PA2 ==> Reshow
 You may request specific help information by entering a '?' in any entry field
```

Step 2: Getting into your Data Set

- **Next, you'll see the ISPF LOGON Panel. Enter option 3.4**

```
------------ SHARE ISPF 6.1 SCROLLABLE PRIMARY OPTION MENU ---------- S1
OPTION ===> 3.4

 D  Alternate Dialog ===> CMD(%????)
 D2 Alternate Dialog ===> PANEL(????)
                                                            More:
 The time is 5:53 p.m.  on Friday, February 25, 2011 (2011.056)
 Your uid is SHARB09  dsn prefix is SHARB09  proc is SHARE    sys is S1

 0    SETTINGS     - Specify ISPF parameters
 1    VIEW         - View source data or output listing
 1P   VIEW-OE      - View/Browse files in the Open Edition file system
 2    EDIT         - Create or change source data
 2P   EDIT-OE      - Edit files in the Open Edition file system
 3    UTILITIES    - Perform utility functions
 3P   ISHELL-OE    - Open Edition ISPF shell
 4    FOREGROUND   - Invoke language processors in foreground
 5    BATCH        - Submit job for language processing
 6    COMMAND      - Enter TSO command, CLIST, or REXX exec
 7    DIALOG TEST  - Perform dialog testing
 8    LM UTILITIES - Perform library administrator utility functions
 9    IBM PRODUCTS - Additional IBM program development products
F1=HELP      F2=SPLIT     F3=END      F4=RETURN    F5=RFIND     F6=RCHANGE
F7=UP        F8=DOWN      F9=SWAP     F10=LEFT     F11=RIGHT    F12=RETRIEVE
```

Step 2: Getting into your Data Sets…

▪ **Enter "SHAREBnn.RACFICE" as the "Dsname Level", where nn=your user ID**

```
 Menu  RefList  RefMode  Utilities  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
                              Data Set List Utility
Option ===>
                                                                 More:    +
   blank Display data set list           P Print data set list
       V Display VTOC information        PV Print VTOC information

Enter one or both of the parameters below:
   Dsname Level . . . SHARB09.RACFICE
   Volume serial . .

Data set list options
   Initial View              Enter "/" to select option
1  1. Volume                 /  Confirm Data Set Delete
   2. Space                  /  Confirm Member Delete
   3. Attrib                 /  Include Additional Qualifiers
   4. Total                  /  Display Catalog Name
                             /  Display Total Tracks
                                Prefix Dsname Level

When the data set list is displayed, enter either:
 F1=Help     F2=Split     F3=Exit      F7=Backward  F8=Forward   F9=Swap
F10=Actions  F12=Cancel
```

Step 2: Getting into your Data Sets…

▪ **You should see your data set for this project. Put a "e" in the comand field**

```
 Menu  Options  View  Utilities  Compilers  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
DSLIST - Data Sets Matching SHARB09.RACFICE                    Row 1 of 1
Command ===>                                           Scroll ===> PAGE

Command - Enter "/" to select action          Message          Volume
-------------------------------------------------------------------------
e       SHARB09.RACFICE.CNTL                                    SHTS07
**************************** End of Data Set list ****************************






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

Step 2: Getting into your Data Sets…

- **You have three members populated in the data set:**
  - IEBUPDTE, which we will use to create the RACFICE reports in your data se
  - ICETOOL, a standalone sample ICETOOL job
  - JOBCARD, a sample JOBCARD for this system
- **Put an "S" next to IEBUPDTE**

```
   Menu  Functions  Confirm  Utilities  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT            SHARB09.RACFICE.CNTL                Row 00001 of 00003
Command ===>                                        Scroll ===> DATA
        Name      Prompt      Size  Created           Changed      ID
_____ ICETOOL               24  2011/02/25  2011/02/25 17:10:59  MARKAN
_S_____ IEBUPDTE               6  2011/02/25  2011/02/25 13:40:39  MARKAN
_____ JOBCARD                3  2010/02/02  2011/02/25 13:28:37  MARKAN
          **End**




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

Step 3: Creating your RACFICE Members

- **Change the _two_ occurrences of "SHARBNN" to your user ID**

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT        SHARB09.RACFICE.CNTL(IEBUPDTE) - 01.03        Columns 00001 00072
Command ===>                                             Scroll ===> CSR
****** **************************** Top of Data ****************************
==MSG> -CAUTION- Profile changed to CAPS ON (from CAPS OFF) because the
==MSG>           data does not contain any lower case characters.
==MSG> -Warning- The UNDO command is not available until you change
==MSG>           your edit profile using the command RECOVERY ON.
000100 //SHARBNNI JOB  ,'UNLOAD RACFICE RPTS',CLASS=A,
000200 //         MSGLEVEL=(1,l),NOTIFY=&SYSUID,MSGCLASS=H
000300 //UNLOAD   EXEC PGM=IEBUPDTE,PARM=NEW
000400 //SYSPRINT DD   SYSOUT=*
000500 //SYSUT2   DD   DSN=SHARBNN.ACFICE.CNTL,DISP=SHR
000600 //SYSIN    DD   DSN=SYS1.SAMPLIB(IRRICE),DISP=SHR
****** **************************** Bottom of Data ****************************
```

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Step 3: Creating your RACFICE Members…

- **Use the SUB command to submit the job.**

```
 File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL(IEBUPDTE) - 01.03         Columns 00001 00072
Command ===> SUB                                          Scroll ===> CSR
****** **************************** Top of Data ****************************
==MSG> -CAUTION- Profile changed to CAPS ON (from CAPS OFF) because the
==MSG>           data does not contain any lower case characters.
==MSG> -Warning- The UNDO command is not available until you change
==MSG>           your edit profile using the command RECOVERY ON.
000100 //SHARB09I  JOB  ,'UNLOAD RACFICE RPTS',CLASS=A,
000200 //         MSGLEVEL=(1,1),NOTIFY=&SYSUID,MSGCLASS=H
000300 //UNLOAD    EXEC PGM=IEBUPDTE,PARM=NEW
000400 //SYSPRINT DD   SYSOUT=*
000500 //SYSUT2   DD   DSN=SHARB09.RACFICE.CNTL,DISP=SHR
000600 //SYSIN    DD   DSN=SYS1.SAMPLIB(IRRICE),DISP=SHR
****** *************************** Bottom of Data ****************************




   F1=Help      F2=Split     F3=Exit      F5=Rfind     F6=Rchange   F7=Up
   F8=Down      F9=Swap      F10=Left     F11=Right    F12=Cancel
```

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Step 3: Creating your RACFICE Members…

- **Wait for the job completion message. MAXCC=0 is what you want. If you get something else, we'll have to go into SDSF to figure out what happened.**

```
  18.13.53 JOB16649 $HASP165 SHARB09I ENDED AT N1  MAXCC=0 CN(INTERNAL)
 ***
```

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Step 3: Creating your RACFICE Members…

- **Press "END" (PF3) twice to get back to this panel. Put an "e" in the command field.**

```
 Menu  Options  View  Utilities  Compilers  Help
ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
DSLIST - Data Sets Matching SHARB09.RACFICE                    Row 1 of 1
Command ===>                                          Scroll ===> PAGE

Command - Enter "/" to select action                 Message        Volume
-------------------------------------------------------------------------------
e        SHARB09.RACFICE.CNTL                                        SHTSO7
**************************** End of Data Set list ****************************




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

Step 3: Creating your RACFICE Members…

- **Whoa! Look at all the members! These were extracted from 'SYS1.SAMPLIB' by the IEBUPDTE job that you just submitted. This is the RACFICE report package.**
- **Select the $$CNTL$$ member by putting an "s" in the command column**

```
 Menu  Functions  Confirm  Utilities  Help
ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT            SHARB09.RACFICE.CNTL                 Row 00001 of 00091
Command ===>                                        Scroll ===> DATA
          Name     Prompt    Size  Created       Changed        ID
_____  $$$COPYR
s_____  $$CNTL$$
_____  $CFQG
_____  $CHLQ
_____  $ULAST90
_____  ACD$
_____  ACD$CNTL
_____  ALDS
_____  ALDSCNTL
_____  ASOC
_____  ASOCCNTL
_____  BGGR
_____  BGGRCNTL
_____  CADU
_____  CADUCNTL
_____  CCMD
_____  CCMDCNTL
  F1=Help     F2=Split   F3=Exit   F5=Rfind   F7=Up    F8=Down   F9=Swap
 F10=Left    F11=Right  F12=Cancel
```

Step 4: Preparing your first RACFICE Job

- **Delete the first two lines of the file by putting a "d" at the front of the line number. Put a "b" on the third line, and put COPY JOBCARD on the command line.**

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL($$CNTL$$) - 01.00         Columns 00001 00072
Command ===> COPY JOBCARD                                  Scroll ===> CSR
****** ***************************** Top of Data *****************************
==MSG> -CAUTION- Profile changed to CAPS OFF (from CAPS ON) because data
==MSG>           contains lower case characters.
==MSG> -Warning- The UNDO command is not available until you change
==MSG>           your edit profile using the command RECOVERY ON.
==MSG> -CAUTION- Profile is set to STATS ON. Statistics did not exist for
==MSG>           this member, but will be generated if data is saved.
d36800 //USER01I  JOB MSGLEVEL=(0,0),CLASS=5,NOTIFY=&SYSUID,MSGCLASS=H
d36900 /*JOBPARM  S=ANY,LINES=99
b37000 //*----------------------------------------------------------------
137100 //*
137200 //* RACFICE -  Create reports from RACF database unload utility
137300 //*            (IRRDBU00) and RACF SMF unload utility (IRRADU00)
137400 //*
137500 //*
137600 //* RACF Database Reports
137700 //*
137800 //*    Name   Description
```

Step 4: Preparing your first RACFICE Job…

- **The old job card will be delete and one for this system inserted. Change the SHARBNN to your user ID**

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL($$CNTL$$) - 01.00        Member JOBCARD copied
Command ===>                                               Scroll ===> CSR
****** ***************************** Top of Data *****************************
==MSG> -CAUTION- Profile changed to CAPS OFF (from CAPS ON) because data
==MSG>           contains lower case characters.
==MSG> -Warning- The UNDO command is not available until you change
==MSG>           your edit profile using the command RECOVERY ON.
==MSG> -CAUTION- Profile is set to STATS ON. Statistics did not exist for
==MSG>           this member, but will be generated if data is saved.
000100 //SHARB09J  JOB CLASS=A,MSGLEVEL=(1,1),MSGCLASS=H,NOTIFY=&SYSUID,
000200 //          REGION=0M
000300 //*----------------------------------------------------------------
137000 //*----------------------------------------------------------------
137100 //*
137200 //* RACFICE -  Create reports from RACF database unload utility
137300 //*            (IRRDBU00) and RACF SMF unload utility (IRRADU00)
137400 //*
137500 //*
137600 //* RACF Database Reports
137700 //*
 F1=Help      F2=Split     F3=Exit      F5=Rfind     F6=Rchange   F7=Up
 F8=Down      F9=Swap      F10=Left     F11=Right    F12=Cancel
```

Step 4: Preparing your first RACFICE Job…

▪ **Press "scroll down" (PF8) approximately four (4) times until you see the data below.**

```
 File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
 sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 EDIT      SHARB09.RACFICE.CNTL($$CNTL$$) - 01.00        Columns 00001 0007
 Command ===>                                            Scroll ===> CSR
 143200 //*   VIOL   Access violations
 143300 //*   WARN   Accesses allowed due to WARNING mode profiles
 143400 //*-------------------------------------------------------------
 143500 //        JCLLIB ORDER=USER01.RACFICE.CNTL
 143600 //        SET  ADUDATA=USER01.RACFICE.IRRADU00       IRRADU00 dat
 143700 //        SET  DBUDATA=USER01.RACFICE.IRRDBU00       IRRDBU00 dat
 143800 //        SET  ICECNTL=USER01.RACFICE.CNTL           ICETOOL dat
 143900 //*------------------------------------------------------------
 144000 //*------- IRRDBU00-Based Reports ------------------------------
 144100 //*------------------------------------------------------------
 144200 //ALDS     EXEC RACFICE,REPORT=ALDS
 144300 //ASOC     EXEC RACFICE,REPORT=ASOC
 144400 //BGGR     EXEC RACFICE,REPORT=BGGR
 144500 //CCON     EXEC RACFICE,REPORT=CCON
 144600 //CGEN     EXEC RACFICE,REPORT=CGEN
 144700 //CPRO     EXEC RACFICE,REPORT=CPRO
 144800 //CONN     EXEC RACFICE,REPORT=CONN
 144900 //GRPM     EXEC RACFICE,REPORT=GRPM
 F1=Help     F2=Split    F3=Exit     F5=Rfind    F6=Rchange   F7=Up
 F8=Down     F9=Swap     F10=Left    F11=Right   F12=Cancel
```

Step 4: Preparing your first RACFICE Job…

▪ **Change**
  – the JCLLIB statement to 'SHARBnn.RACFICE.CNTL', where nn=you
  – ADUDATA to MARKAN.SAMPLE.IRRADU00
  – DBYDATA to MARKAN.SAMPLE.IRRDBU00
  – ICECNTL to SHARBnn.RACFICE.CNTL, where nn = you
▪ **Type SUB on the command line to submit the job**
▪ **Wait for the job completion message. MAXCC=0 is what we want. If you don't get it, we'll need to go into SDSF to figure out what happened.**

```
  File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
  sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
  EDIT      SHARB09.RACFICE.CNTL($$CNTL$$) - 01.00        Columns 00001 00072
  Command ===>  sub                                       Scroll ===> CSR
  143200 //*   VIOL   Access violations
  143300 //*   WARN   Accesses allowed due to WARNING mode profiles
  143400 //*------------------------------------------------------------
  143500 //        JCLLIB ORDER=SHARB09.RACFICE.CNTL
  143600 //        SET  ADUDATA=MARKAN.SAMPLE.IRRADU00       IRRADU00 data
  143700 //        SET  DBUDATA=MARKAN.SAMPLE.IRRDBU00       IRRDBU00 data
  143800 //        SET  ICECNTL=SHARB09.RACFICE.CNTL         ICETOOL data
  143900 //*------------------------------------------------------------
  144000 //*------- IRRDBU00-Based Reports ------------------------------
  144100 //*------------------------------------------------------------
  144200 //ALDS     EXEC RACFICE,REPORT=ALDS
  144300 //ASOC     EXEC RACFICE,REPORT=ASOC
  144400 //BGGR     EXEC RACFICE,REPORT=BGGR
  144500 //CCON     EXEC RACFICE,REPORT=CCON
  144600 //CGEN     EXEC RACFICE,REPORT=CGEN
  144700 //CPRO     EXEC RACFICE,REPORT=CPRO
  144800 //CONN     EXEC RACFICE,REPORT=CONN
  144900 //GRPM     EXEC RACFICE,REPORT=GRPM
```

Step 5: Looking at the RACFICE Output

- **Press PF2 to start a second ISPF session and enter S.H on the command line to start SDSF to look at the output**

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL($$CNTL$$) - 01.00          Columns 00001 00072
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .  .  .
------------ SHARE ISPF 6.1 SCROLLABLE PRIMARY OPTION MENU ---------- S1
OPTION  ===> s.h

   D  Alternate Dialog ===> CMD(%????)
   D2 Alternate Dialog ===> PANEL(????)
                                                            More:    +
   The time is 6:39 p.m.  on Friday, February 25, 2011 (2011.056)
   Your uid is SHARB09  dsn prefix is SHARB09   proc is SHARE    sys is S1

   0    SETTINGS     - Specify ISPF parameters
   1    VIEW         - View source data or output listing
   1P   VIEW-OE      - View/Browse files in the Open Edition file system
   2    EDIT         - Create or change source data
   2P   EDIT-OE      - Edit files in the Open Edition file system
   3    UTILITIES    - Perform utility functions
   3P   ISHELL-OE    - Open Edition ISPF shell
   4    FOREGROUND   - Invoke language processors in foreground
   5    BATCH        - Submit job for language processing
 F1=HELP      F2=SPLIT     F3=END      F4=RETURN    F5=RFIND     F6=RCHANGE
 F7=UP        F8=DOWN      F9=SWAP     F10=LEFT     F11=RIGHT    F12=RETRIEVE
```

Step 5: Looking at the RACFICE Output…

- **You will see a couple of jobs. The last one (SHARBnnJ) is the one that you just submitted. Put an s in the NP and press enter to review your job**

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL($$CNTL$$) - 01.00          Columns 00001 00072
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .  .  .
   Display  Filter  View  Print  Options  Search  Help
----------------------------------------------------------------------------
SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 6,501       LINE 1-2 (2)
COMMAND INPUT ===>                                      SCROLL ===> CSR
NP   JOBNAME  JobID    Owner    Prty C ODisp Dest              Tot-Rec  Tot-
     SHARB09I JOB16649 SHARB09   144 H HOLD  LOCAL               1,753
s    SHARB09J JOB16654 SHARB09   128 H HOLD  LOCAL               4,748




   F1=HELP      F2=SPLIT     F3=END      F4=RETURN    F5=IFIND     F6=BOOK
   F7=UP        F8=DOWN      F9=SWAP     F10=LEFT     F11=RIGHT    F12=RETRIEVE
```

Step 5: Looking at the RACFICE Output…

- **Scroll up and down and look at some of the reports that have been created. Note that many will be empty as there isn't data relevant to all of the reports.**

- **Next, we'll run a short report that you will tailor. To do that, swap back to your member edit screen (PF9) and END out of that member with PF3**

Step 6: Running your own ICETOOL Report

- **Select the member ICETOOL by typing "s icetool" on the command line**

```
   Menu  Functions  Confirm  Utilities  Help
 sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 EDIT           SHARB09.RACFICE.CNTL                 Member $$CNTL$$ saved
 Command ===> s ICETOOL                                 Scroll ===> DATA
          Name     Prompt      Size  Created      Changed         ID
 _____ $$CNTL$$ *Edited     118  2011/02/25  2011/02/25 18:48:26  SHARB09
 _____ $CFQG
 _____ $CHLQ
 _____ $ULAST90
 _____ ACD$
 _____ ACD$CNTL
 _____ ALDS
 _____ ALDSCNTL
 _____ ASOC
 _____ ASOCCNTL
 _____ BGGR
 _____ BGGRCNTL
  F1=Help    F2=Split   F3=Exit    F5=Rfind   F7=Up      F8=Down    F9=Swap
 F10=Left   F11=Right  F12=Cancel
 .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
   Display  Filter  View  Print  Options  Search  Help
 -----------------------------------------------------------------------------
 SDSF OUTPUT DISPLAY SHARB09J JOB16654 DSID    2 LINE 0       COLUMNS 02- 81
 COMMAND INPUT ===>                                      SCROLL ===> CSR
```

Step 6: Running your own ICETOOL Report…

- **Change the jobname to SHARBnnI where "nn" is you**
- **This report shows all of the users whose user ID starts with 'TEST'. How?**

```
    File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL(ICETOOL) - 01.01          Columns 00001 00072
Command ===>                                                 Scroll ===> CSR
****** *************************** Top of Data ****************************
==MSG> -CAUTION- Profile changed to CAPS OFF (from CAPS ON) because data
==MSG>           contains lower case characters.
==MSG> -Warning- The UNDO command is not available until you change
==MSG>           your edit profile using the command RECOVERY ON.
000010 //SHARBNNI  JOB CLASS=A,MSGLEVEL=(1,1),MSGCLASS=H,NOTIFY=&SYSUID,
000020 //        REGION=0M
000030 //* -------------------------------------------------------
000040 //RACFICE   EXEC PGM=ICETOOL,PARM='MSGPRT=ALL'
000050 //TOOLMSG   DD SYSOUT=*
000060 //PRINT     DD SYSOUT=*
000070 //DFSMSG    DD SYSOUT=*
000080 //DBUDATA   DD DISP=SHR,DSN=MARKAN.SAMPLE.IRRDBU00
```

Step 6: Running your own ICETOOL Report…

- **Scroll down to the TITLE line and change the title to something else. Don't go too long, though…..**
- **The INCLUDE statement selects the records that are in the report. We're only looking for TEST user IDs in this example**
- **Submit the job by typing "sub" on the command line**
- **Swap your session (PF9), which takes you back into SDSF, and select your job**

```
    File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL(ICETOOL) - 01.02          Columns 00001 00072
Command ===> sub                                            Scroll ===> CSR
000500          PAGE                  -
000600          TITLE('My report title')  -
000700          DATE(YMD/)            -
000800          TIME(12:)             -
000900          BLANK                 -
001000          ON(10,8,CH)     HEADER('User ID')
001100 /*
001200 //TSTUCNTL DD *
001300  SORT    FIELDS=COPY
001400  INCLUDE COND=(5,4,CH,EQ,C'0200',AND,10,4,CH,EQ,C'TEST')
001500 /*
```

Step 6: Running your own ICETOOL Report…

- **To see the output of your job, PF3 to end stop looking at the prior job. Then, select your last job from the SDSF job list. The output of your ICETOOL job is show below.**
- **Once your done looking at it, PF9 (SWAP) to get to the report JCL**

```
        File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
      sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
      EDIT       SHARB09.RACFICE.CNTL(ICETOOL) - 01.02        Columns 00001 00072
      Command ===>                                           Scroll ===> CSR
      . . . . .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
        Display  Filter  View  Print  Options  Search  Help
      -----------------------------------------------------------------------------
      SDSF OUTPUT DISPLAY SHARB09I JOB16655 DSID   104 LINE 1        COLUMNS 02- 81
      COMMAND INPUT ===>                                       SCROLL ===> CSR
      - 1 -       My report title        11/02/25        06:54:10 pm

      User ID
      -------

      TESTUSER
      TEST0001
      TEST0002
      TEST0003
      TEST0004
      TEST0005
      TEST0006
      TEST0007
```

Step 7: Adding Fields to your own ICETOOL Report

- **Let's add a few ffields to your report. Using the information from the USER BASIC DATA record in RACF Macros and Interfaces. Pich a few fields and add them to the report as ON(fieldname) statements. A copy of things to remember**
  - Always add 4 to the starting position document in Macros and Interfaces to account for the record descriptor word
  - Remember to add the DFSORT character ("-") to each record (except the last)
- **Type 'sub' on the command like to submit the job.**

```
        File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
      sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
      EDIT       SHARB09.RACFICE.CNTL(ICETOOL) - 01.02        Columns 00001 00072
      Command ===>                                           Scroll ===> CSR
      000200 //TOOLIN    DD *
      000300   SORT   FROM(DBUDATA) TO(TEMP01)   USING(TSTU)
      000400   DISPLAY FROM(TEMP01)  LIST(PRINT)  -
      000500          PAGE                      -
      000600          TITLE('My Report Title')   -
      000700          DATE(YMD/)                 -
      000800          TIME(12:)                  -
      000900          BLANK                      -
      001000          ON(10,8,CH)    HEADER('User ID') -
      001010          ON(44,4,CH)    HEADER('Special') -
      001011          ON(49,4,CH)    HEADER('Operations') -
      001012          ON(390,4,CH)   HEADER('Auditor') -
      001020          ON(10,8,CH)    HEADER('Last Job Date')
      001100 /*
       F1=Help    F2=Split   F3=Exit    F5=Rfind    F6=Rchange   F7=Up
       F8=Down    F9=Swap    F10=Left   F11=Right   F12=Cancel
      . . . . .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
        Display  Filter  View  Print  Options  Search  Help
      -----------------------------------------------------------------------------
      SDSF OUTPUT DISPLAY SHARB09I JOB16656 DSID   103 LINE 20       COLUMNS 02- 81
```

Step 7: Adding Fields to your own ICETOOL Report…

- **PF9 to swap back to SDSF to look at your report. Since you are still looking at the last report, PF3 to end looking at it and then select your last job.**

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
 sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 EDIT       SHARB09.RACFICE.CNTL(ICETOOL) - 01.02          Columns 00001 00072
 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .  .     .    .
   Display  Filter  View  Print  Options  Search  Help
 -----------------------------------------------------------------------------
  SDSF OUTPUT DISPLAY SHARB09I JOB16678 DSID   104 LINE 0        COLUMNS 02- 81
  COMMAND INPUT ===>                                        SCROLL ===> CSR
 ****************************** TOP OF DATA ********************************
 - 1 -        My Report Title        11/02/26        12:11:18 am

 User ID   Special   Operations   Auditor   Last Job Date
 -------   -------   ----------   -------   -------------
 TESTUSER  NO        NO           NO         TESTUSER
 TEST0001  NO        NO           NO         TEST0001
 TEST0002  NO        NO           NO         TEST0002
 TEST0003  NO        NO           NO         TEST0003
 TEST0004  NO        NO           NO         TEST0004
 TEST0005  NO        NO           NO         TEST0005
 TEST0006  NO        NO           NO         TEST0006
 TEST0007  NO        NO           NO         TEST0007
 TEST0008  NO        NO           NO         TEST0008
    F1=HELP     F2=SPLIT    F3=END     F4=RETURN    F5=IFIND    F6=BOOK
    F7=UP       F8=DOWN     F9=SWAP    F10=LEFT     F11=RIGHT   F12=RETRIEVE
```

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Step 8: Running a Single RACFICE Report

- **It's easy to run a single RACFICE report by commenting out all of the reports that we don't want.**
- **Press PF9 to swap back to the 'SHARBnn.RACFICE.CNTL(ICETOOL)'**
- **Press PF3 to exit this member**
- **Scroll to the top and select the $$CNTL$$ member by placing an "s" in the "Command" line**

```
   Menu  Functions  Confirm  Utilities  Help
 sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 EDIT       SHARB09.RACFICE.CNTL                        Row 00002 of 00091
 Command ===>                                           Scroll ===> DATA
          Name        Prompt      Size  Created       Changed       ID
 s_____ $$CNTL$$               119   2011/06/14  2011/06/14 22:32:25  SHARB09
 _____  $CFQG
 _____  $CHLQ
 _____  $ULAST90
 _____  ACD$
 _____  ACD$CNTL
 _____  ALDS
 _____  ALDSCNTL
 _____  ASOC
 _____  ASOCCNTL
 _____  BGGR
 _____  BGGRCNTL
 _____  CADU
  F1=Help    F2=Split   F3=Exit    F5=Rfind   F7=Up     F8=Down   F9=Swap
 F10=Left   F11=Right   F12=Cancel
 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .  .     .    .
   Display  Filter  View  Print  Options  Search  Help
 -----------------------------------------------------------------------------
  SDSF OUTPUT DISPLAY SHARB09I JOB20835 DSID   104 LINE 4        COLUMNS 02- 81
```

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Step 8: Running a Single RACFICE Report…

- **Comment out all of the job steps except the UGLB job step by making the first three characters of the job step "//*"**

- **Be sure to comment all of the other job steps!**

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
   sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
   EDIT       SHARB09.RACFICE.CNTL($$CNTL$$) - 01.01        Columns 00001 00072
   Command ===>                                                 Scroll ===> CSR
   146000 //*UADS     EXEC RACFICE,REPORT=UADS
   146100 //*UAGR     EXEC RACFICE,REPORT=UAGR
   146200 //UGLB      EXEC RACFICE,REPORT=UGLB
   146300 //*UGRP     EXEC RACFICE,REPORT=UGRP
   146400 //*UIDS     EXEC RACFICE,REPORT=UIDS
   146500 //*URVK     EXEC RACFICE,REPORT=URVK
   146600 //*WNDS     EXEC RACFICE,REPORT=WNDS
   146700 //*WNGR     EXEC RACFICE,REPORT=WNGR
   146800 //*---------------------------------------------------------------
   146900 //*------- IRRADU00-Based Reports -------------------------------
   147000 //*---------------------------------------------------------------
   147100 //*ACD$     EXEC RACFICE,REPORT=ACD$
   147200 //*CADU     EXEC RACFICE,REPORT=CADU
   147300 //*CCMD     EXEC RACFICE,REPORT=CCMD
    F1=Help     F2=Split    F3=Exit     F5=Rfind    F6=Rchange   F7=Up
    F8=Down     F9=Swap     F10=Left    F11=Right   F12=Cancel
   . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
     Display  Filter  View  Print  Options  Search  Help
   ----------------------------------------------------------------------------
   SDSF OUTPUT DISPLAY SHARB09I JOB20835  DSID  104 LINE 4      COLUMNS 02- 81
```

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Step 8: Running a Single RACFICE Report…

- **Submit the job by typing "sub" on the command line**

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
   sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
   EDIT       SHARB09.RACFICE.CNTL($$CNTL$$) - 01.01        Columns 00001 00072
   Command ===> sub                                             Scroll ===> CSR
   145800 //*PCAM     EXEC RACFICE,REPORT=PCAM
   145900 //*SUPU     EXEC RACFICE,REPORT=SUPU
   146000 //*UADS     EXEC RACFICE,REPORT=UADS
   146100 //*UAGR     EXEC RACFICE,REPORT=UAGR
   146200 //UGLB      EXEC RACFICE,REPORT=UGLB
   146300 //*UGRP     EXEC RACFICE,REPORT=UGRP
   146400 //*UIDS     EXEC RACFICE,REPORT=UIDS
   146500 //*URVK     EXEC RACFICE,REPORT=URVK
   146600 //*WNDS     EXEC RACFICE,REPORT=WNDS
   146700 //*WNGR     EXEC RACFICE,REPORT=WNGR
   146800 //*---------------------------------------------------------------
   146900 //*------- IRRADU00-Based Reports -------------------------------
   147000 //*---------------------------------------------------------------
   147100 //*ACD$     EXEC RACFICE,REPORT=ACD$
    F1=Help     F2=Split    F3=Exit     F5=Rfind    F6=Rchange   F7=Up
    F8=Down     F9=Swap     F10=Left    F11=Right   F12=Cancel
   . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
     Display  Filter  View  Print  Options  Search  Help
   ----------------------------------------------------------------------------
   SDSF OUTPUT DISPLAY SHARB09I JOB20835  DSID  104 LINE 4      COLUMNS 02- 81
```

Step 8: Running a Single RACFICE Report…

- Press PF9 to swap to the SDSF session and select your job
- PF3 (from the SDSF screen) to return back to the selection list
- Select your job by putting an "s" in the "NP" column
- Scroll down to the bottom of the job. This is the "Users with Extraordinary Authorities" report

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
 sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 EDIT       SHARB09.RACFICE.CNTL($$CNTL$$) - 01.01        Columns 00001 00072
 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
   Display  Filter  View  Print  Options  Search  Help
 ------------------------------------------------------------------------------
 SDSF OUTPUT DISPLAY SHARB09J JOB20836  DSID   101 LINE 1       COLUMNS 02- 81
 COMMAND INPUT ===>                                       SCROLL ===> CSR
 - 1 -        UGLB: Users with Extraordinary Authorities     11/06/14        1

 User ID    User Name            Special   Operations   Auditor
 --------   --------------------  -------   ----------   -------
 ADRIAN     ####################   YES        YES          YES
 IBMUSER                          YES        YES          YES
 MARKN      ####################   YES        YES          YES
 ORIP       ####################   YES        YES          YES
 U$AUDT     ####################   NO         NO           YES
 U$OPER     ####################   NO         YES          NO
 U$SPEC     ####################   YES        NO           NO
 UAUDR$Y    AUDITOR               NO         NO           YES
 UOPER$Y    OPERATIONS            NO         YES          NO
 USPEC$Y    SPECIAL               YES        NO           NO
   F1=HELP     F2=SPLIT    F3=END     F4=RETURN    F5=IFIND    F6=BOOK
   F7=UP       F8=DOWN     F9=SWAP    F10=LEFT     F11=RIGHT   F12=RETRIEVE
```

Step 8: Running a Single RACFICE Report…

- Let's change this to find only those user IDs who have SPECIAL, OPERATIONS and AUDITOR
- Press PF9 to swap back to 'SHARBnn.RACFICE.CNTL'
- Press PF3 to end editing the $$CNTL$$ member.
- Scroll down to the members that start with UGLB
- Select the UGLBCNTL member by placing an "s" in the "Command" line

```
   Menu  Functions  Confirm  Utilities  Help
 sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 EDIT       SHARB09.RACFICE.CNTL                         Row 00069 of 00091
 Command ===>                                             Scroll ===> DATA
            Name     Prompt     Size   Created         Changed         ID
 _____  SUPUCNTL
 _____  TRMF
 _____  TRMFCNTL
 _____  UADS
 _____  UADSCNTL
 _____  UAGR
 _____  UAGRCNTL
 _____  UGLB
 s_____  UGLBCNTL
 _____  UGRP
 _____  UGRPCNTL
 _____  UIDS
 _____  UIDSCNTL
  F1=Help   F2=Split  F3=Exit   F5=Rfind  F7=Up     F8=Down   F9=Swap
 F10=Left  F11=Right  F12=Cancel
 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
   Display  Filter  View  Print  Options  Search  Help
 ------------------------------------------------------------------------------
 SDSF OUTPUT DISPLAY SHARB09J JOB20836  DSID   101 LINE 1       COLUMNS 02- 81
```

Step 8: Running a Single RACFICE Report…

- This member contains the selection criteria for the report. This is done by examining the fields (columns) which have a 'YES' if the user ID has the attribute. These fields are in columns 44 (SPECIAL), 49 (OPERATIONS) and 390 (AUDITOR).

- To select only those users who have the SPECIAL, OPERATIONS, and AUDITOR attribute, change the "OR" that joins these tests to an "AND" on the third and fourth line in the member.

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
 sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 EDIT       SHARB09.RACFICE.CNTL(UGLBCNTL) - 01.00         Columns 00001 00072
 Command ===>                                               Scroll ===> CSR
 ****** *************************** Top of Data ******************************
 ==MSG> -CAUTION- Profile is set to STATS ON. Statistics did not exist for
 ==MSG>          this member, but will be generated if data is saved.
 115400  SORT    FIELDS=(10,8,CH,A)
 115500  INCLUDE COND=(5,4,CH,EQ,C'0200',AND,
 115600              (44,3,CH,EQ,C'YES',AND,
 115700               49,3,CH,EQ,C'YES',AND,
 115800              390,3,CH,EQ,C'YES'))
 115900  OPTION  VLSHRT
 ****** *************************** Bottom of Data ***************************



  F1=Help      F2=Split     F3=Exit      F5=Rfind     F6=Rchange   F7=Up
  F8=Down      F9=Swap      F10=Left     F11=Right    F12=Cancel
 .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
   Display  Filter  View  Print  Options  Search  Help
 ----------------------------------------------------------------------------
 SDSF OUTPUT DISPLAY SHARB09J JOB20836  DSID   101 LINE 1        COLUMNS 02- 81
```

Step 8: Running a Single RACFICE Report…

- PF3 to save the UGLBCNTL member.
- Scroll to the top and select the $$CNTL$$ member and submit the job.
- PF9 to swap to SDSF.
- PF3 to back out of the last job's output and then select the most recently submitted job by placing an 's' in the 'NP' column
- Note that we only see the users who have all of the authorities!

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
 sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 EDIT       SHARB09.RACFICE.CNTL($$CNTL$$) - 01.01          Columns 00001 00072
 .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
   Display  Filter  View  Print  Options  Search  Help
 ----------------------------------------------------------------------------
 SDSF OUTPUT DISPLAY SHARB09J JOB20837  DSID   101 LINE 1      COLUMNS 02- 81
 COMMAND INPUT ===>                                          SCROLL ===> CSR
 - 1 -       UGLB: Users with Extraordinary Authorities      11/06/14       1

 User ID    User Name             Special   Operations   Auditor
 --------   --------------------  -------   ----------   -------
 ADRIAN     ####################  YES       YES          YES
 IBMUSER                          YES       YES          YES
 MARKN      ####################  YES       YES          YES
 ORIP       ####################  YES       YES          YES
 **************************** BOTTOM OF DATA ****************************



  F1=HELP      F2=SPLIT     F3=END       F4=RETURN   F5=IFIND     F6=BOOK
  F7=UP        F8=DOWN      F9=SWAP      F10=LEFT    F11=RIGHT    F12=RETRIEVE
```

Step 9: Finding Users Connected to More than "x" Groups

- Let's make a different type of change to a report. The CONN report shows the users who have more than 100 connections to groups. Let's change that limit from 100 connections to two.
- Press PF9 to swap back to the 'SHARBnn.RACFICE.CNTL(ICETOOL)'
- Press PF3 to exit the $$CNTL$$ member.
- Scroll to the top and select the CCON member by placing an "s" in the "Command" line

```
   Menu  Functions  Confirm  Utilities  Help
 ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 EDIT            SHARB09.RACFICE.CNTL                      Row 00014 of 00091
 Command ===>                                               Scroll ===> DATA
          Name     Prompt      Size   Created        Changed          ID
 _____  CADU
 _____  CADUCNTL
 _____  CCMD
 _____  CCMDCNTL
 s_____  CCON
 _____  CCONCNTL
 _____  CGEN
 _____  CGENCNTL
 _____  CONN
 _____  CONNCNTL
 _____  CPRO
 _____  CPROCNTL
 _____  CUG$
  F1=Help    F2=Split   F3=Exit    F5=Rfind   F7=Up      F8=Down   F9=Swap
 F10=Left   F11=Right  F12=Cancel
 .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
   Display  Filter  View  Print  Options  Search  Help
 -----------------------------------------------------------------------------
 SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 7,459         COMMAND ISSUED
```

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Step 9: Finding Users Connected to More than "x" Groups…

- Scroll down and change the "HIGHER(100)" statement to "HIGHER(2)".

```
   File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
 ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 EDIT        SHARB09.RACFICE.CNTL(CCON) - 01.01            Columns 00001 00072
 Command ===>                                               Scroll ===> CSR
 050000 * The ICETOOL "HIGHER(x)" keyword is used to set the failure        *
 050100 * threshold.                                                        *
 050200 ***********************************************************************
 050300  COPY    FROM(DBUDATA) TO(TEMP0001) USING(RACF)
 050400  OCCURS  FROM(TEMP0001) LIST(PRINT) -
 050500          PAGE -
 050600          TITLE('CCON: Users With More Than 100 Group Connections') -
 050700          DATE(YMD/) -
 050800          TIME(12:)  -
 050900          BLANK -
 051000          ON(10,8,CH)  HEADER('User ID') -
 051100          ON(VALCNT)   HEADER('Number of Group Connections') -
 051200          HIGHER(2)
 ****** *********************** Bottom of Data ***************************
  F1=Help    F2=Split   F3=Exit    F5=Rfind   F6=Rchange  F7=Up
  F8=Down    F9=Swap    F10=Left   F11=Right  F12=Cancel
 .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
   Display  Filter  View  Print  Options  Search  Help
 -----------------------------------------------------------------------------
 SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 7,459         COMMAND ISSUED
```

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Step 9: Finding Users Connected to More than "x" Groups...

- PF3 to exit the CCON member and scroll up and select the $$$CNTL$$ member. Comment out all of the job steps except the CCON step.

- Submit the job by placing "sub" on the command line

```
     File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT      SHARB09.RACFICE.CNTL($$$CNTL$$) - 01.03         Columns 00001 00072
Command ===> sub                                          Scroll ===> CSR
143500 //        JCLLIB ORDER=SHARB09.RACFICE.CNTL
143600 //        SET  ADUDATA=MARKAN.SAMPLE.IRRADU00        IRRADU00 data
143700 //        SET  DBUDATA=MARKAN.SAMPLE.IRRDBU00        IRRDBU00 data
143800 //        SET  ICECNTL=SHARB09.RACFICE.CNTL          ICETOOL  data
143900 //*----------------------------------------------------------------
144000 //*------- IRRDBU00-Based Reports ----------------------------------
144100 //*----------------------------------------------------------------
144200 //*ALDS    EXEC RACFICE,REPORT=ALDS
144300 //*ASOC    EXEC RACFICE,REPORT=ASOC
144400 //*BGGR    EXEC RACFICE,REPORT=BGGR
144500 //CCON     EXEC RACFICE,REPORT=CCON
144600 //*CGEN    EXEC RACFICE,REPORT=CGEN
144700 //*CPRO    EXEC RACFICE,REPORT=CPRO
144800 //*CONN    EXEC RACFICE,REPORT=CONN
 F1=Help     F2=Split    F3=Exit     F5=Rfind    F6=Rchange   F7=Up
 F8=Down     F9=Swap     F10=Left    F11=Right   F12=Cancel
 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
  Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 7,459       COMMAND ISSUED
```

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Step 9: Finding Users Connected to More than "x" Groups...

- PF9 to swap to SDSF
- PF3 to exit the current job output and select the most recently submitted job by placing a "s" in the "NP" column
- Note the new groups which match the new threshold.
- Why is the number of groups to which a user is connected an issue? Users with "large" numbers of connects can be an indication of an organization which has not cleaned up its group memberships.

```
     File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT      SHARB09.RACFICE.CNTL($$$CNTL$$) - 01.03         Columns 00001 00072
 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
  Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF OUTPUT DISPLAY SHARB09J JOB20844 DSID   101 LINE 1     COLUMNS 02- 81
COMMAND INPUT ===>                                         SCROLL ===> CSR
- 1 -       CCON: Users With More Than 100 Group Connections      11/06/15

User ID   Number of Group Connections
--------  ---------------------------
UAUTH$CO                   3
UAUTH$CR                   3
UAUTH$JO                   3
UAUTH$US                   3
******************************* BOTTOM OF DATA *******************************




 F1=HELP     F2=SPLIT    F3=END     F4=RETURN   F5=IFIND    F6=BOOK
 F7=UP       F8=DOWN     F9=SWAP    F10=LEFT    F11=RIGHT   F12=RETRIEVE
```

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Step 10: Adding Selection Criteria

- Let's see how to add selection criteria to a report. In this example, we have a report has too much information. The report that we are altering is the URVK report, which lists the user IDs which have been revoked. First, let's run this report as it is shipped in 'SYS1.SAMPLIB(IRRICE)'.
- Press PF9 to swap back to the 'SHARBnn.RACFICE.CNTL($$CNTL$$)'.'
- Comment out all of the job steps except the URVK job step and submit the job.

```
     File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL($$CNTL$$) - 01.04          Columns 00001 00072
Command ===> sub                                             Scroll ===> CSR
146100 //*UAGR     EXEC RACFICE,REPORT=UAGR
146200 //*UGLB     EXEC RACFICE,REPORT=UGLB
146300 //*UGRP     EXEC RACFICE,REPORT=UGRP
146400 //*UIDS     EXEC RACFICE,REPORT=UIDS
146500 //URVK      EXEC RACFICE,REPORT=URVK
146600 //*WNDS     EXEC RACFICE,REPORT=WNDS
146700 //*WNGR     EXEC RACFICE,REPORT=WNGR
146800 //*------------------------------------------------------------------
146900 //*------- IRRADU00-Based Reports ------------------------------------
147000 //*------------------------------------------------------------------
147100 //*ACD$     EXEC RACFICE,REPORT=ACD$
147200 //*CADU     EXEC RACFICE,REPORT=CADU
147300 //*CCMD     EXEC RACFICE,REPORT=CCMD
147400 //*ECD$     EXEC RACFICE,REPORT=ECD$
 F1=Help      F2=Split     F3=Exit      F5=Rfind     F6=Rchange   F7=Up
 F8=Down      F9=Swap      F10=Left     F11=Right    F12=Cancel
 .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
   Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF OUTPUT DISPLAY SHARB09J JOB20834  DSID   124 LINE 2       COLUMNS 01- 80
```

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Step 10: Adding Selection Criteria…

- PF9 to swap to SDSF
- PF3 to exit the current job output and select the most recently submitted job by placing a "s" in the "NP" column
- Note that the users which are revoked. Note that the list includes some user IDs which are shipped by IBM and are "anchor" user IDs and can't be used as real users.

```
     File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL($$CNTL$$) - 01.04          Columns 00001 00072
 .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
   Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF OUTPUT DISPLAY SHARB09J JOB20834  DSID   123 LINE 4      COLUMNS 01- 80
COMMAND INPUT ===>                                           SCROLL ===> CSR
----------   --------------------
1- 1 -       URVK: User IDs Which are Currently Revoked       11/06/14

 User ID    User Name
 --------   --------------------
 irrcerta   CERTAUTH Anchor
 irrmulti   Criteria Anchor
 irrsitec   SITE Anchor
 UREVK$Y    REVOKED
1- 1 -       WNDS: DS Profiles with in WARNING Mode       11/06/14       10:3

 Data Set Name                            Volume  Owner     UACC
 ---------------------------------------  ------  --------  --------
 DSTEST.WARNING.YES.*                             DSTEST    NONE
  F1=HELP      F2=SPLIT     F3=END      F4=RETURN    F5=IFIND     F6=BOOK
  F7=UP        F8=DOWN      F9=SWAP     F10=LEFT     F11=RIGHT    F12=RETRIEVE
```

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Step 10: Adding Selection Criteria…

- Let's add the code to delete these user IDs from the list.
- PF9 to swap back to 'SHARBnn.RACFICE.CNTL'
- PF3 to exit the $$CNTL$$ member
- Select the "URVKCNTL" member
- Note the selection criteria: If this is a "User Basic Data" record (0200) and the revoked flag (column 54) is set to "YES"

```
        File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL(URVKCNTL) - 01.00          Columns 00001 00072
Command ===>                                                Scroll ===> CSR
****** ***************************** Top of Data ******************************
==MSG> -CAUTION- Profile is set to STATS ON. Statistics did not exist for
==MSG>          this member, but will be generated if data is saved.
122000  SORT    FIELDS=(10,8,CH,A)
122100  INCLUDE COND=(5,4,CH,EQ,C'0200',AND,
122200              54,3,CH,EQ,C'YES')
122300  OPTION  VLSHRT
****** **************************** Bottom of Data ****************************




 F1=Help      F2=Split    F3=Exit     F5=Rfind    F6=Rchange   F7=Up
 F8=Down      F9=Swap     F10=Left    F11=Right   F12=Cancel
```

Step 10: Adding Selection Criteria…

- The logic that we want to add is to remove the user IDs which start with "irr" from the report
- To ensure that ISPF doesn't fold our lower case data to upper case, enter the command "caps off" on the command line

```
        File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT       SHARB09.RACFICE.CNTL(URVKCNTL) - 01.01          Columns 00001 00072
Command ===> caps off                                       Scroll ===> CSR
****** ***************************** Top of Data ******************************
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
122000  SORT    FIELDS=(10,8,CH,A)
122100  INCLUDE COND=(5,4,CH,EQ,C'0200',AND,
122200              54,3,CH,EQ,C'YES')
122300  OPTION  VLSHRT
****** **************************** Bottom of Data ****************************




 F1=Help      F2=Split    F3=Exit     F5=Rfind    F6=Rchange   F7=Up
 F8=Down      F9=Swap     F10=Left    F11=Right   F12=Cancel
 .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
  Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF OUTPUT DISPLAY SHARB09J JOB20834 DSID   123 LINE 4       COLUMNS 01- 80
```

Step 10: Adding Selection Criteria…

- Now, let's add the selection criteria to eliminate the user IDs which start with "irr" from the report.

- Since the report already contains all of the user IDs that we want and only a few that we don't, the simplest solution is to exclude the records that we don't want. The logic that we want to add is to remove the user IDs which start with "irr" from the report

- The line that we add is "10,3,CH,NE,C'irr'" which is "include only those records where in column 10 (the profile name field) the value is not "irr".

- PF3 to exit the URVKCNT member.

```
           File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT      SHARB09.RACFICE.CNTL(URVKCNTL) - 01.01        Columns 00001 00072
Command ===>                                              Scroll ===> CSR
****** ***************************** Top of Data ******************************
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
122000  SORT    FIELDS=(10,8,CH,A)
122100  INCLUDE COND=(5,4,CH,EQ,C'0200',AND,
122110          10,3,CH,NE,C'irr',AND,
122200          54,3,CH,EQ,C'YES')
122300  OPTION  VLSHRT
****** *************************** Bottom of Data ****************************




  F1=Help      F2=Split     F3=Exit      F5=Rfind     F6=Rchange   F7=Up
  F8=Down      F9=Swap      F10=Left     F11=Right    F12=Cancel
 .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
  Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF OUTPUT DISPLAY SHARB09J JOB20834  DSID  123 LINE 4      COLUMNS 01- 80
```

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Step 10: Adding Selection Criteria…

- Scroll up and select the $$CNTL$$ member.

- Submit the job by entering "sub" on the command line.

- PF9 to swap to SDSF

- PF3 to exit the last report

- Select the most recent job output by placing a "s" in the "NP" column

- Examine the report output. Note that the "irr" user IDs are no longer shown!

```
           File  Edit  Edit_Settings  Menu  Utilities  Compilers  Test  Help
ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
EDIT      SHARB09.RACFICE.CNTL($$CNTL$$) - 01.04        Columns 00001 00072
 .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
  Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF OUTPUT DISPLAY SHARB09J JOB20846  DSID  101 LINE 1      COLUMNS 02- 81
COMMAND INPUT ===>                                        SCROLL ===> CSR
 1 -        URVK: User IDs Which are Currently Revoked      11/06/15       1

ser ID    User Name
-------   --------------------
REVK$Y    REVOKED
***************************** BOTTOM OF DATA *********************************






  F1=HELP      F2=SPLIT     F3=END       F4=RETURN    F5=IFIND     F6=BOOK
  F7=UP        F8=DOWN      F9=SWAP      F10=LEFT     F11=RIGHT    F12=RETRIEVE
```

Corporation

Summary

- **We've just scratched the surface… there are so many reports that you can create….**

- **In the remaining time in the lab, try a few more report modifications.**

- **Look at the 'SYS1.SAMPLIB(IRRICE)' reports… there are a lot of interesting techniques used there**

- **Look at the RACF Downloads section of the RACF web page**
  - **www.ibm.com/racf   resources->downloads**

- **The "Introduction to DFSORT" manual is *outstanding* and**

- **…and if you have any questions, please e-mail me!**