

CA JARS® Resource Accounting

Online System User Guide

Release 12.7



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Chapter 1: Introduction to the Online System

The CA JARS Resource Accounting Online System (JOS) is designed to increase productivity by providing an interactive, menu-driven environment for creating reports. Standard ISPF commands are used throughout the product. Menu selections and your specifications are used to build the reports you need. You simply specify the options you want from the menus provided. Single or multiple reports can be coded or submitted in the same session. Tables can be customized to your operation with very little effort. With JOS you can also browse your output reports online.

This section contains the following topics:

[Functional Overview](#) (see page 7)

Functional Overview

The first menu in JOS is the Primary Option Menu. It provides you with the major features of the Online System. The Primary Option Menu is presented on the next page. It offers the following functions to choose from:

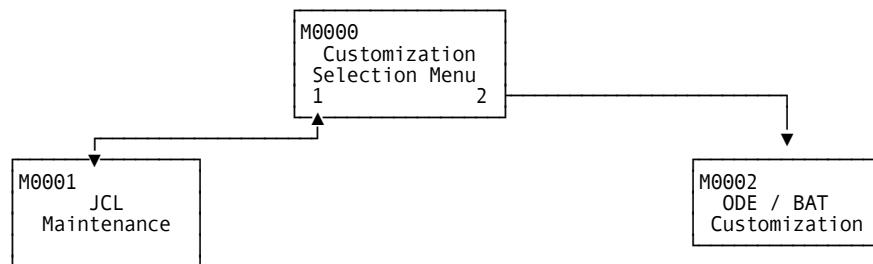
- Customization
- Report
- Output
- Tutorial

```
CA JARS Online System ----- Primary Option Menu -----  
OPTION ==> _  
  
Select one of the following options:  
  
  0 CUSTOMIZATION - Default JCL and JOS Table Customization  
  
  1 REPORT        - Define, Change, or Execute Report Definitions  
  
  2 OUTPUT        - View CA JARS Online Output Reports  
  
  T TUTORIAL     - Display Information About CA JARS Online System  
  
  X EXIT         - Terminate CA JARS Online System  
  
Enter END command to terminate CA JARS Online System
```

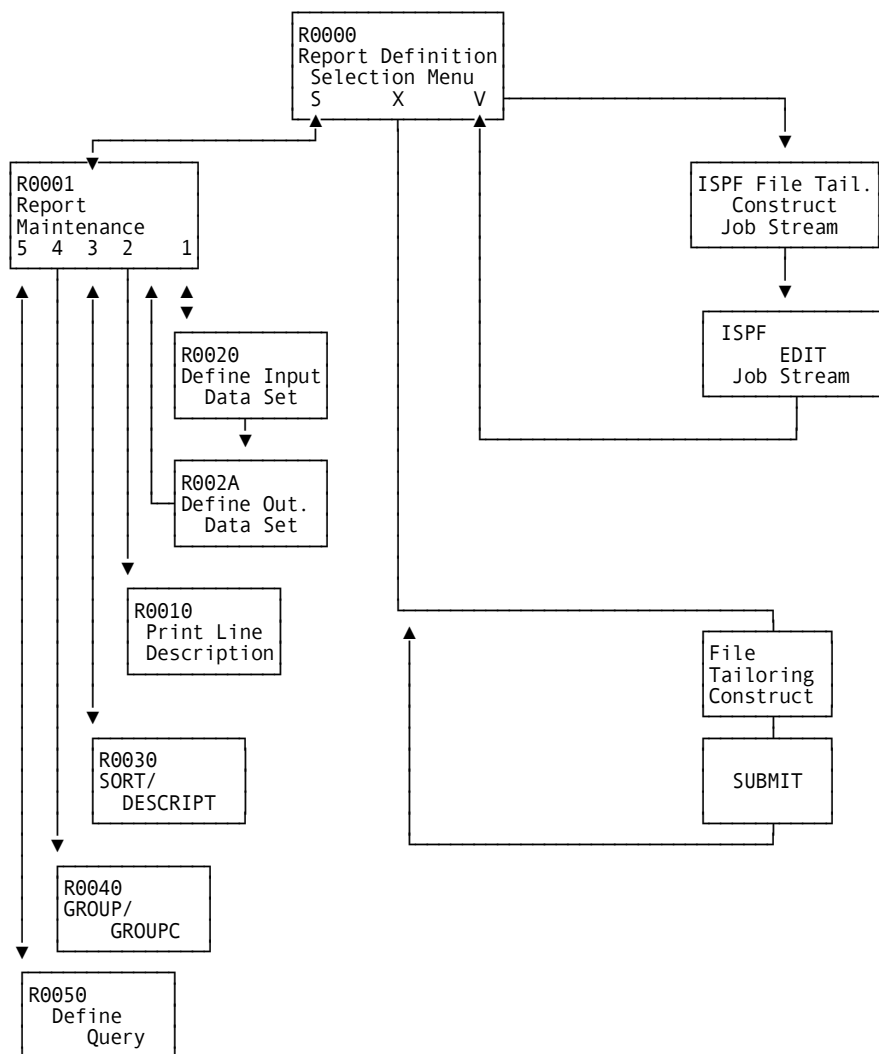
These options are as follows:

Option	Description
0 CUSTOMIZATION	Customize default JCL, and Online System (JOS) tables
1 REPORT	Create or modify user-defined reports that you can submit for execution and/or save for execution at some future time.
2 OUTPUT	You can BROWSE your print data sets by selecting Output. JOS lets you review these data sets online, save them for later review, or delete them.
T TUTORIAL	JOS has extensive HELP screens and a detailed Tutorial to provide information about JOS product screens and functions. The Tutorial has been built to use standard ISPF HELP commands to move you through the panels and sections.

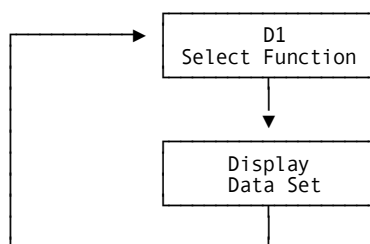
On the following pages, you will find flowcharts for each of the numbered options on the Primary Menu. These options are also described in detail in the following chapters of this guide.



Option 0: CUSTOMIZATION



Option 1: REPORT



Option 2: OUTPUT

Chapter 2: JOS Customization Menu

The Customization Menu provides you with two options for customization of JOS coding. One option lets you customize the JOS tables used in developing your reports. The other option lets you customize the default JCL so that it is tailored to your operation. In all cases, your customization only affects reports done with your user ID. Other users can make their own customizations independent of your changes. In short, customization of JOS is user ID-specific.

Here is a sample screen and a description of the options:

```
CA JARS OnLine System ----- JOS Customization Menu -----
OPTION ==> _
Select one of the following options:
1 JCL          - Default JCL
2 ODE/BAT     - Output Data Element / Basic Accounting Table
Enter END To Return To The Primary Option Menu
```

Option	Description
1 JCL	Provides you with the default JCL and allows you to customize the defaults to your needs. Lets you customize your DASD defaults, DDs, report data sets and Job statement information.
2 ODE/BAT	Output Data Element/Basic Accounting Table customization. Lets you customize the tables used in DISPLAY and SORT/DESCRIPT to fit your operation.

This section contains the following topics:

[Option 1: Default JCL](#) (see page 11)

[Option 2: ODE/BAT Customization](#) (see page 12)

Option 1: Default JCL

Default JCL is used to establish DASD defaults, DDs, report data sets and JOB statement information.

Note: JOB Statement Information (located at lower screen section) must be user supplied. There are no defaults.

You do not need to change the default JCL unless it is incorrect for your purposes. However, if you need to make changes, tab to the field that you want to change, type in your values and save them. A sample JCL Customization screen is presented below.

```
JOSM0010 Online System - JCL Defaults -----
Command ==>

STEPLIB DSN ==> CAI.CAJRLOAD
           ==>
SORTLIB DSN ==> SYS1.SORTLIB
REGION SIZE ==> 1526K (K)

DASD defaults for DD: SORTWknn ACT/Hist CAIJSCTn | Report (CAIJSPT) data set
-----|-----
SYSDA (generic) ==> SYSDA SYSDA SYSDA | LRECL (max 256) ==> 133
VOLSER (output) ==>          MC0001 | BLKSIZE ==> 23408
(CYL,TRK,blksiz) ==> CYL CYL CYL | SYSOUT class ==> *
Primary quantity ==> 20 1 1
Secondary qnty. ==> 0 1 1

JOB Statement Information:
==> //UserIDJL JOB '40800000',UserID,MSGCLASS=A,
==> // CLASS=A,MSGLEVEL=(2,0)
==> /*ROUTE PRINT SYSTEMC.UserID
==> /*ROUTE PRINT USHRDNP2

Press ENTER to continue; Enter END to end(save) or
CANCEL to cancel(nosave)
```

Note: While you can define a Logical Record Length (LRECL) up to 256, you must match the maximum length acceptable for your printer.

Option 2: ODE/BAT Customization

CA JARS uses the following tables in generating reports:

- The Basic Accounting Table (BAT) is a layout of the job and job-step records contained in the account file. The input SMF or history data has been processed and stored in this format by the report program. The fields described in this table are used by the SORT and GROUP options.
- The Output Data Elements Table (ODE) defines the formatted data elements as they are available for display. This is an internal table which only exists as print lines are generated.

Use the ODE/BAT Customization option to modify the tables to your requirements. The modifications are available whenever you use JOS (with the same user ID). All changes remain and are user ID-specific and **will not change the table for other users**.

When the ODE/BAT Customization screen first appears, the ODEs are listed in TBLDSP/Data Element ID number order, as shown below. This is a *scrollable* screen. To view all elements, scroll forward.

```

JOSM0020 Online System - ODE/BAT Customization - Version 1.88   ROW 1 OF 175
Command ==> _                                                    Scroll ==> CSR
  <-----O.D.E.-----> | <_ B.A.T. > | <==Sort Fields
- ID# Data Element Name   LENgth TBLDSP | Pos. LEN FMT |
- 0X Number of Jobs      | 127  2  B   |
- 0Y Number of TSO Sess's | 129  2  B   |
- 0Z Charge Suffix       | 591  1  C   |
- 01 Control Field       8         0         |
- 02 Description Field   20        8         |
- 03 Processing ID       1         28        | 028  1  C
- 04 Job Name            8         29        | 016  8  C
- 05 Program Name        8         37        | 107  8  C
- 06 Job Start Date      8         45        | 043  6  C
- 07 Job Class           2         53        | 049  2  C
- 08 Account Field      16        55        | 077 16  C
- 08a Project            16        55        | 077  7  C
- 08b Cost Center        16        55        | 084  2  C
- 08c Division           16        55        | 086  3  C
- 08d Department         16        55        | 089  3  C
- 08e District           16        55        | 092  1  C
- 09 Completion Code     4         71        | 093  4  C
- 10 SMF User Field      8         75        | 029  8  C
- 11 Step Name           8         83        | 099  8  C

```

To EXIT this screen, enter:

- END to end (save)
- CANCEL to cancel (no save)

Ordering the Table

When the ODE/BAT Customization screen first appears, the ODEs are listed in TBLDSP order, as shown on the previous screen. However, JOS gives you the option of having the table sorted:

- alphabetically by data element name
- numerically by data element table displacement; data element ID number
- numerically by BAT position

To re-order the table, place any non-blank character in any one of the three input fields located on the table heading line, then press ENTER.

The screen is refreshed with the ODEs presented in alphabetical order as follows:

```

CA JARS Online System - ODE/BAT Customization - ROW 1 OF 170
Command ==> Scroll ==> CSR

  <-----O.D.E.-----> | <_ B.A.T. > | <==Sort Fields
- IDm Data Element Name   LENgth  TBLDSP | Pos. LEN FMT |
- F8 Absorption Rate      6       1181 | 483  4  P  |
- 08 Account Field       16        55 | 077 16  C  |
- F2 Account Field 2     16       1107 | 487 16  C  |
- F3 Account Field 3     16       1123 | 503 16  C  |
- A7 Active Time hh.99999 10        790 | 373  6  P  |
- A8 Active Time hh:mm:ss 10        800 |      |
- A9 Active Time Avrg      8        810 |      |
CA JARS Online System - ODE/BAT Customization - ROW 40 OF 175
Command ==> Scroll ==> CSR

  <-----O.D.E.-----> | <_ B.A.T. > | <==Sort Fields
- IDm Data Element Name   LENgth  TBLDSP | Pos. LEN FMT |
- 57 CPU Identification    1        430 | 001  1  C  |
- 60 RDR Start Date        8        453 | 004  6  C  |
- 61 RDR Start hh:mm:ss    8        461 | 010  6  C  |
- 04 Job Name              8         29 | 016  8  C  |
- H1 RJE Line Name         8       1469 | 016  8  C  |
- 56 Step Number          6        424 | 026  2  B  |
- 03 Processing ID         1         28 | 028  1  C  |
    
```

Modifying the Table

You can also *modify* data elements using either of the following procedures:

- To modify just a **data element name**, move the cursor to the data element name you want to change, type in the new name, and then press ENTER.
- To modify a name and other BAT information:
 - Type an alphabetic character in the *m(odify)* column (it is the column between the ID and Data Element Name) and press ENTER. Acceptable characters are a-z and A-Z. An A and a are not treated as the same modifier. For example, 08a is not recognized as 08A. When you type any alphabetic character in the **m** (modify) field and press ENTER, you are provided with a duplicate of the full entry. Make your modifications on this line.
 - Type in your modifications to any of the BAT fields for the selected data element.

Modification examples are presented on the next page.

Note: User-modified data elements appear within report definitions of the SORT and GROUP statements.

User-modifications affect the sort field and Sort Break Descriptive Headers.

On the sample screen below, we have indicated that we want to modify ODE entry **08** by placing an **a** in the modify field.

<-----O.D.E.----->				<_ B.A.T. >			<==Sort Fields
- IDm	Data Element Name	LENgth	TBLDSP	Pos.	LEN	FMT	
- 02	Description Field	20	8				
- 03	Processing ID	1	28	028	1	C	
- 04	Job Name	8	29	016	8	C	
- 05	Program Name	8	37	107	8	C	
- 06	Job Start Date	8	45	043	6	C	
- 07	Job Class	2	53	049	2	C	
- 08a	Account Field	16	55	077	16	C	
- 09	Completion Code	4	71	093	4	C	
- 10	SMF User Field	8	75	029	8	C	
- 11	Step Name	8	83	099	8	C	

When you press ENTER, the screen is refreshed with ID 08 displayed in its original state and 08a displayed with duplicate 08 information. Make your modifications on the 08a line as shown on the next page.

<-----O.D.E.----->				<_ B.A.T. >			<==Sort Fields
- IDm	Data Element Name	LENgth	TBLDSP	Pos.	LEN	FMT	
- 02	Description Field	20	8				
- 03	Processing ID	1	28	028	1	C	
- 04	Job Name	8	29	016	8	C	
- 05	Program Name	8	37	107	8	C	
- 06	Job Start Date	8	45	043	6	C	
- 07	Job Class	2	53	049	2	C	
- 08a	Account Field	16	55	077	16	C	
- 09	Completion Code	4	71	093	4	C	
- 10	SMF User Field	8	75	029	8	C	
- 11	Step Name	8	83	099	8	C	

The following sample screen shows how we used the modification process described above to continue to modify 08 (Account Field) into meaningful components.

<-----O.D.E.----->				<_ B.A.T. >			<==Sort Fields
- IDm	Data Element Name	LENgth	TBLDSP	Pos.	LEN	FMT	
- 06	Job Start Date	8	45	043	6	C	
- 07	Job Class	2	53	049	2	C	
- 08	Account Field	16	55	077	16	C	
- 08a	Project	16	55	077	16	C	
- 08b	Cost Center	16	55	084	2	C	
- 08c	Division	16	55	086	3	C	
- 08d	Department	16	55	089	3	C	
- 08e	District	16	55	092	1	C	
- 09	Completion Code	4	71	093	4	C	

Note: In order to **save** your modifications, you must END out of this panel. Cancel will **not** save any data.

All modifications saved using the END command remain in effect until deleted. The sort order used before the save also remain until changed.

Line Command D

The only acceptable line command for this screen is **D** (delete).

Note: You can only delete user-modified elements from the table.

Enter D in the ODE entry area preceding the user-modified element you want to delete; then press ENTER.

Chapter 3: Defining, Changing or Executing Report Definitions

This is a scrollable table of Report Definitions. You can use it for single or multiple reports. Use this menu to select report(s) for modification, creation, or submission for execution. Use the Line Commands with the report(s) of your choice. JOS can process multiple reports in a session.

The top line of the table is available for you to enter a new Report ID and header information.

```
JOSR0000 Online System - Report Definitions ----- ROW 1 OF 8
Command ==>                                     Scroll ==> CSR
Use The Following Line Commands To Process Report Definitions:

S - Review Or Alter
V - Build And EDIT Report JOB Stream
X - Build And SUBMIT Report JOB Stream
D - Delete
C - Copy

Report-ID |<----- Report Header ----->|
          <--Enter new Report ID and Header in this area-->
- REPORTC Hourly Turnaround Analysis
- REPORTD Job Resource Utilization
- REPORTF Abnormal Termination by Cancel Code
- REPORTL Class Structure Analysis
- REPORTM MVS Performance Group Summary
- REPORTP Printer Device Utilization by Day
- REPORTT TSO Session Analysis
- REPORT$ Remote Usage Summary
***** BOTTOM OF DATA *****
```

To use the Report Definitions menu, place the appropriate line command in the select field to the left of the Report ID, or type in a new report ID and header and then enter the line command in the select field.

The following is an explanation of the line commands for the Report Definition Selection menu (JOSR0000).

Enter	To
S	Select the report that you want to work on by placing an S next to the Report ID. When you have made your selection JOS takes you to the Report Definition Maintenance menu (JOSR001) shown on the next page. Note: Entering a new Report ID (on the Report Definition Selection Menu) will also promote you through to the Report Definition Maintenance menu.
V	Build and EDIT the report job stream. Puts you into ISPF EDIT mode after building the report job stream. Any EDIT changes you make will only change the output for this run, not future runs. You must redefine your report through menu selection if you need to modify or alter the job stream every time. Note: If your report is to go to an online data set for subsequent viewing, you must not submit it from EDIT. If you do, JOS will not be able to retrieve the report for view or query.
X	Build and SUBMIT report job stream for CA JARS processing.
D	Delete a report definition.
C	Copy all attributes of the selected report to the new report, defined in the NEW Report ID and Header Line.

To EXIT this menu, enter:

- END to end (save)
- CANCEL to cancel (no save)

This section contains the following topics:

- [Report Definition Maintenance](#) (see page 19)
- [Selecting START TIME as Group 1](#) (see page 32)
- [Generating a Report from an Existing Definition](#) (see page 35)
- [Build and EDIT Report JOB Stream \(Option V\)](#) (see page 36)

Report Definition Maintenance

The Report Definition Maintenance menu is a major junction in your report development. This menu is where you begin to select the core of your report definitions for CA JARS. The menu is displayed when you **S** (select) or enter a new report ID from the Report Definition menu (JOSR0000). Use this menu to define your report format and content. As you can see, selections 1, 2, and 3 are required for report generation; selection 4 is optional. Each of these options is described in detail on the following pages.

```
JOSR0001 Online System - REPORTC  Report Definition Maintenance
OPTION ==> _

Report Header = Hourly Turnaround Analysis

Select The Following Options To Create Or Modify Report Control Statements:

1 SELECT      (Req) - Define Input And Outputs To Be Generated
2 DISPLAY     (Req) - Define Elements To Be Displayed On Output Report
3 SORT/      (Req) - Define Order Of Output, Control Break DESCRIPTIONS,
  DESCRIPT    History Output And Summarization
4 GROUP/GROUPC (Opt) - Define Selection/Rejection Process

Enter END To Return To The Report Definitions Selection Menu.
```

Option	Description
1 SELECT	To select or define the Input data set(s) and Outputs for report generation.
2 DISPLAY	To select and order the Output Data Elements that will be displayed on your output report.
3 SORT/DESCRPT	To select and define the Sort Levels and Sort Break Descriptions. Sort level definition is required to order records for output, define the history output and summarization. DESCRPT statements define control keys and sort break descriptions for your output report.
4 GROUP/GROUPC	While not required to generate a report, the GROUP option is recommended. Through this option you select and define data groupings and the criteria for those groupings within your reports

Option 1: SELECT

Use this menu to SELECT the Input and Outputs for your report (the Input Data Set Type, the Output Data Set Type, the Report Data Set Type, the Print Detail, and the Input Data Set(s)) that you will use.

```

CA JARS Online System - REPORTC INPUT and OUTPUT -----
Command ==>

Select Input Data Set Type: ==> 1 | Select Output Data Set Type: ==> 0
  1 - SMF                          | 0 - Create NO History File
  2 - JARS History                   | 1 - Create level 1 summary File
-----| 2 - Create level 2 summary File
Select Report Data Set Type:==> D | 3 - Create level 3 summary File
  S - Create sysout (default)       | 4 - Create level 4 summary File
  D - Create print data set         | 5 - Create level 5 summary File
-----| 6 - Create JOB level history File
                                           | 7 - Create STEP level history File
-----|-----
Print detail for: (Yes or No)
      JOB ==> NO   STEP ==> NO   RJE ==> NO   FORMs==> NO

----- Input Data Set(s) ----- (If not cataloged) -----
      Data Set Name                Volser  Unit
==> JARS.JARIVP.DATA                -----
==>                                  -----
==>                                  -----
==>                                  -----

Press ENTER to continue; Enter END to end(save) or CANCEL to cancel(nosave)
    
```

Select Input Data Set Type

You must select one of the two Input Data Set Types to get a report.

1 - SMF:

System Management Facilities generated records.

2 - JARS History

Consists of history records.

You must provide the Data Set Name(s) you will use as input data. Enter the names of the data sets you are using for this report in the fields labeled for **Input Data Set(s)**.

Select Output Data Set Type

The higher the number of the output summary file (1 - 7), the greater the detail it contains. Do **not** select an output summary level with detail greater than the contents of the input file you are using.

0 - Create NO History File:

Select if you do not want a history file created. You still must make all other selections from this menu and name your input data set(s) before leaving the menu.

1 - 7 Create xxxxxxxx

Select the level number (1 - 7) to create the appropriate level of history file. The level of detail increases from 1 to 7, with 7 having the greatest detail level.

Select Report Data Set Type

S Create sysout:

sends your report to print through sysout.

D Create print data set:

creates a print data set on disk for future browsing through OUTPUT. If you want to browse your report online you must select **D**.

Print detail for:

JOB, STEP, RJE, FORMs

You indicate whether or not you want print detail in your report by typing YES or NO for the record types listed above.

Output Data Set Specification Panel (JARS History)

This panel is displayed because you have defined your Output report as a history file (1-7) on the Input and Output panel (JOSR0020).

Use this panel to define Unit Name, Volser, and Space requirements. You can also use it to verify or change default values that are presented here for the report.

```

JOSR002A Online System - REPORTC  OUTPUT (JARS History) Data Set -----
Command ==>

Data Set Name ==> UserID.REPORTC.JARS.HISTORY_____

    Unit Name ==> SYSDA___

        Volser==> MC0001

Space: Type ==> CYL__ <-- CYL, TRK, or block length
      Pri. ==> 1____ <-- Primary quantity
      Sec. ==> 1____ <-- Secondary quantity

Press ENTER to continue; Enter END to end(save) or CANCEL to cancel(nosave)
    
```

Output Data Set Specification Panel (JARS Report)

This panel is displayed when you specify **D** (Create print data set) on the Input and Output menu (JOSR0020). Use it to define Data Set Name, Unit Name, Volser, and Space requirements for the print data set.

Note: If Volser is blank the print data set will go to a temporary disk.

```

JOSR002B Online System - REPORTC  OUTPUT (JARS Report) Data Set -----
Command ==>

Data Set Name ==> UserID.REPORTC.JARS.REPORT_____

    Unit Name ==> SYSDA___

        Volser==> _____

Space: Type ==> CYL__ <-- CYL, TRK, or block length
      Pri. ==> 1____ <-- Primary quantity
      Sec. ==> 1____ <-- Secondary quantity

Press ENTER to continue; Enter END to end(save) or CANCEL to cancel(nosave)
    
```

Option 2: DISPLAY

Use the DISPLAY option to select and order the data elements for display on your output reports.

The Data Element Name List is presented in the same order as last used; or as last sorted in the ODE/BAT Customization. If you are viewing the selections from an existing report or sample report, the previously selected names will be at the top of the select list and also ordered on the left side of the screen (Selected Names). The menu is divided into several areas. To indicate your selections: type an **S** in the entry preceding the Data Element Name ID. Then, press ENTER.

A sample menu is provided below.

```

JOSR0010 OnLine System - REPORTC Display Data Elements -----
Command ==>                                     Scroll ==> CSR
Line Cmds:A,B,M,MM,D,DD > scroll                 Report Print Line Length = 106
  Order Selected Names | ----Select Data Element Names From These Columns----
    In This Column     | S ID Data Element Name   S ID Data Element Name
-- -- Selected Names --| - - - - - Data Element Name Select List -----
__ Description Field   | 42 Percent Total Charge  _ 01 Control Field
__ Job Number          | 03 Processing ID         _ 04 Job Name
__ RDR Queue hh:mm:ss | 05 Program Name         _ 06 Job Start Date
__ Alloc. Time Avrg    | 07 Job Class            _ 08 Account Field
__ Active Time Avrg    | 09 Completion Code      _ 10 SMF User Field
__ Elapsed Time-Avrg   | 11 Step Name            _ 12 Start Time hh:mm:ss
__ CPU Time Averaged   | 13 Stop Time hh:mm:ss   _ 15 Priority Level
__ WTR Queue hh:mm:ss | 16 Print Forms ID       _ 17 Punch Forms ID
__ Turnaround hh:mm:ss| 18 Statements Read      _ 19 Lines Printed, Total
__ Service Rate        | 20 Statements Punched   _ 21 Memory/K Used
__ Percent Total Charge| 22 Memory/K Allocated   _ 23 Memory, % Unused
                       | 24 Setup/Idle hh:99999  _ 25 Elapsed hh:99999
                       | 26 CPU Time hh:99999    _ 27 Overhead hh:99999
                       | 28 Wait Time hh:99999   _ 29 Processor hh:99999
                       | 30 I/O Time hh:99999    _ 31 Total Time hh.nnnnn
                       |                               Scroll these columns
Press ENTER To Continue; Enter END To End(Save) Or CANCEL To Cancel(Nosave)

```

Once selected, the names will appear in the Selected Names column on the *left*. (See the sample screen on the next page.) As Display items are selected, the Report Print Line Length is displayed in the upper right of the screen (Report Print Line Length = ____).

Note: An element can only be selected for display once.

The following view of the DISPLAY menu (JOSR0010) shows how selected items are presented in the column at the *left* of the menu. They are displayed in the order in which they were selected. The order of selected names in the column is also the order in which they will appear on the report. If you want to reorder the column, use the Line Commands (A,B,M,MM,D,DD). Change the order by using line commands. Also note that both sides of the menu are independently scrollable.

Line Commands: A B D M DD MM

Use the following standard ISPF line commands for moving and deleting lines of data, where:

- A = After
- B = Before
- D = Delete
- M = Move
- MM = Block Move
- DD = Block Delete

To move a single line place an M on the line you want moved and either an A (After) or B (Before) on the line that you want it moved before or after. For block moves use MM on the first and last line of the block to be moved, and then use A or B to relocate the block.

To delete use D for single line action and DD on the first and last line of a block delete.

```
JOSR0010 Online System - REPORT1 Display Data Elements -----
Command ==>
Line Cmds:A,B,M,MM,D,DD > scroll Report Print Line Length = 101
Order Selected Names | ----Select Data Element Names From These Columns---
In This Column | S ID Data Element Name S ID Data Element Name
-- -- Selected Names -- | - - - - - Data Element Name Select List - - - - -
-- Account Field | 08 Account Field A7 Active Time hh.99999
-- Active Time hh.99999 | A8 Active Time hh:mm:ss A9 Active Time Avrg
-- Active Time hh:mm:ss | 43 Adjusted Rate B8 Alloc. Time hh.99999
-- Active Time Avrg | B9 Alloc. Time hh:mm:ss 01 Control Field
-- Adjusted Rate | 26 CPU Time hh.99999 C4 CPU(SRB)Timehh.99999
-- Alloc. Time hh.99999 | 02 Description Field 03 Processing ID
-- Alloc. Time hh:mm:ss | 04 Job Name 05 Program Name
-- Control Field | 06 Job Start Date 07 Job Class
-- CPU Time hh.99999 | 09 Completion Code 10 SMF User Field
-- CPU(SRB)Timehh.99999 | 11 Step Name 12 Start Time hh:mm:ss
| 13 Stop Time hh:mm:ss 14 Job Number
| 15 Priority Level 16 Print Forms ID
| 17 Punch Forms ID 18 Statements Read
| 19 Lines Printed, Total 20 Statements Punched
| 21 Memory/K Used 22 Memory/K Allocated
Scroll these columns
Press ENTER To Continue; Enter END To End(Save) Or CANCEL To Cancel(Nosave)
```

You can scroll (up/down) the lists on either side of the menu. To **switch** the scroll columns, you can use either:

- enter LEFT or RIGHT in the command area and press ENTER
- press LEFT or RIGHT PF key (normally PF10/22 or PF11/23)
- type over the < or > that appears at the end of the Line Cmds row, using the symbol to point to the side of the menu you want to scroll

Option 3: SORT/DESCRIPT

The SORT statement is required for report generation. Input data can be sorted on up to five different fields. SORT orders records for output, defines history output and level of summarization.

Define SORT Fields

At this menu you can select your sort fields from the Basic Accounting Table (BAT), with any customization you may have made to that table through Customization. You select your Sort field levels from the table by placing an **S** in the entry area preceding any of the items named in the table and pressing ENTER. The names at the top of the table (highlighted in red on color monitors) are those names you selected in DISPLAY. You can scroll through the table as you could with the DISPLAY menu. Your first selection will become the first sort level. Your second selection will become the second level, and so forth for all five sort levels. You can move or reorder your Sort level selections by using the Line Commands (A, B, D, M, MM, DD).

Note: You can select the same name more than once. The menu is then refreshed with the top portion of the menu filled in as shown on the next screen.

The Sort Field Level area of the menu is used to enter line commands. The line commands for this menu area are explained on the next page.

```

JOSR0030 OnLine System - REPORTC Define SORT Fields -----
Command ==>
Sort Field:
Level -- Name                Picture          Length (A|D) Opt. Header
1st=>  __ Group Code #2      C                1   A   E   YES
2nd=>  __ Start Time  hh:mm:ss CC....          2   A   1   YES
3rd=>  __
4th=>  __
5th=>  __
Select Sort Fields from those defined below:
Group Code #2      Start Time  hh:mm:ss      Processing ID
Job Number        RDR Queue  hh:mm:ss      ResidentTimehh.99999
ConnectTime hh.99999  Readers Used      WTR Queue  hh:mm:ss
Turnaround  hh:mm:ss  Service Rate      Adjusted Rate
Absorption Rate   Account Field      Account Field 2
Account Field 3   Active Time hh.99999  Alloc. Time hh.99999
Charge Suffix     Completion Code     Connect Charge
Cost Center       CPU Identification  CPU Index
CPU Paging Rate   CPU Time  hh.99999   CPU(SRB)Timehh.99999
CPU(TCB)Timehh.99999  Day of Week Ind.   Department
Disk Devices Used  Disk I/O Count     Disk Mounts
District          Division           Elapsed  hh.99999
Press ENTER to continue; Enter END to end(save) or CANCEL to cancel(nosave)

```

Note: You can use the ? (question mark) to get HELP messages by entering them in the input fields for any level. Calling HELP during a message display will take you to a field specific HELP panel.

Line Commands

Use the following standard ISPF line commands for moving and deleting lines of data.

A = After

Specifies you want the line(s) placed immediately after this line.

B = Before

Specifies you want the line(s) placed immediately before this line.

D = Delete

Placed on the line you want to delete.

M = Move

Placed on the line you want to move.

DD = Block delete

Placed at the beginning and end of a block of text you want to delete

MM = Block move

Placed at the beginning and end of a block of text you want to move

Note: If you delete a name from the Sort Field list, the list will self adjust.

Column Description

Sort Field

defines the order of the sort fields

Level -- Name

name of the field at the specified sort level

Picture

format

C

character

P

packed

X

hexidecimal

Length

field length

Order

the order you want the records sorted and printed in. A(Ascending) low to high;
D(Descending) high to low.

Prt Opt.

tells the report generator whether or not you want a summary line printed for the sort level. Valid options are:

N

do not print a summary line at this level

1, 2, or 3

space 1, 2, or 3 lines before printing the summary line

E

eject to new page after printing summary

P

eject to new page and reset page number to 1 after printing.

Note: If either E or P is specified for the first (major) summary level, grand totals will print on a page by themselves.

Descrip. Header

YES indicates if you want a descriptive header before each sort break, in addition to a summary line at the end.

Note: If your response is YES, you are taken to the Define SORT Break Descriptive Headers menu (JOSR0031):

Define Sort Break Descriptive Headers

This panel provides the default Descriptive Headers for each level (1 - 5) and input fields for you to enter the header variable that you want to replace the default header. This menu is only displayed if you entered YES in the Descriptive Header column on the Define SORT Fields menu (JOSR0030).

Additional descriptive headers can be defined for each level by placing an **S** (Select) before the header name. This selection will take you to a new panel (JOSR0032) for the defining of Control Keys for that level's Sort Break Descriptions.

An explanation of column headings and menu usage follows.

```

JOSR0031 Online System - REPORTC Define SORT Break Descriptive Headers -----
Command ==>                               Scroll ==> CSR

Level  Sort Break Header                Sort Field Picture
Sort Field Name      Header Variable    Header Variable    Header Variable
                   ---- Prefix ----    (Select with " )  ---- Suffix ----

1st=> S Group Code #2 x                C
Group Code #2          Group Code #2    "

2nd=> Start Time xx                    CC....
Start Time hh:mm:ss Start Time         ""

3rd=>

4th=>

5th=>

Press ENTER to continue; Enter END to end(save) or CANCEL to cancel(nosave)
    
```

Each Sort Level on the menu gives the default header and entry fields for modification of the default headers.

The Sort Break Header is a variable that has a set maximum length of 20 characters. Within that maximum limit you can define your headers as you wish. The menu provides you with the field names that you have selected and a picture of the field length, but you can write your headers by entering the header you want using the prefix area, picture area, and suffix area.

If you require additional descriptive headers for any or all levels enter an **S** before the header name you select, and you will be taken to a new input panel (shown below).

```

JOSR0032 Online System - REPORTC Level 1 Sort Break Description -- ROW 1 OF 3
Command ==>                               Scroll ==> CSR

Enter CONTROL keys, to be matched against Sort Field; Group Code #2
to associated summary line DESCRIPTION with corresponding sort control break.

      Default = Group Code #2 x
      CONTROL DESCRIPTION
000001 1      First Shift
000002 2      Second Shift
000003 3      Third Shift
***** BOTTOM OF DATA *****
    
```

Sort Field

Name:

Displays the name of the sort field you selected (1st - 5th).

Sort Break**Header:**

This is the display header used at each Sort Break and defined by the following three fields:

Header Variable Prefix:

Use this field to enter any header information that you want to precede the field value displayed on your output report.

Sort Field Picture:

Format

C character

P packed

X hexadecimal

" (quotation mark) is used to indicate which **contiguous** characters within a string you want to use. This is then translated into the appropriate number of Xs that appear in the Sort Break Header. For example, if you use "", xx would be displayed.

Header Variable Suffix:

Use this field to enter any header information that you want to appear after the field value displayed on your output report.

To specify new values, use the second line of each sort level. On the following panel we have added a suffix code of *Dist*

Specifying Variables

```
JOSR0031 Online System - REPORT1 Define SORT Break Descriptive Headers -----
Command ==>                               Scroll ==> CSR

Level  Sort Break Header          Sort Field Picture
Sort Field Name      Header Variable      Header Variable      Header Variable
                   ---- Prefix -----      (Select with " )    ---- Suffix -----

1st=>  Project xxxxxx             CCCCCC
Project                Project          " " " " " " " "

2nd=>  Cost Center xx             CC
Cost Center           Cost Center      ""                Dist.
```

After you specified the variable(s) you want to add, press ENTER. The panel will be refreshed with the new variable(s) displayed as shown below.

A Refreshed Panel

```

JOSR0031 Online System - REPORT1 Define SORT Break Descriptive Headers -----
Command ==>                               Scroll ==> CSR

Level  Sort Break Header                Sort Field Picture
Sort Field Name      Header Variable   Header Variable   Header Variable
                   ---- Prefix ----- (Select with " ) ---- Suffix -----

1st=>  Project xxxxxxxx                CCCCCC
Project                Project          "*****"

2nd=>  Cost Center xx Dist.             CC
Cost Center           Cost Center       ""                Dist.
    
```

Option 4: GROUP/GROUPC

The GROUP/GROUPC option is used to group data in your reports. You select the items you want to create a *group*. But you must also provide and define the *group criteria* (GROUPC) with a minimum value. You can create up to six groups, each with its own criteria.

Ordering of group(s) is **critical** because conditions established for a Group 1 definition qualify data for Group 2, and Group 2 for Group 3, and so forth, including selection or rejection. For a further explanation of grouping, consult your *User Guide*.

Report Field Selection Screen

Logic and menus similar to that used for the DISPLAY and SORT options are used to create GROUP and GROUPC statements (when selected). You can scroll the field names to make selections. The menu also tells you how many groups you have selected (Groups in use: N).

```

JOSR0040 ----- Report Field Selection ----- ROW 1 OF 142
Command ==> LISTG                               Scroll ==> CSR

Command Line : Find, Locate, RESet, LISTGroup     Groups in use: 2

Line Commands : C (Criteria), D (Drop), M (Modify), S (Select)
----- Basic Accounting Table Fields -----

```

Field Name	Relative Column	Length	Type (bl,P,X)	Action (R,S,bl)
- CPU IDENTIFICATION	1	1	-	-
- RDR START HH:MM:SS	1	6	-	-
- PROGRAM NAME	1	8	-	-
- RJE LINE PASSWORD	1	8	-	-
- MEMORY/K ALLOCATED	1	4	P	-
- MEMORY/K USED	1	4	P	-
- MEMORY, % UNUSED	1	3	P	-
- JOB NUMBER	1	5	-	-
- NUMBER OF JOBS	1	2	X	-
- NUMBER OF TSO SESS'S	1	2	X	-
- PRIORITY LEVEL	1	2	-	-
- STATEMENTS READ	3	4	P	-
- LINES PRINTED (STD.)	3	4	P	-
- LINES PRINTED (SPCL)	3	4	P	-

Line commands are used for coding of the specific Field Name groups. Line commands, Command Line Options, and columns descriptions are explained on the next page.

Before you can modify or provide criteria for a field, you must select it. Once you make a selection you are taken to the Define Criteria panel (JOSR004A).

Selecting START TIME as Group 1

```

JOSR0040 ----- Report Field Selection ----- ROW 1 OF 131
Command ==> _                               Scroll ==> PAGE

Command Line : Find, Locate, RESet, LISTGroup           Groups in use: 0

Line Commands : C (Criteria), D (Drop), M (Modify), S (Select)
----- Basic Accounting Table Fields -----
      Field Name           Relative   Type      Action
                          Column   Length (bl,P,X) (R,S,bl)
-----
- CPU IDENTIFICATION           1         1         -         -
S START TIME HH:MM:SS           1         2         -         -
- PROGRAM NAME                 1         8         -         -
- RJE LINE PASSWORD            1         8         -         -
- MEMORY/K ALLOCATED           1         4         P         -
- MEMORY/K USED                 1         4         P         -
- MEMORY, % UNUSED             1         3         P         -
- JOB NUMBER                    1         5         -         -
- NUMBER OF JOBS                1         2         X         -
- NUMBER OF TSO SESS'S         1         2         X         -
- PRIORITY LEVEL                1         2         -         -
- STATEMENTS READ              3         4         P         -
- LINES PRINTED (STD.)         3         4         P         -
  
```

Command Line Options

Find **F** whenever

displays all occurrences of field names that match the string *WHENEVER*.

Locate **L** whatever

displays the first occurrence of *WHATEVER*. If you repeat the locate command, it will take you to the next occurrence of *WHATEVER*.

RESet

resets menu to the full display after a Find or Locate operation (it is sometimes necessary to enter the TOP command, prior to RESet).

LISTGroup

list all groups selected in this session.


```

JOSR0040 ----- Report Field Selection ----- ROW 49 OF 142
Command ==> _                               Scroll ==> CSR

Command Line : Find, Locate, RESet, LISTGroup           Groups in use: 2

Line Commands : C (Criteria), D (Drop), M (Modify), S (Select)
----- Basic Accounting Table Fields -----
      Field Name          Relative   Type   Action
                        Column  Length (bl,P,X) (R,S,bl)
-----
_  PROCESSING ID          1       1     _      R  SELECTED
_  START TIME  HH:MM:SS   1       2     _      _  SELECTED
***** BOTTOM OF DATA *****

```

Line Commands

C (Criteria)

shows the defined criteria for this group

D (Drop)

deselect

M (Modify)

lets you modify Column, Length, Type and Action for a selection
(before you use Modify you must have Selected the Field Name)

S (Select)

used to select a group's Field Name

Basic Accounting Table Fields

Field Name

lists the members of the BAT for you to choose your groups from.

Relative Column

gives the default column position from which begin to read the column position.

Length

field length.

Type

format

bl

blank (character)

P

packed

X

hexidecimal

Action

- R-reject
- S-select
- bl-blank for select *all*

After you indicate a selection you are taken to the Define Criteria screen (JOSR004A). You must enter a minimum value or criteria for each field you select. When you have provided the criteria you are returned to the Report Field Selection menu. You will see that the selected Field Name has been duplicated and SELECTED is displayed at the end of that same line.

Note that we used FIND START to get the following display.

```

JOSR0040 ----- Report Field Selection ----- ROW 2 OF 140
Command ==> _                               Scroll ==> PAGE

Command Line : Find, Locate, RESet, LISTGroup           Groups in use: 1
Line Commands : C (Criteria), D (Drop), M (Modify), S (Select)
----- Basic Accounting Table Fields -----
Field Name          Relative      Type      Action
                   Column      Length (bl,P,X) (R,S,bl)
-----
- RDR START  HH:MM:SS      1         6      -      -
- START TIME HH:MM:SS      1         6      -      -
- START TIME HH:MM:SS      1         2      -      S  SELECTED
- RDR START DATE      1         6      -      -
- JOB START DATE      1         6      -      -
***** BOTTOM OF DATA *****
    
```

The following menu shows the result of the LISTG command, after we selected another group.

```

JOSR0040 ----- Report Field Selection ----- ROW 75 OF 142
Command ==>                               Scroll ==> PAGE

Command Line : Find, Locate, RESet, LISTGroup           Groups in use: 2
Line Commands : C (Criteria), D (Drop), M (Modify), S (Select)
----- Basic Accounting Table Fields -----
Field Name          Relative      Type      Action
                   Column      Length (bl,P,X) (R,S,bl)
-----
- START TIME HH:MM:SS      1         2      -      S  SELECTED
- JOB START DATE      1         6      -      -  SELECTED
***** BOTTOM OF DATA *****
    
```

Define Criteria

This menu is displayed when you select M(Modify) or C(Criteria) on the Report Field Selection menu (JOSR0040). You use this menu to define the criteria (acceptable range of values) for each group you defined on the Report Field Selection menu (JOSR0040). You do this using the Minimum and Maximum Value areas of the menu which is blank the first time it is displayed. You must enter a minimum value for a Group or JOS will deselect it. CA JARS requires a minimum value for Grouping.

The *Group #* tells you which group number you're working on as it relates to Groups 1-6.

CPU gives you the ability to change the CPU ID of any accounting record for further processing. In this way, qualified records can be assigned different CPU codes corresponding to various charge rates for a given report.

```
JOSR004A ----- Define Criteria ----- ROW 1 OF 26
Command ==> _                               Scroll ==> CSR

Field Name - START TIME HH:MM:SS
Field Type -   Field Length - 2 Starting column - 1 Action -   Group # - 2

Line Commands : D (Delete), I (Insert), R (Replicate)
Error Flags   : F : Data format L : Too Long M : Missing value X : Min > Max
-----
```

Minimum Value	Errors	Maximum Value	Errors	Group Code	CPU
00		07		1	
08		15		2	
16		23		3	
-					
-					

Line Commands

D

delete

I

insert

R

replicate (copy)

Generating a Report from an Existing Definition

Use this menu to *verify* or *submit* job streams. Select the report ID(s) you want to verify using a **V** and press ENTER. This displays the job stream JCL and control statements via Edit.

To simply construct and submit the report job stream, select the report ID(s) you want to submit using an **X**, and press ENTER.

```
JOSR0000 Online System - Report Definitions ----- ROW 1 OF 8
Command ==>                                     Scroll ==> CSR
Use The Following Line Commands To Process Report Definitions:

S - Review Or Alter
V - Build And EDIT Report JOB Stream
X - Build And SUBMIT Report JOB Stream
D - Delete
C - Copy

Report-ID |<----- Report Header ----->|
          <--Enter new Report ID and Header in this area-->
X REPORTC Hourly Turnaround Analysis
X REPORTD Job Resource Utilization
_ REPORTF Abnormal Termination by Cancel Code
_ REPORTL Class Structure Analysis
_ REPORTM MVS Performance Group Summary
X REPORTP Printer Device Utilization by Day
_ REPORTT TSO Session Analysis
_ REPORT$ Remote Usage Summary
***** BOTTOM OF DATA *****
```

Build and EDIT Report JOB Stream (Option V)

Report Job Stream JCL and Control Statements

When you select option V, the JOS will build the report JOB stream for you to review online. You will be in EDIT mode during these sessions. Any changes you make to the report job stream, while in edit, are **not** reflected in the report definition. This is because all report definition data is stored in ISPF tables and skeletons.

Screen 1 of 3

```

ISREDDE  SYS89118.T054149.RA000.UserID.R0000002 ----- COLUMNS 001 072
COMMAND ==>_                                     SCROLL ==> CSR
Enter HELP for information about how to submit and/or SAVE this jobstream.
000001 //UserIDJL JOB '40800000',UserID,MSGCLASS=A,
000002 // CLASS=A,MSGLEVEL=(2,0)
000003 /*ROUTE PRINT SYSTEMC.UserID
000004 /*ROUTE PRINT USHRDNP2
000005 /* Hourly Turnaround Analysis
000006 /* JOS version 1.88 created REPORTC at 06:18 on 98/04/28
000007 //JS10 EXEC PGM=JSIMAIN,REGION=1526K,COND=(0,NE)
000008 //STEPLIB DD DSN=CAJRL0AD,DISP=SHR
000009 //SORTLIB DD DSN=SYS1.SORTLIB,DISP=SHR
000010 //SYSOUT DD SYSOUT=*
000011 //SYSPRINT DD SYSOUT=*
000012 //CAIJSNAP DD SYSOUT=*
000013 //CAIJSMF DD DSN=JARS.JARIVP.DATA,DISP=SHR
000014 //CAIJSACT DD UNIT=SYSDA,SPACE=(CYL,(1,1))
000015 DCB=(BLKSIZE=30000,BUFL=32760)
000016 //SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(20,0))
000017 //SORTWK02 DD UNIT=(SYSDA,,SEP=SORTWK01),
000018 // SPACE=(CYL,(20,0))
000019 //SORTWK03 DD UNIT=(SYSDA,,SEP=(SORTWK01,SORTWK02)),
000020 // SPACE=(CYL,(20,0))
000021 //CAIJSCT1 DD UNIT=SYSDA,SPACE=(CYL,(1,1))

```

Screen 2 of 3

```

ISREDDE  SYS89118.T054149.RA000.UserID.R0000002 ----- COLUMNS 001 072
COMMAND ==>_                                     SCROLL ==> CSR
000022 //CAIJSCT2 DD UNIT=SYSDA,SPACE=(CYL,(1,1))
000023 //CAIJSPT DD SYSOUT=*,
000024 // DCB=(RECFM=FBA,LRECL=133,BLKSIZE=23408)
000025 //SYSUDUMP DD SYSOUT=*
000026 //CAIJSCT1 DD *
000027 SELECT 1 A
000028 AHEADER Hourly Turnaround Analysis
000029 ADISPLAY 0021141621C01A91901911631641D2142
000030 ASORT 29701AE103702A11 A
000031 AGROUP 0281 R0372
000032 AGROUPC 1T T
000033 AGROUPC 200 07 1
000034 AGROUPC 208 15 2
000035 AGROUPC 216 23 3
000036 ADESCRIPT11 First Shift
000037 ADESCRIPT12 Second Shift
000038 ADESCRIPT13 Third Shift
000039 ADESCRIPT1****1511Group Code #2 x
000040 ADESCRIPT200 00 - 01 AM
000041 ADESCRIPT201 01 - 02 AM
000042 ADESCRIPT202 02 - 03 AM
000043 ADESCRIPT203 03 - 04 AM

```

Screen 3 of 3

```
ISREDDE  SYS89118.T054149.RA000.UserID.R0000002 ----- COLUMNS 001 072
COMMAND ==>_                                     SCROLL ==> CSR
000022 //CAIJSCT2 DD UNIT=SYSDA,SPACE=(CYL,(1,1))
000023 //CAIJSPT  DD SYSOUT=*,
000024 //          DCB=(RECFM=FBA,LRECL=133,BLKSIZE=23408)
000025 //SYSUDUMP DD SYSOUT=*
000026 //CAIJSIN  DD *
000027 SELECT    1                                     A
000028 AHEADER    Hourly Turnaround Analysis
000029 ADISPLAY    0021141621C01A91901911631641D2142
000030 ASORT      29701AE103702A11                     A
000031 AGROUP     0281 R0372
000032 AGROUPC    1T      T
000033 AGROUPC    200     07      1
000034 AGROUPC    208     15      2
000035 AGROUPC    216     23      3
000036 ADESCRIPT11 First Shift
000037 ADESCRIPT12 Second Shift
000038 ADESCRIPT13 Third Shift
000039 ADESCRIPT1****1511Group Code #2 x
000040 ADESCRIPT200 00 - 01 AM
000041 ADESCRIPT201 01 - 02 AM
000042 ADESCRIPT202 02 - 03 AM
000043 ADESCRIPT203 03 - 04 AM
```

Chapter 4: Viewing Output Reports

The Output option lets you browse your print data sets online or you can delete previously saved print data sets. Output is entered by specifying option **2** from the Primary Option Menu.

This section contains the following topics:

- [View Output](#) (see page 39)
- [Viewing Output](#) (see page 39)
- [Deleting a Data Set](#) (see page 40)

View Output

When you select Output to view Output reports online, JOS takes you to the panel shown on the next page for selecting and deleting Output reports. To select a report data set for viewing or several report data sets for view, as in the example on the next page, simply tab down to the report(s) you wish to browse and place an **S** before the report(s) you want to display and press ENTER.

```
JOS00001 Online System ----- Output File Select ----- ROW 1 OF 8
Command ==>                                         Scroll ==> CSR

Output data sets are available for the reports listed.
Please indicate the desired action.
S - Browse Data Set
D - Delete Data Set

          Create
Report ID   Date/Time   Header Text
S REPORT$  98.125 06:34   Remote Usage Summary
- REPORTT  98.125 06:34   TSO Session Analysis
- REPORTP  98.125 06:34   Printer Device Utilization by Day
S REPORTM  98.125 06:33   MVS Performance Group Summary
- REPORTL  98.125 06:33   Class Structure Analysis
S REPORTF  98.125 06:33   Abnormal Termination by Cancel Code
S REPORTD  98.125 06:33   Job Resource Utilization
- REPORTC  98.125 06:33   Hourly Turnaround Analysis
***** BOTTOM OF DATA *****
```

You can use standard ISPF commands to scroll up or down, right or left, to view your data. All standard BROWSE commands can be used in Output.

Viewing Output

If the selected data set is available for viewing, it will be listed on the table.

Note: If you did NOT select Create Print Data Set on (JOSR0020) SELECT INPUT and OUTPUT for the report, it will not be listed on the Output table.

For those individuals who are not familiar with CA JARS, the first page of your report will contain a display entitled *REPORT CONTROL CARDS*. It lists the control statements used to build your report. You should refer to your *User Guide* for a further explanation of these statements.

The example below is from the sample report we selected on screen JOSO0001, (Report ID: REPORT\$).

```
ISRBROBF UserID.REPORT$.JARS.REPORT ----- LINE 00000000 COL 001 080
COMMAND ==>                                SCROLL ==> CSR
***** TOP OF DATA *****
CA JARS R12                                SYSTEM CONTROL CARDS
RESOURCE ACCOUNTING SP0
DIAGNOSTIC                                1..5..10..15..20..25..30..35..40..45..50..
                                           SELECT 1                                A
                                           1..5..10..15..20..25..30..35..40..45..50..

CA JARS R12                                SMF RECORD TYPE SUMMARY
RESOURCE ACCOUNTING SP0
TIME OF MEASUREMENT IS FROM 98/05/28 AT 10.00.02
                                           TO 98/05/28 AT 19.15.18
                                           TYPE  DESCRIPTION
                                           2    DUMP HEADER
                                           4    STEP TERMINATION
                                           5    JOB TERMINATION
                                           6    OUTPUT WRITER
                                           9    VARY ONLINE
                                           11   VARY OFFLINE
                                           14   INPUT OR RDBACK DATASET ACTIVIT
                                           15   OUTPUT, UPDATE, INOUT OR OUTIN
```

To view the other reports that you have selected, END/SAVE out of this report and the next report will be brought up for BROWSE.

Deleting a Data Set

In order to delete a data set, place a **D** before the Report ID(s) for the data set you wish to delete.

Chapter 5: Using the JOS Online Product HELP

You can invoke the JOS product HELP in three ways:

- select **Option T** (TUTORIAL) from the JOS Primary Option Menu
- enter the HELP command to get HELP for the currently displayed product screen
- enter the HELP command after an error message is displayed.

This section contains the following topics:

[Using HELP](#) (see page 41)

Using HELP

The HELP utility provides immediate online assistance, presenting detailed information about the product facilities. You can call HELP from any screen by typing HELP and pressing ENTER.

HELP is designed so that each JOS screen leads to a specific branch of HELP. The top of each branch is a menu of HELP choices. The choices on the menu branch downward and outward to other HELP screens.

A sample menu screen is shown on the next page.

Sample Menu Screen

```
JOSTR300 <-A-----B--> CA JARS OnLine System .....  
SELECTION ==>C  
  
          D      |          SORT/DESCRIPT          |  
          -----|-----|  
  
The SORT statement is required for the generation of a report.  
Input data can be sorted into Levels 1-5.  
  
The SORT routine orders records for output, it defines the  
History output and the summarization.  
SORT selections are required for each report.  
  
          E      SELECT ONE Of The Following For More HELP  
  
1      Line Commands          5      Sort Break Description Header  
2      Sort Field Picture     6      Default Descriptive Headers  
3      Sort Order (A/D)      7      Control Keys  
4      Print Option          8      Summary Line Descriptions  
  
          - OR PRESS ENTER TO CONTINUE -
```

- A**
Identifies the screen
- B**
Identifies the product name
- C**
Identifies the JOS HELP command line. Enter menu choice number here.
- D**
Indicates the HELP panel topic
- E**
Instructs you on selecting options from this menu

In order to choose an item from a menu like the one shown, you simply type the number of your choice in the command area and press ENTER.

Once you are in HELP, you can use the conventional TSO commands to move forward or backwards through the HELP screens. You can also go forward to the next HELP screen by pressing ENTER.

HELP Commands

HELP

Calls HELP from any JOS screen; calls HELP for using HELP from any HELP screen.

ENTER

To display the next sequential page.

UP

To display a higher level topic.

DOWN

To skip to the next topic.

END

Returns to the previous product screen.

Use these commands or the equivalent PF keys when in HELP.

Getting Help from Messages

On JOS menus for SELECT, SORT, and DESCRIPT you can get a message by entering a "?" in the input fields. The message instructions will help you with field input requirements. If you need more information than these messages can provide simply go to HELP. The HELP routine will call up a HELP panel from that message and provide you with more detailed information about that field and its use.

Getting Help with HELP

If at any time you need help with HELP, press PF1 or P13. If your terminal doesn't have PF keys, enter **HELP** in the command area. You will be taken to an ISPF HELP screen with all the HELP commands listed.

Exiting HELP

To exit HELP, enter the END or RETURN command to return to the JOS screen that was being viewed when the HELP command was originally entered.

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