

2. Sample Session Reviewing Jobs

Introduction

This chapter leads you through a sample session to demonstrate using IOF for reviewing and controlling your own jobs. Although it describes only a small portion of the functions provided by IOF, this subset allows you to effectively review and manage your own jobs.

IOF makes it easy to review batch jobs. At a glance you can see if your job succeeded. IOF shows exactly where and why the job failed if a problem occurred.

You can cancel, release, and modify your jobs with simple commands. You can quickly and conveniently browse your sysout data before it is printed. IOF displays data on your screen exactly as it would appear on a printed page. IOF lets you change your sysout data set characteristics, such as forms and class, by overtyping the desired field.

This chapter will introduce you to IOF. It takes you through a simple session and shows you how to use many IOF features. Press the **HELP** key on any IOF panel for more information.

Selecting IOF

If you do not already have jobs in the system, submit several batch jobs for use during this session. This first lesson in using IOF will deal only with the jobs you submitted.

Our sample session will begin from the *IOF Option Menu*. You invoke this menu from TSO READY or CICS by entering either **IOF** or **IOF *** depending upon how IOF was installed for your group.

You can also invoke the *IOF Option Menu* directly from the *ISPF Primary Option Menu*.

```

----- ISPF Primary Option Menu -----
Option ==>
0 Settings      Terminal and user parameters      *****
1 View          Display source data or listings        *
2 Edit          Create or change source data          *
3 Utilities     Perform utility functions            *
4 Foreground    Interactive language processing      *
5 Batch         Submit job for language processing     *
6 Command       Enter TSO or Workstation commands     *
7 Dialog Test   Perform dialog testing               *
8 LM Facility   Library administrator functions     *
9 IBM Products  IBM program development products    *
10 SCLM         SW Configuration Library Manager    *****
11 Workplace    ISPF Object/Action workplace
M More         Additional IBM Products

I IOF          Interactive Output Facility

Enter X to Terminate using log/list defaults

```

To invoke the *IOF Option Menu* from ISPF enter **I** or **I.** depending upon how IOF was installed for your group.

```

----- IOF Option Menu -----
COMMAND ==>

Follow an option with "?" to display its detailed interface panel.

blank - Your jobs      LOG - System Log      CN - MVS Console
I - Input jobs         SR - System Req     MAS - MAS Systems
R - Running jobs      DEV - Devices       ENC - Enclaves
O - Output jobs       PR - Printers       PS - Processes
J - Jobs menu         LINE - Lines        WLM - WLM Functions
G - Output Groups     INIT - Initiators   JM - JES2 Monitor
H - Held Groups       OFF - Offloaders    JBC - Job Classes
M - System Monitor    CHK - Health Chks   APPC - APPC menu
P - IOF Profile       SPV - Spool Vols    MORE - More Commands
                     NOD - JES2 Nodes

JOBNAMES ==>          Enter 1 to 8 generic jobnames above

SCOPE ==>            ALL, ME or another user's USERID

DEST ==>            Enter 1 to 8 destinations above

```

The specific options shown on this panel depend on the functions each user is authorized to use. Most users will not see all the options shown above. To see a list of your jobs, press **ENTER**. You can bypass the *IOF Option Menu* and go directly from ISPF to your list of jobs by entering either **I.** or **I** depending upon how IOF was installed for your group. You can bypass the *IOF Option Menu* from TSO READY or CICS by entering either **IOF** or **IOF ***.

Job List Menu Example

The *IOF Job List Menu* gives you detailed status for all the jobs you submitted on a single display. Let's assume that you have an input job, three running jobs, and some output jobs in the system. As you can see in the figure below,

IOF displays each basic job type in a separate section that shows the most interesting information for that type of job.

```

----- IOF Job List Menu -----( 10 )-----
COMMAND ==>                               SCROLL ==> SCREEN
----- Input Jobs -----
----- JOBNAME--JOBID--ACT-STAT-OWNER-----C-POSIT-PRTY-SRVCLASS-QUALIFIER-----
-   1 DMSMERG1 J007890      JOB  ISIJER  A   4   9
----- Running Jobs -----
----- JOBNAME--JOBID--ACT-STAT-SYID-----CPU-----I/O-STEP-----PROCSTEP-SWP
-   2 MODELGN  J007825      A83B
-   3 QAS311   J006060      B83D   53:03   443.02 QAS311      IN
-   4 TSCDRS   J000777      B83D           :02     1.75 TSCDRS   RBTR      OUT
----- Output Jobs -----
----- JOBNAME--JOBID--ACT-STAT-OWNER-----DEST/DEVICE-----RECS-HELD-DAY--TIME
-   5 DSMERG0  J004118      ISIJER  NAPLES      48K   19K 008 12:29
-   6 MAKLOAD  J008862      ISIJER  TRIANGLE    12K   018 15:17
-   7 MAKOPTN  J008098      ISIJER  PRINTER1    108   018 14:25
-   8 MAKSRCR  J001929      ISIJER  ISIWPC      421   016 18:12
-   9 PNTSRCE  J008099      ISIJER  R18.PR1    164K   009 14:26
-  10 SALESRUN J008854      ISIJER  LOCAL      4333  466 017 15:59

```

Some information is common to all job types. Note the common fields in the example panel, from left to right:

- Line command area
- Menu number
- Jobname
- Jobid
- Action column (ACT) for command confirmation
- Job status column (STA) that shows exception conditions

Input jobs are grouped together in the Input Jobs section, running jobs are grouped together in the Running Jobs section, and output jobs are displayed in the Output Jobs section. Each section displays the information that is most useful for that type of job.

For input jobs you are most interested in the class, priority, and position in queue. You need to know step, CPU time used, and I/O time used for running jobs. And, you need to know how much output an output job produced. You can scroll right to get additional information about each job on the list.

The *IOF Job List Menu* is normally simpler than this example because you don't usually have all types of jobs in the system at any given time. If there are no jobs of a particular type, that section is not displayed.

Job List Menu Commands

The *IOF Job List Menu* provides comprehensive commands to allow you to manipulate your jobs. It provides commands to select jobs for online review, cancel jobs, modify job characteristics such as class, destination and priority,

and release held data sets. [See Chapter 7](#) for a full list of commands and functions that are supported on the *IOF Job List Menu*, or enter **HELP**.

Most commands can be entered in the line command area to the left of each job. Job characteristics can be modified by using the **Tab** key to position the cursor in the applicable field and overtyping the existing data.

Select Job Example

To demonstrate, let's select the SALESRUN job from the *IOF Job List Menu* for review. This is the last job on the menu.

To select SALESRUN enter **S** in the line command area as shown on the menu below.

An alternate way to select SALESRUN is to enter its menu number, **10**, in the COMMAND area at the top of the screen. This method must be used from line mode terminals and may save key strokes on a full-screen terminal. [See Chapter 7, Line Commands in the Command Area](#), for a full description of command area use.

```

----- IOF Job List Menu -----( 10 )-----
COMMAND ==>                               SCROLL ==> SCREEN
----- Input Jobs -----
JOBNAME--JOBID--ACT-STAT-OWNER---C-POSIT-PRTY-SRVCLASS-QUALIFIER---
-   1 DMSMERG1 J007890   JOB  ISIJER  A   4   9
----- Running Jobs -----
JOBNAME--JOBID--ACT-STAT-SYID-----CPU-----I/O-STEP-----PROCSTEP-SWP
-   2 MODELGN  J007825           A83B
-   3 QAS311   J006060           B83D   53:03   443.02 QAS311   IN
-   4 TSCDRS   J000777           B83D   :02      1.75 TSCDRS   RBTR   OUT
----- Output Jobs -----
JOBNAME--JOBID--ACT-STAT-OWNER---DEST/DEVICE-----RECS-HELD-DAY--TIME
-   5 DSMERG0  J004118           ISIJER  NAPLES      48K  19K  008  12:29
-   6 MAKLOAD  J008862           ISIJER  TRIANGLE    12K  018  15:17
-   7 MAKOPTN  J008098           ISIJER  PRINTER1    108   018  14:25
-   8 MAKSRCR  J001929           ISIJER  ISIWPC      421   016  18:12
-   9 PNTSRCE  J008099           ISIJER  R18.PR1    164K  009  14:26
-   S 10 SALESRUN J008854           ISIJER  LOCAL      4333  466  017  15:59

```

Some of the other job list menu line commands are:

- ?** Display a function menu of available job commands. When you can't remember the commands, enter a question mark by the job.
- B** Browse the entire job as one continuous data set
- C** Cancel the job
- R** Release all the held data sets of the job.
- P** Print the job at your default print destination and sysout class.
- ED** Recreate original input job from an output job and edit it (ISPF only).

PC Show why job is not printing (TSO only).

IOF Job Summary Example

To continue our example, selecting the SALESRUN job produces the *IOF Job Summary*. This panel shows exactly what happened to your job.

```
----- IOF Job Summary -----
COMMAND ==>                                     SCROLL ==> CURSOR
--JOBNAME--JOBID---STATUS---RAN/RECEIVED-----DAY-----DEST-----
SALESRUN J008882  OUTPUT   12:45   1/06/1997 YESTERDAY TRIANGLE
--RC--PGM-----STEP-----PRSTEP---PROC-----COMMENTS-----
  0 SR1203E  EDIT       PREPARE  SA01A
  0 COMPRE   SORT       PREPARE  SA01A
ABND SR1203P  WEEKLY    PRINT    SA02A  ABEND SYSTEM=B37 USER=0000
 * SR1335P  MONTHLY   PRINT    SA02A  NOT EXECUTED
-----DDNAME---STEP-----PRSTEP---STAT-ACT-C-GRP-D-SIZE-U-DEST-----
  1 LOG      *
  2 JCL      *
  3 MESSAGES *
  4 SYSPRINT EDIT       PREPARE  A 1 3282 L TRIANGLE
  5 SYSPRINT SORT       PREPARE  A 1 5 L TRIANGLE
  6 SYSPRINT WEEKLY    PRINT    A 1 15K L TRIANGLE
  7 SALESMEN WEEKLY    PRINT    A 1 4167 L TRIANGLE
  8 SUMMARY  MONTHLY   PRINT    DONE  A
```

The *IOF Job Summary* panel has three sections:

- The **Job Information Section** at the top of the screen gives you basic information about your job. For example, it shows that SALESRUN was run yesterday at 12:45.
- The **Step Information Section** in the middle contains one line for each job step in your job. In this case, SALESRUN had four steps.
- The **Data Set Section** at the bottom has one line for each sysout data set the job produced. SALESRUN has 8 sysout data sets, each of which is completely described by its line on the display.

It is easy to see in the example above that the EDIT and SORT steps completed normally with return code 0 (RC column). The WEEKLY step abended with code B37 in program SR1203P. The MONTHLY step was not run because of the abend.

All sysout data sets for the job are displayed in the data set section at the bottom. Both held and non-held data sets can be selected for browse directly from this panel. Data set characteristics easily can be modified by overtyping. Additional data set characteristics can be seen by scrolling right, or by requesting a data set function menu.

In many cases this is all you need to see to determine how a job ran. For example, you may not need to browse any sysout data sets if all return codes are good.

IOF Job Summary Commands

The *IOF Job Summary* provides a comprehensive set of commands for reviewing and modifying sysout data sets. You can browse sysout data, release individual held data sets, cancel and modify held sysout data sets and output groups, and modify output characteristics such as destination and forms. [See Chapter 8](#) for a full description of the commands and functions that are supported on the *IOF Job Summary*.

Data set line commands can be entered in the line command area to the left of each data set, and attributes can be changed by simply overtyping on the menu.

Selecting a Data Set for Browse Example

To demonstrate, we will select the REGIONS report from the WEEKLY PRINT step. This is the sixth data set on the menu as shown by the menu number.

Enter **S** in the line command area to the left of SYSPRINT WEEKLY PRINT to select it for browse. An alternate way to select this data set is to enter its menu number, **6**, in the command area.

```

----- IOF Job Summary -----
COMMAND ==>                                SCROLL ==> CURSOR
--JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST-----
SALESRUN J008882  OUTPUT  12:45  1/06/1997 YESTERDAY TRIANGLE
--RC--PGM-----STEP-----PRSTEP-----PROC-----COMMENTS-----
  0 SR1203E  EDIT    PREPARE  SA01A
  0 COMPRE  SORT    PREPARE  SA01A
ABND SR1203P  WEEKLY  PRINT    SA02A  ABEND SYSTEM=B37 USER=0000
 * SR1335P  MONTHLY  PRINT    SA02A  NOT EXECUTED
-----DDNAME-----STEP-----PRSTEP-----STAT-ACT-C-GRP-D-SIZE-U-DEST-----
-  1 LOG      *                A  1      23 L TRIANGLE
-  2 JCL      *                A  1      93 L TRIANGLE
-  3 MESSAGES *                A  1     245 L TRIANGLE
-  4 SYSPRINT EDIT    PREPARE  A  1    3282 L TRIANGLE
-  5 SYSPRINT SORT    PREPARE  A  1      5 L TRIANGLE
S 6 SYSPRINT WEEKLY  PRINT    A  1     15K L TRIANGLE
-  7 SALESMEN WEEKLY  PRINT    A  1    4167 L TRIANGLE
-  8 SUMMARY  MONTHLY  PRINT    DONE   A

```

IOF Job Summary commands are fully documented in Chapter 8. Some of the other available line commands are:

- ?** Display a function menu for the data set. When you are in doubt or can't remember the available commands, enter a question mark for assistance.
- C** Cancel a held data set.
- M** Display a menu showing all data set attributes that can be modified.
- R** Release a held data set.

- P** Print an exact copy of the data set.
- ED** Edit a temporary copy of the data set with the ISPF editor.

Browse Example

Let's continue our example by showing the IOF *Browse* panel that would be produced by selecting the SYSPRINT WEEKLY PRINT data set on the IOF *Job Summary*.

```

BROWSE - SYSPRINT WEEKLY      PRINT      - Page 1      Line 1      Cols 1-80
COMMAND ==>                  SCROLL ==> CURSOR
***** TOP OF DATA *****

```

Weekly Sales Report Summary		Page 1
Week Ending January 7, 1997		
Region	Office	Total Sales
New England	Boston	221,433.97
New England	Hartford	34,977.00
New England	** Total **	256,410.97
New York	Albany	45,932.44
New York	Buffalo	23,439.19
New York	New York	1,434,912.56
New York	Rochester	72,545.14
New York	Syracuse	33,167.99
New York	** Total **	1,608,997.32

The IOF *Browse* screen looks much like an ISPF browse screen. The top line shows the ddname (SYSPRINT), step and procstep names (WEEKLY PRINT), and current page number, line number, and columns (page 1, line 1, cols 1-80).

The data set is displayed next. You can use the **UP**, **DOWN**, **LEFT**, **RIGHT** and **FIND** commands to position within the data set. These commands are on your standard PF keys.

Visual Fidelity

IOF *Browse* presents the data on the screen as it would appear on a printed page. In the example above, note the blank lines that were produced by printer control sequences.

IOF *Browse* honors printed page boundaries. You can scroll up or down to a particular printed page, or to a specific line on a page. [See Chapter 9](#) for a full description of IOF *Browse* features.

Ending the Browse

Press **END** to return to the *IOF Job Summary*, or **RETURN** to return to the *IOF Job List Menu*. Remember that you can cancel, modify, copy, and release held data sets from the *IOF Job Summary*, and you can select other data sets for browse. From the *IOF Job List Menu* you can cancel, print, or modify jobs, and you can select other jobs for review.

Summary of Sample Session

This sample session has quickly demonstrated how to review the jobs you submitted. You have seen examples of:

- The *IOF Job List Menu* of all your jobs
 - Shows job status
 - All types of jobs (input, running, output)
 - Allows cancel, modification, print, and select for review
- The *IOF Job Summary* for a specific job
 - Return codes for each step
 - All sysout data sets listed
 - Allows data set cancel, modification, release and select for browse
- *IOF Browse*
 - Display and commands much like ISPF browse
 - Page orientation so screen looks like printed page

This brief introduction illustrated how easily and quickly you can review your jobs using IOF. A few of the most frequently used features were explained. Together with the IOF **HELP** facility, this introduction should enable you to use IOF immediately to review your jobs.