

Slide 1

Fischer  
**IOF**  
INTERACTIVE  
OUTPUT  
FACILITY

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**Pool Browser Shootout  
Interactive Output Facility  
IOF**

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**Triangle Systems**  
Excellence in Mainframe Management Software

March 12, 2019  
Session Number 24666

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IOF is a full-function pool management system for JES2 that has been under continuous development and improvement for over 30 years. Some of its features are primarily of interest to System Programmers, but today the focus will be on the individual user, and especially on features that have been recently added to IOF. IOF's natural user interface for viewing and managing your own jobs is a big reason for IOF's continuing popularity -- whether you are skilled in all the intricacies of z/OS systems implementation, customization, and maintenance, or someone who just needs to run a few jobs every now and then.

In addition to the TSO environment that will be demonstrated today, IOF has an easy-to-learn REXX interface that provides powerful scripting facilities that can be used in BATCHTSO, or interactively in TSO. A CICS interface is also available that can provide access to z/OS batch facilities for users that do not normally use TSO.

Note: Screenshots have been edited to improve readability when viewed in a slide show presentation.

**IOF Option Menu**

----- IOF Option Menu -----

COMMAND ==>

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

blank - Your jobs	LOG - Sys Log	ENC - Enclaves
I - Input jobs	SR - Sys Req	CN - Console
R - Running jobs	DEV - Devices	MAS - MAS Systems
O - Output jobs	PR - Printers	PS - Processes
J - Jobs menu	LINE - Lines	WLM - WLM Support
G - Output Groups	INIT - Inits	CHK - Health cks
H - Held Groups	OFF - Offload	JM - JES2 info
M - System Monitor	SPV - Spools	JBC - Job Classes
P - IOF Profile	NOD - Nodes	APPC - APPC menu

JOBNAMEs ==> Enter 1 to 8 generic jobnames

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

DEST ==> Enter 1 to 8 destinations.

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This slide omitted from the live presentation due to time constraints, but for actual use it is important to know how to access the IOF Option Menu. This panel allows you to:

- Select jobs base on attributes other than current USERID.
- Use the IOF PROFILE panel to specify personal preferences for IOF panels.
- Display other system-level information. Not all users have access to all these panels. The IOF Option Menu is customized so that a user only sees options they are authorized to use.

The IOF Option menu can be invoked from any IOF panel by entering "IOF \*" on the command line.

Slide 3

**IOF Job List Menu** ( 6 )

COMMAND ==> SCROLL ==> CURSOR

**Input Jobs**

JOBNAME	JOBID	ACT	STAT	OWNER	CLASS	POSIT	PRTY	SRVCLASS
1 SETROPTS	J844856	JOB	ISIDSC	A		7	BATMDM	

**Running Jobs**

JOBNAME	JOBID	ACT	STAT	SYID	CPU	I/O	STEP	PROCSTEP	SWP
2 SCANTSI	J844865		S0W1		:00	3392	S1		IN

**Output Jobs**

JOBNAME	JOBID	ACT	STAT	OWNER	DEST/DEVICE	RECS	HELD	DAY	TIME
3 SPOOLDSC	J831943		ISIDSC	TRISYS		92	54	205	14:30
4 SPOOLPCT	J835164		ISIDSC	TRISYS		83	244	261	11:56
5 SETROPTS	J838893		8 ISIDSC	TRISYS		64		325	14:06
6 SCANDEV	J843470		ISIDSC	TRISYS		1674		035	15:38

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Normally, the first panel displayed by IOF is the Job List Menu. This display shows the jobs owned by my userid (ISIDSC). As you can see, there are separate sections for input jobs, running jobs, and output jobs. If you scroll right (PF11), you'll see a lot more detail about the jobs.

Line commands on this panel enable you to select an individual job for viewing, or to manage jobs as a unit (Cancel, Hold, Release)

Here I've highlighted the CPU, I/O counts, and STEPNAME for a running job. If you press enter while the job is running, this information is updated.

**IOF Job List Menu** SHARE  
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----- IOF Job List Menu ----- ( 6 )-----  
COMMAND ==> SCROLL ==> CURSOR

----- Input Jobs -----

JOBNAME	JOBID	ACT	STAT	OWNER	CLASS	POSIT	PRTY	SRVCLASS
1 SETROPTS	J844856	JOB	ISIDSC	A		7	BATMDM	

----- Running Jobs -----

JOBNAME	JOBID	ACT	STAT	SYID	CPU	I/O	STEP	PROCSTEP	SWP
2 SCANTSI	J844865		S0W1		:00	4705	S1		IN

----- Output Jobs -----

JOBNAME	JOBID	ACT	STAT	OWNER	DEST/DEVICE	RECS	HELD	DAY	TIME
3 SPOOLDSC	J831943		ISIDSC	TRISYS		92	54	205	14:30
4 SPOOLPCT	J835164		ISIDSC	TRISYS		83	244	261	11:56
5 SETROPTS	J838893		8 ISIDSC	TRISYS		64		325	14:06
6 SCANDEV	J843470		ISIDSC	TRISYS		1674		035	15:38

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While a job is running, you can select the job and view SYSOUT files, not only of files that have closed, but those that are currently being produced by the running job.

IOF Job List Menu ( 6 )

COMMAND ==> SCROLL ==> CURSOR

----- Input Jobs -----

JOBNAME	JOBID	ACT	STAT	OWNER	CLASS	POSIT	PRTY	SRVCLASS
1 SETROPTS	J844856	JOB	ISIDSC	A		7	BATMDM	

----- Output Jobs -----

JOBNAME	JOBID	ACT	STAT	OWNER	DEST/DEVICE	RECS	HELD	DAY	TIME
2 SPOOLDSC	J831943		ISIDSC	TRISYS		92	54	205	14:30
3 SPOOLPCT	J835164		ISIDSC	TRISYS		83	244	261	11:56
4 SETROPTS	J838893	8	ISIDSC	TRISYS		64		325	14:06
5 SCANDEV	J843470		ISIDSC	TRISYS		1674		035	15:38
6 SCANTSI	J844865	MOV	ISIDSC	TRISYS		1317		056	15:32

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If you press “Enter” and the job has completed, it will be moved to the Output section, and the “Action” column will show a flag of “MOV” to highlight that the job moved from Running to Output.

Entering the “S” line command for the job takes you to the Job Summary Panel.

**IOF Job Summary**

----- IOF Job Summary -----

COMMAND ==> SCROLL ==>

--JOBNAME--JOBID---STATUS---RAN/RECEIVED-----DAY-----DEST-----

SCANTSJ J844865 OUTPUT 15:32 2/25/2019 TODAY TRISYS

--RC--PGM-----STEP---PRSTEP---PROC---COMMENTS-----

12 IKJEFT01 S1

4 IDCAMS S2

\* IKJEFT01 S3 NOT EXECUTED

-----DDNAME---STEP---PRSTEP---STAT-ACT-C-GRP-D-SIZE-U-DEST-----

DDNAME	STEP	PRSTEP	STAT	ACT	C	GRP	D	SIZE	U	DEST
1 LOG	*				M	1	W	20	L	TRISYS
2 JCL	*				M	1	W	17	L	TRISYS
3 MESSAGES	*				M	1	W	341	L	TRISYS
4 SYSTSPRT	S1				A	2	W	976	L	TRISYS
5 SYSPRINT	S2				A	2	W	26	L	TRISYS

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IOF has done an in-depth analysis of the job to display the programs that were run, and their return codes. (Bypassed Steps show “\*”). This panel also shows the SYSOUT files, number of records, and DEST. In this case, MSGCLASS SYSOUT files are in one group, and other SYSOUT files are in a different SYSOUT group. There is even more information if you scroll right.

Remember this screen. We will come back to it several times in the presentation.

From this panel, you can manage the SYSOUT files in many different ways including:

- Browse different SYSOUT files
- Release or cancel individual SYSOUTs
- Copy a SYSOUT to a printer destination or to a disk dataset.
- Email individual SYSOUT files
- Edit and re-submit the job (as-is, or with changes)
- Cancel the entire output job.

## Basic IOF functions: summary



In this segment, we have shown the basic IOF functions:

1. Invoke IOF with no parms to show your own jobs.
2. When you have a running job, simply hit enter to watch the job progress.
3. Enter the "S" line command to select the job. This panel:
  - a) Shows a concise summary of the job: Step Status and SYSOUT files and their attributes.
  - b) Provides a central location for all actions related to viewing and managing the job's SYSOUT.

The simplicity of this interface makes it easy to remember for the occasional user, but still provides a full-function feature set for the power user.

## 2. Recently added Features



The remainder of this presentation covers Recently added features:

- a) IOF Send Mail
- b) JAMS: User-directed Job Archive
- c) ZF: PDS Scan facility
- d) JF: Search for a string in a list of jobs.



## Slide 9



There are many ways to use the email interface. It can be used to email any file, either from TSO or batch, and you can even email output from a running job – the whole job, or a subset. You might want to send yourself the Job Summary as a notification that the job has finished and as a way to tell at a glance whether the job ran as expected.

In this example, I'm emailing the job I just ran to my email account. Kick it off from the IOF Job List Menu by entering the "SEND" line command. (you can also "send" from the Job Summary panel)

**IOF Send Mail**

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----- IOF Job List Menu ----- ( 5 )-----  
COMMAND ==> SCROLL ==> CURSOR

----- Output Jobs -----

-----	JOBNAME	---JOBID---	ACT-STAT	OWNER	-----	DEST/DEVICE	-----	RECS	HELD	DAY	---TIME
-	1	SPOOLDSC	J831943		ISIDSC	TRISYS		92	54	205	14:30
-	2	SPOOLPCT	J835164		ISIDSC	TRISYS		83	244	261	11:56
-	3	SETROPTS	J838893	8	ISIDSC	TRISYS		64		325	14:06
-	4	SCANDEV	J843470		ISIDSC	TRISYS		1674		035	15:38
<b>send</b>	5	SCANTSI	J844865	SEL	12	ISIDSC	TRISYS	1317		056	15:32

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**IOF Send Mail**

----- Send Job Output -----

COMMAND ==>

NOPROMPT - Don't prompt again during this IOF session  
HELP - Display complete description of the IOF SEND facilities

To ==> dave.crow@triangle-systems.com  
CC ==>  
BCC ==>  
From ==>

PC file name for attachment:  
File Name ==> JOB.SCANTSI\_.J844865.2019-02-25@15.32.ALL.html

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In the interest of time, this slide is omitted from the live presentation. In actual use, it is important because it:

1. Gives you a chance to customize where the email is sent.
2. Allows you to specify the default filename at the destination email. For example, for a text file, you can make the file name extension “.TXT”

If everything is correct, press “Enter”

**IOF Send Mail**

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----- IOF Job List Menu ----- ( 5 )-----

COMMAND ==> **Send process completed normally** SCROLL ==> CURSOR

	JOBNAME	JOBID	ACT-STAT	OWNER	DEST/DEVICE	RECS	HELD	DAY	TIME
-	1	SPOOLDSC	J831943	ISIDSC	TRISYS	92	54	205	14:30
-	2	SPOOLPCT	J835164	ISIDSC	TRISYS	83	244	261	11:56
-	3	SETROPTS	J838893	8 ISIDSC	TRISYS	64		325	14:06
-	4	SCANDEV	J843470	ISIDSC	TRISYS	1674		035	15:38
-	5	SCANTSI	J844865	<b>SEL</b> 12	ISIDSC	TRISYS	1317		056 15:32

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That's it – from the send side. Next, let's look at what's in the email.

## IOF Send Mail: Email Body



**The Email Subject and body are the same. In this case:**

Output job SCANTSI J844865 02/25/2019 15:32 max rc: 12, some steps were not executed

**The email attachment(s) contain the files being sent. In this case there is just one attachment. Open this in a Browser:**

Slide 14

**IOF Send Mail: Browser Display**

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----- IOF Job Summary -----  
--JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--OWNER--COPIES--USER NAME--PRTY--USERID--ACCT--ROOM--  
SCANTS1 J0844865 OUTPUT 15:32 2/25/2019 TODAY TRISYS ISIDSC 1 CROW ISIDSC 1

--RC--PRG--STEP--PRSTEP--PRDC--COMMENTS-----  
12 IKJEFT01 S1  
4 IDCAMS S2  
\* IKJEFT01 S3 NOT EXECUTED

-----DDNAME--STEP--PRSTEP--STAT--ACT--C--GRP--D--SIZE--U--DEST--FORMS--COPIES--PAGEDF--FORHDF--ADR--SECLABEL--OWNER--OUTGROUP--ID1--  
1 LOG \* M 1 W 20 L TRISYS NO ISIDSC 1 1  
2 JCL \* M 1 W 17 L TRISYS NO ISIDSC 1 1  
3 MESSAGES \* M 1 W 341 L TRISYS NO ISIDSC 1 1  
4 SYSPRINT S1 A 2 W 976 L TRISYS NO ISIDSC 2 1  
5 SYSPRINT S2 A 2 W 26 L TRISYS NO ISIDSC 2 1

DDNAME	STEP	PRSTEP	CLASS	SIZE	UNITS	DSKEY	
LOG	*		M	20	L	2	<a href="#">Top</a> <a href="#">Next</a> <a href="#">Prev</a>

JES2 JOB LOG -- SYSTEM S0W1 -- NODE TRISYS

15.32.25 J0844865 ---- MONDAY, 25 FEB 2019 ----  
15.32.25 J0844865 IRR0101 USERID ISIDSC IS ASSIGNED TO THIS JOB.  
15.32.26 J0844865 ICH70001I ISIDSC LAST ACCESS AT 13:42:01 ON MONDAY, FEBRUARY 25, 2019  
15.32.26 J0844865 SHASP373 SCANTS1 STARTED - INIT 1 - CLASS A - SYS S0W1

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The email arrives with a single attachment: an HTML version of the IOF Job summary and all the SYSOUT files. Typically, there are both horizontal and vertical scroll bars. In a PC browser, this is quite useable, but it just won't show up in a PowerPoint slide. So I've copied the top left corner and enlarged it to get:


### IOF Send Mail: Browser Display

```
----- IOF Job Summary -----
--JOBNAME--JOBID---STATUS---RAN/RECEIVED-----DAY-----DEST---
SCANTSI J844865  OUTPUT   15:32   2/25/2019 TODAY    TRISYS
--RC--PGM-----STEP-----PRSTEP---PROC-----COMMENTS-----
 12 IKJEFT01  S1
   4 IDCAMS   S2
   * IKJEFT01 S3                                NOT EXECUTED
-----DDNAME---STEP-----PRSTEP---STAT-ACT-C-GRP-D-SIZE-U-DEST---
 1 LOG      *                                M  1 W  20 L TRISYS
 2 JCL      *                                M  1 W  17 L TRISYS
 3 MESSAGES *                                M  1 W 341 L TRISYS
 4 SYSTSPRT S1                              A  2 W 976 L TRISYS
 5 PRINT    S2                              A  2 W  26 L TRISYS
```

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You can scroll through the job output using the scroll bars, or you can position to a given output file using the links in the DDNAME fields. Mouse hover and click to position to that SYSOUT.

### IOF Send Mail: Browser Display



DDNAME	STEP	PRSTEP	CLASS	SIZE	UNITS	DSKEY	
SYSTSPRT	S1		A	976	L	105	<a href="#">Top</a> <a href="#">Next</a> <a href="#">Prev</a>

READY  
PROFILE NOPREFIX  
READY  
PDS ISIDSC.\$MISC.CNTL  
PDS100I PDS -- VERSION 8.5.10

PDS200I	DISP	UNIT	RECFM	LRECL	BLKSIZE	ALLOCTRK	FREETRK	SECONDARY	FREEDIR
PDS200I	SHR	3390	FB	80	27920	16X 80	63	5 TRK	30

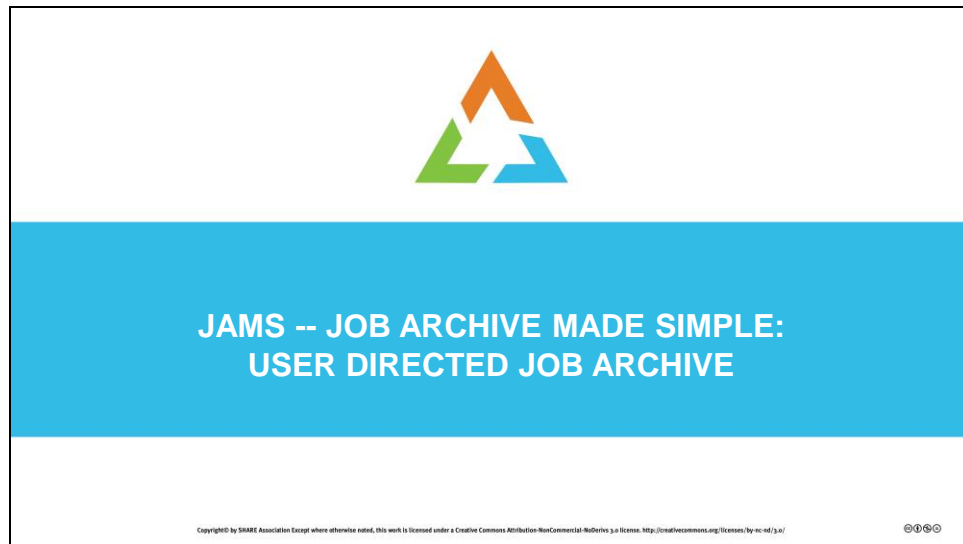
-----

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We're now at the top of the SYSTSPRT file in Step S1. Note the navigation links: Top, Next, Prev.





Have you ever wanted to save one of your jobs just the way it is on the spool before it ages out? That's what JAMS is for.

JAMS is a Job Archive facility for end users. It requires no central data base and can be used by individual users without requiring action by the data center staff. It's not what you would use for an installation's archival of production output, but it provides a powerful way for an individual user to archive important jobs.

You can archive a subset of the entire job, but the default is to archive the entire job including the JCL and other input files.

Each archived job is stored in its own PDS dataset which is then managed according to the installation's storage management policies. To save space, JAMS can TERSE the dataset.

JAMS can be invoked during the execution of a job to create a JAMS archive of the running job.

**IOF JAMS: Job Archive for users** **SHARE**  
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----- IOF Job List Menu ----- ( 5 )-----

COMMAND ==> SCROLL ==> CURSOR

----- Output Jobs -----

	JOBNAME	JOBID	ACT	STAT	OWNER	DEST/DEVICE	RECS	HELD	DAY	TIME
-	1	SPOOLDSC	J831943		ISIDSC	TRISYS	92	54	205	14:30
-	2	SPOOLPCT	J835164		ISIDSC	TRISYS	83	244	261	11:56
-	3	SETROPTS	J838893	8	ISIDSC	TRISYS	64		325	14:06
-	4	SCANDEV	J843470		ISIDSC	TRISYS	1674		035	15:38
<b>ARC</b>	5	SCANTSI	J844865	SEL	12	ISIDSC	TRISYS	1317		056 15:32

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In the example here, the SCANTSI job we just used in the SEND MAIL example is to be archived. Enter the line command "ARC"

**IOF JAMS** **SHARE**  
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----- Archive Job "SCANTSI" to a z/OS Data Set -----

COMMAND ==>

HELP - Display information about IOF archival

Prefix ==>	ISIDSC.JX	Prefix for archive data set name
Catg. ==>	ISIDSC	Category for this job (prefix extension)
Suffix ==>	IOFJOB	Suffix for archive data set name (prefix,suffix,catg <= 25 characters)
Disp ==>		Disposition after OK archive (CANCEL/RELEASE,...)
Sysouts ==>	ALL	Include these sysouts (ALL/JESDS)
Terse ==>	NO	Yes -> Create compressed data set with IBM TERSE
Done ==>	NO	Yes -> Try and include sysouts marked as "DONE"
CC ==>	ASA	Carriage control (ASA/MACHINE/NONE)

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This panel is omitted from the live presentation, but for actual use, it allows you to specify:

- What parts of the job to archive
- How the archived dataset is to be named, and whether it will be stored as a PDS or TERSED.
- What is to happen to the SPOOL Job when the archive completes.

These fields are populated from previous use. If no changes are needed, press "Enter".

In this case:

- \* The dataset will be named ISIDSC.JX.ISIDSC.<unique-level>.JOFJOB
- \* All sysouts will be archived, and the job will be retained on SPOOL after the archive is complete.

**IOF JAMS: Archive complete**

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----- IOF Job List Menu ----- ( 5 )-----  
COMMAND ==> SCROLL ==> CURSOR

----- Output Jobs -----

-----JOBNAME-----	-----JOBID-----	-----ACT-----	-----STAT-----	-----OWNER-----	-----DEST/DEVICE-----	-----RECS-----	-----HELD-----	-----DAY-----	-----TIME-----
- 1 SPOOLDSC	J831943			ISIDSC	TRISYS	92	54	205	14:30
- 2 SPOOLPCT	J835164			ISIDSC	TRISYS	83	244	261	11:56
- 3 SETROPTS	J838893	8		ISIDSC	TRISYS	64		325	14:06
- 4 SCANDEV	J843470			ISIDSC	TRISYS	1674		035	15:38
- 5 SCANTSI	J844865	SEL	12	ISIDSC	TRISYS	1317		056	15:32

Job "SCANTSI" successfully archived

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That's it.

**IOF JAMS: View Archived jobs**

Menu Utilities Compilers Options Status Help

---

ISPF Primary Option Menu

Option ==> **arc**

More: +

0 Settings	Terminal and user parameters	User ID . . : ISIDSC
1 View	Display source data or listings	Time. . . : 16:31
2 Edit	Create or change source data	Terminal. : 3278
3 Utilities	Perform utility functions	Screen. . : 1
4 Foreground	Interactive language processing	Language. : ENGLISH
5 Batch	Submit job for language processing	App1 ID . : ISR
6 Command	Enter TSO or Workstation commands	TSO logon : TSIPROC
7 Dialog Test	Perform dialog testing	TSO prefix: ISIDSC
8 LM Facility	Library administrator functions	System ID : S0W1

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To view the archive. You can enter “arc” from the ISPF primary option menu, or from any IOF panel.

**IOF JAMS: View Archived jobs** **SHARE**  
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----- Select Archived Jobs to be Reviewed

COMMAND ==>

HELP - Display info about IOF archival

The Prefix, Category, and Suffix fields must match those  
when the jobs were archived.

Jobname ==> **scantsi** Generic job name (l  
(Only single traili  
(Refine list furthe

Prefix ==> **ISIDSC.JX** Prefix for archive |

Catg ==> **\*** Generic job categor  
(blank => No categor  
(see HELP for gener

Suffix ==> **IOFJOB** Suffix for archive |  
(blank => No suffix

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This panel comes up, and you can specify what JAMS jobs you want to look at. Here I've specified the Jobname of the job I just archived.

**IOF JAMS: Select an archived job** **SHARE**  
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----- Archived Jobs: Prefix(ISIDSC.JX) Suffix(IOFJOB) - Row 1 from 1

COMMAND ==> Scroll ==> CSR

SORT - Toggle sort (jobname/date)    HELP - Info about display

Scope row below - Displays maximum scope for each display column  
(based on your input parms, which limit the total list)

Filter row below - Overtyp e fields to refine the current list

---Act--Category-Jobname--Year-Mo-Day-Time run--Weekday-----


Scope -> *	SCANTSI	*	*	*	*	*
Filter-> *	SCANTSI	*	*	*	*	*
<b>S</b>	ISIDSC	SCANTSI	2019	02	25	15:32:00 Monday

\*\*\*\*\* Bottom of data \*\*\*\*\*

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To display the job, enter "S" in the Line.

## IOF JAMS: View Archived Job Summary



---

-----Archived Job Summary-----

COMMAND ==> SCROLL==> CSR

---

----- IOF Job Summary -----

```

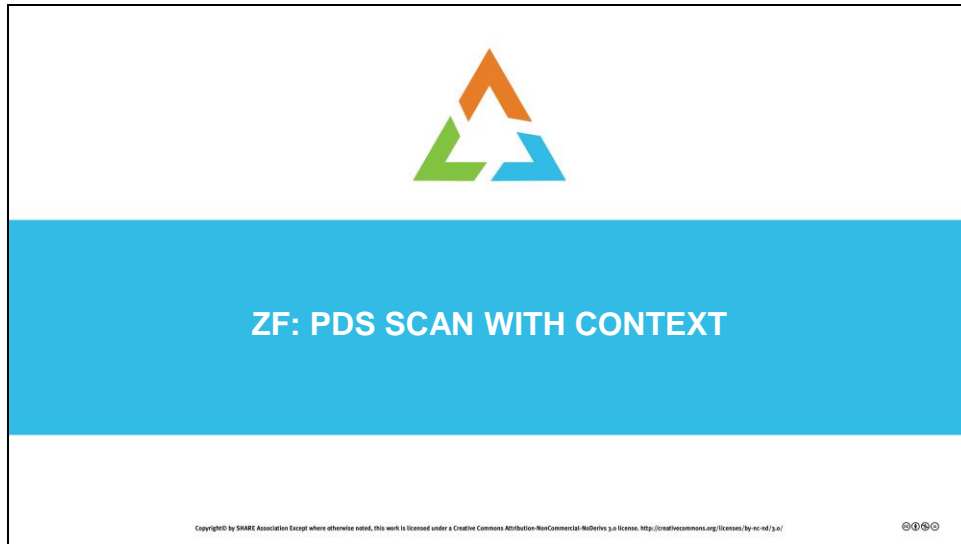
--JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--
SCANTSI J844865 OUTPUT 15:32 2/25/2019 TODAY TRISYS
--RC--PGM-----STEP-----PRSTEP---PROC-----COMMENTS-----
12 IKJEFT01 S1
4 IDCAMS S2
* IKJEFT01 S3
NOT EXECUTED
-----DDNAME---STEP-----PRSTEP---STAT-ACT-C-GRP-D-SIZE-U-DEST-----
- 1 LOG * M 1 W 20 L TRISYS
- 2 JCL * M 1 W 17 L TRISYS
- 3 MESSAGES * M 1 W 341 L TRISYS
- 4 SYSPRINT S1 A 2 W 976 L TRISYS
- 5 SYSPRINT S2 A 2 W 26 L TRISYS
    
```

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IOF displays the Job Summary. From here you can:

- Browse, print, copy, edit or email individual SYSOUT files.
- Print, copy or email the entire job.
- ISPF edit the original input job and submit it.





IOF now has the ZF command for scanning a PDS. I know everybody has their own favorite tool for scanning a PDS, but this one is nice because:

- You can specify ISPF-like find commands, including column limits.
- ZF provides a concise report of all the members where the string was found and a little bit of context.
- When you view the hit, you are automatically positioned to the proper location in the file.

Let's see an example:

**ZF: Scan one or more PDS libraries**

SH<sub>A</sub>RE  
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Menu Utilities Compilers Options Status Help

---

ISPF Primary Option Menu

Option ==> **ZF asa 25 60 WORD**

More: +

0 Settings	Terminal and user parameters	User ID . . : ISIDSC
1 View	Display source data or listings	Time. . . : 16:49
2 Edit	Create or change source data	Terminal. : 3278
3 Utilities	Perform utility functions	Screen. . : 2
4 Foreground	Interactive language processing	Language. : ENGLISH
5 Batch	Submit job for language processing	Appl ID . : ISR
6 Command	Enter TSO or Workstation commands	TSO logon : TSIPROC
7 Dialog Test	Perform dialog testing	TSO prefix: ISIDSC
8 LM Facility	Library administrator functions	System ID : S0W1

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ZF can be entered from the ISPF Primary option menu, or from any IOF panel.

**ZF: Scan PDS**

----- Scan Libraries using IOF ZF -

COMMAND ==>

Any parms valid on a FIND ALL command:  
Find All ==> **asa 25 60 word**

Library name (or select library from list below):  
Library ==>

S - Scan one or more libraries from the list below  
C - Copy library name to prompt field (modify name t  
D - Remove library from list

-----Action---Previously Searched Libraries-----

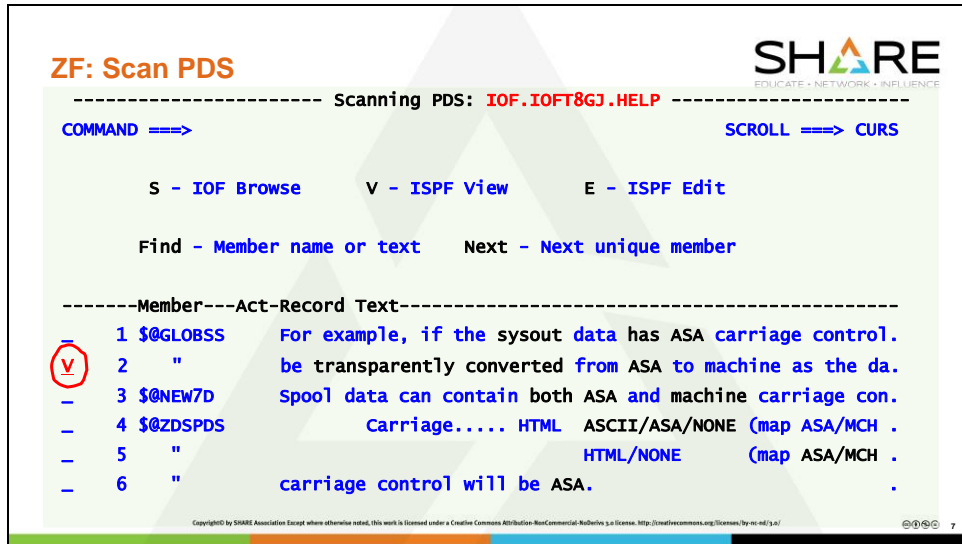
1	IOF.IOFT8GJ.CLIST
<b>S</b> 2	IOF.IOFT8GJ.HELP

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Select the library to be scanned.

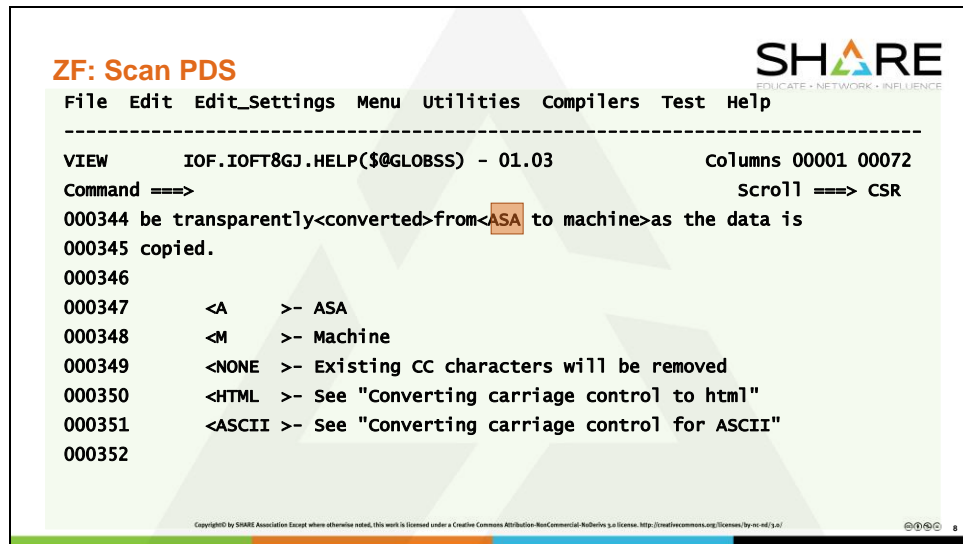
This will scan for the word “asa” in columns 25-60 of the IOF HELP dataset.



This list shows all the members where a hit was found in the dataset **IOF.IOFT8GJ.HELP**, along with text from the line where the string was found.

From here you can invoke IOF Browse, ISPF View, or ISPF Edit, and will be positioned at the appropriate location in the member. In this case, I'm doing ISPF View on the 2<sup>nd</sup> hit.

Note: When scanning multiple datasets, the results from each dataset are presented in sequence.




```
ZF: Scan PDS
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File Edit Edit_Settings Menu Utilities Compilers Test Help
-----
VIEW      IOF.IOFT8GJ.HELP($@GLOBSS) - 01.03      columns 00001 00072
Command ==>                               Scroll ==> CSR
000344 be transparently<converted>from<ASA to machine>as the data is
000345 copied.
000346
000347      <A      >- ASA
000348      <M      >- Machine
000349      <NONE   >- Existing CC characters will be removed
000350      <HTML   >- See "Converting carriage control to html"
000351      <ASCII  >- See "Converting carriage control for ASCII"
000352
```

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As you can see, the view has been positioned to the correct place in the member, and the matching string is highlighted.

When you end this VIEW session, you will be returned to the Scan Summary panel.

**ZF: Scan PDS**


---

Scanning PDS: **IOF.IOFT8GJ.HELP**

COMMAND ==>
SCROLL ==> CURS

S - IOF Browse      V - ISPF View      E - ISPF Edit

Find - Member name or text      Next - Next unique member

-----Member-----	Act	Record	Text
- 1 \$@GLOBSS			For example, if the sysout data has ASA carriage control.
- 2 "	vw		be transparently converted from ASA to machine as the da.
- 3 \$@NEW7D			Spool data can contain both ASA and machine carriage con.
- 4 \$@ZDSPDS			Carriage..... HTML ASCII/ASA/NONE (map ASA/MCH .
- 5 "			HTML/NONE (map ASA/MCH .
- 6 "			carriage control will be ASA.

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IOF now re-displays the original FIND summary, but the “ACT” column has been updated to help you keep track of what you’ve already investigated.



Do you ever think to yourself “I need to look at a job I ran earlier today, but I’m not sure which one it was?” If you do, JF is for you.

The JF command scans the jobs shown in the IOF Job List Menu for a specified string. You may not want to scan all the jobs in your default list, so you can use the IOF EXCLUDE command to remove jobs you do not want to scan. Then enter the command “JF” followed by the string to be scanned. As with ZF, ISPF “Find” format is used.


Examples:

```
EXCLUDE JOBNAME BG M
```

```
EXCLUDE AGEDAYS GT 5
```


You can also use the “X” line command to exclude specific jobs.

**JF: Job Find – Scan multiple jobs.**



```
----- IOF Job List Menu ----- ( 10 )-----
COMMAND ==> JF AUTH SCROLL ==> CURSOR
----- Output Jobs -----
-----JOBNAME--JOBID--ACT-STAT-OWNER-----DEST/DEVICE-----RECS-HELD-DAY--TIME
- 1 ? J844510 SEL JCL ISIDSC TRISYS 16 051 10:42
- 2 CATLST J832831 SEL ISIDSC TRISYS 4499 220 14:01
- 3 DBSYNC1 J836153 SEL ISIDSC TRISYS 587 277 14:59
- 4 IRRDBU00 J834356 SEL S913 ISIDSC TRISYS 111 247 14:28
- 5 IRRUT200 J834364 SEL ISIDSC TRISYS 184 247 15:33
- 6 REXXZAP J832749 SEL ISIDSC TRISYS 119 219 12:56
- 7 SCANDEV J835186 SEL ISIDSC TRISYS 1694 261 18:31
- 8 SCANDEV J843470 SEL ISIDSC TRISYS 1674 035 15:38
- 9 SCANTSI J835227 SEL ISIDSC TRISYS 1317 262 12:10
- 10 SCANTSI J836131 SEL ISIDSC TRISYS 1626 277 8:36
```

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Once you have found all the jobs you want scanned, enter the JF command. Here I've specified the string to be searched without column limits.



**JF: Job Find** **SHARE**  
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----- Matching Records -----

COMMAND ==> SCROLL ==> CURSOR

S - Browse dataset      E - Edit job  
B - Browse entire job    J - Job Summary for job

-----Act-Jobname--Job-DDname---Step----Text-----

Act	Jobname	Job-DDname	Step	Text
- 1	DBSYNC1	2 SYSPRINT LIVEDBU	IRR67494I 8	general TSOAUTH profil...
- 2	DBSYNC1	2 SYSPRINT BKLVDDBU	IRR67494I 8	general TSOAUTH profil...
- 3	IRRDBU00	3 LOG	*	... INSUFFICIENT ACCESS AUTHORITY
<b>S</b> 4	IRRDBU00	3 MESSAGES	*	INSUFFICIENT ACCESS AUTHORITY
- 5	REXXZAP	4 JCL	*	...ISIDSC.IOF.APFAUTH.LOAD ...

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As with ZF, the scan results shows the context where the match was found: The Jobname, Stepname, and DDname along with the text of the line.

Next, select the job or SYSOUT file to be viewed. In this example, Browse the SYSOUT dataset.

Note the “E – Edit job”. This brings up an ISPF Edit panel with the original job: JCL, and all the SYSIN files.

```
JF: Job Find SHARE  
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BROWSE - MESSAGES * - Page 1 Line 8 Co1s 1-80  
COMMAND ==> INSUFFICIENT ACCESS AUTHORITY SCROLL ==> CURSOR  
FROM SYS1.*.** (G)  
ACCESS INTENT(UPDATE ) ACCESS ALLOWED(READ )  
IEC150I 913-38,IFG0194E,IRRD8U00,UNLOAD,INDD1,0CE3,VPMVSB,SYS1.RACFFRM1  
IEA995I SYMPTOM DUMP OUTPUT  
SYSTEM COMPLETION CODE=913 REASON CODE=00000038  
TIME=15.28.46 SEQ=00965 CPU=0000 ASID=0034  
PSW AT TIME OF ERROR 075C1000 80E6846A ILC 2 INTC 0D  
NO ACTIVE MODULE FOUND  
NAME=UNKNOWN  
DATA AT PSW 00E68464 - 41003B9A 0A0D41F0 38C256F0  
AR/GR 0: 96F14B12/00E6874C 1: 00000000/A4913000  
2: 00000000/0001596D 3: 00000000/00E67BB2  
  
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```

Now you are in IOF Browse, positioned to the correct location in the file with the matching string highlighted.

## SUMMARY




IOF users gain significant productivity from IOF's ease of use, and it continues to evolve with the system to fit the needs of its users. Today we gave a brief overview of the IOF Browse and job management features, and then focused on these recently added features:

- SEND MAIL
- JAMS: Job Archive for the end user
- ZF: Improved PDS scan
- JF: Scan multiple jobs for a string

Not previously mentioned in this presentation:

- Full support for 8 character userids available in IOF release 8G.

I will be around for the rest of the week. I'd like to talk to you individually if you have questions or suggestions – or just to chat about your own experiences on this platform, whether it involves IOF or not.



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PROGRAM

PROJECT

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## Useful Links and Contact information



<https://www.triangle-systems.com/>

IOF Website. This has a lot of examples and other usage information including a comprehensive user guide that goes into all the IOF Features.

<http://www.fisc.com/support/ioffunctionality/>

Our associated corporation, Fischer International, also has a website with IOF tips (text and video!). They also conduct an annual user survey to get ideas for future development. If you're interested, send email to Christine Cargnoni : [CCC@FischerInternational.com](mailto:CCC@FischerInternational.com)

[ioftech@triangle-systems.com](mailto:ioftech@triangle-systems.com)

IOF Technical Support. Use this for reporting problems, and feel free to ask usage questions.

<http://www.fisc.com/support/docs/ShareShootPresentationJW.pdf>

2010 Shootout presentation. A similar presentation was done in 2010. It still has useful information.

Me: [Dave.Crow@triangle-systems.com](mailto:Dave.Crow@triangle-systems.com)