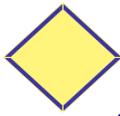


IOF/JAMS

- ◆ Standard z/OS data sets
- ◆ No complex data base
- ◆ No new security rules

So, what is IOF/JAMS? It's a very simple archival system that archives each job to a standard z/OS data set. That means that you don't need a complex data base or new security rules. If you can access a job with IOF, you can archive it. If you can create z/OS data sets, you can create archive data sets.



IOF/JAMS Benefits for End Users

- ◆ **Gain control over your personal jobs**
- ◆ **Organize your jobs into useful categories**
- ◆ **Archive entire jobs**

- ◆ **Simple archival process**
- ◆ **No help from tech support**
- ◆ **Simple to find archived jobs**
- ◆ **Review archived jobs just like spool jobs**
- ◆ **Manually or automatically archive your jobs**

OK, this sounds pretty simple, but why would you want to use it?

First of all, you gain complete control over your jobs because they are in your data sets. And, you can organize your jobs into categories that can be very useful. We'll show you how we use that in IOF development. We also archive the entire job, including SYSIN data sets and the entire original input job.

This may sound pretty interesting at this point, but you're probably wondering how complicated it is to use. I think you will see that users can easily learn to archive their jobs with no help at all from tech support. And, it's also very simple for them to find and browse archived jobs.

Best of all, users review their archived jobs just like their spool jobs. And, they can manually archive jobs from IOF displays or automatically archive jobs after jobs run.



IOF/JAMS Benefits for the Installation

- ◆ **Low impact on technical resources**
 - ◆ **No complicated data base**
 - ◆ **No new security rules**
 - ◆ **End users need little or no help**
- ◆ **Bulk archival**
 - ◆ **Archive jobs or output groups**
 - ◆ **Select using IOF display fields**
 - ◆ **Enhance existing archival system**
 - ◆ **Nondestructive spool cleanup**

Here are some benefits that we see for the installation. First, users can start archiving with little or no help from tech support. That's because there are no complicated data bases or new security rules.

IOF/JAMS also includes a classical bulk archival capability that lurks around and picks up jobs based on very flexible selection criteria. For IOF/JAMS, you can select based on any IOF display fields. Many companies already have a bulk archival system in place, but here are a couple of potentially useful applications even if you already have an archive system.

You can actually use IOF/JAMS to archive additional information for jobs that are already being archived (without disrupting their normal archival). As we will see, IOF/JAMS saves an IOF Job Summary for each job and the original input job. You can choose to have IOF/JAMS just archive that additional information and not any large reports.

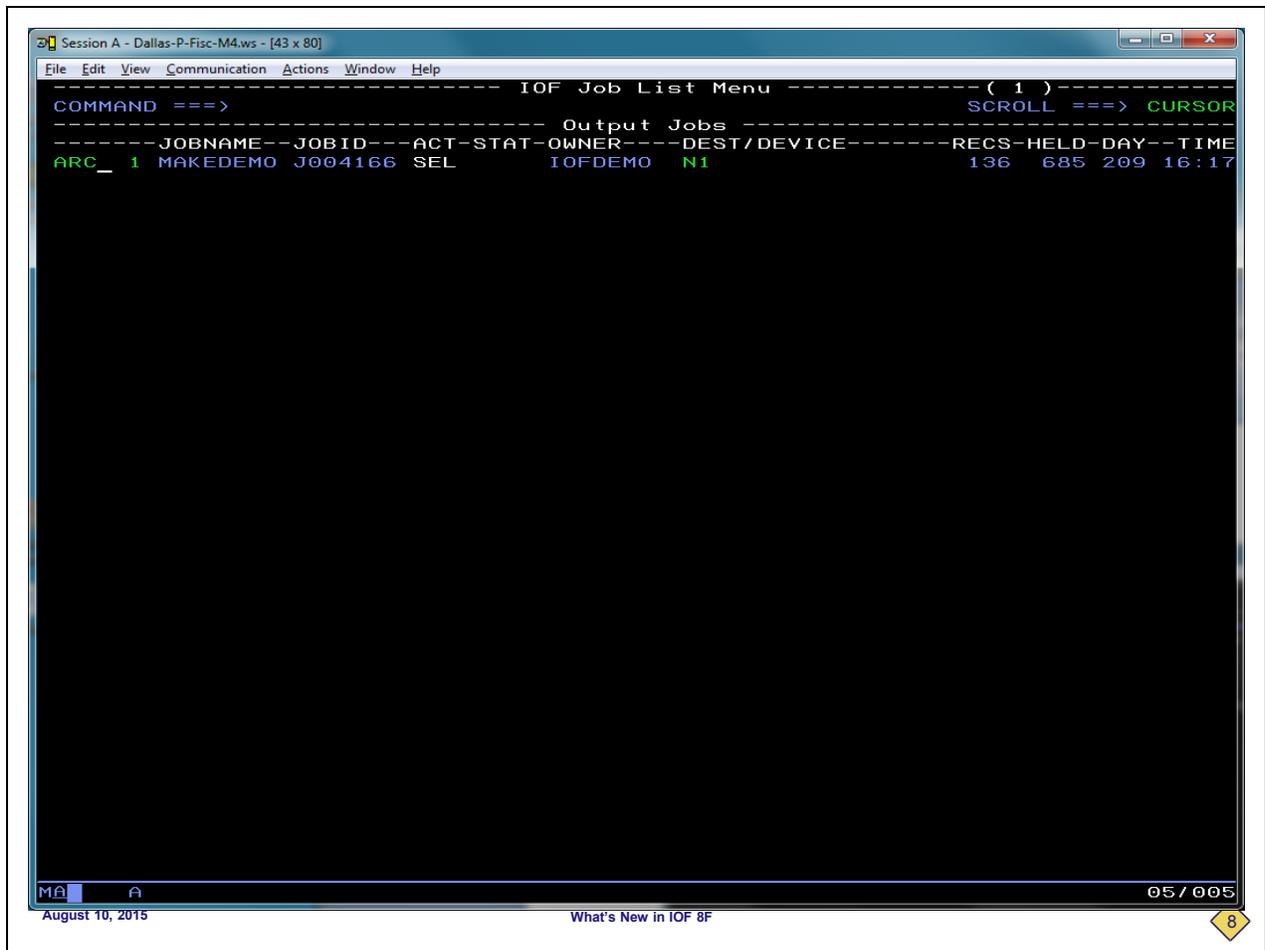
IOF/JAMS can also be very useful for spool cleanup. The potential downside to accidentally throwing away vital jobs can be overwhelming. IOF/JAMS allows you to copy jobs off the spool into z/OS data sets that can then be migrated off the system. And, it's easy to go back and find them.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- IOF Job List Menu ----- ( 1 )-----
COMMAND ==>                               SCROLL ==> CURSOR
----- Output Jobs -----
-----JOBNAME--JOBID--ACT-STAT-OWNER--DEST/DEVICE-----RECS-HELD-DAY--TIME
S_  1  MAKEDEMO  J004166          IOFDEMO  N1          136  685 209 16:17
-----
MÁ  A                                     05 / 003
August 10, 2015                          What's New in IOF 8F
```

Now, we will demonstrate IOF/JAMS with some screen captures from an actual IOF session. First, we will demonstrate how to manually archive jobs.

This is a standard *IOF Job List Menu*. For simplicity of this demo, this job list has only one job.

To display the normal *IOF Job Summary* panel for this job, we will enter the “S” line command by the job.



We will now enter the **ARC** line command for the **MAKEDEMO** job to manually archive the job.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- Archive Job "MAKEDEMO" to a z/OS Data Set -----
COMMAND ==> _
      HELP - Display information about IOF archival

Prefix ==> IOFDEMO          Prefix for archive data set name
Catg.  ==>                  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)

Allocation attributes for archive data set

UNIT   ==>                VOLUME ==>
STORCLAS ==>              MGMTCLAS ==>                DATACLAS ==>

MA A 02/015
August 10, 2015 What's New in IOF 8F 9
```

This is where you specify the target data set for the archival and other useful options. Since we have previously archived other jobs, it has remembered the data set name prefix and suffix that we like to use for our archive data sets. You optionally can specify a second level for the data set name in the category field. We will show how useful this can be later in the presentation. For now we will ignore the fields at the bottom of the panel that show its flexibility and press ENTER to archive the job.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- IOF Job List Menu ----- ( 1 )-----
COMMAND ==> ARC_ SCROLL ==> CURSOR
Job "MAKEDEMO" successfully archived
-----JOBNAME--JOBID---ACT-STAT-OWNER----DEST/DEVICE-----RECS-HELD-DAY--TIME
_ 1 MAKEDEMO J004166 SEL IOFDEMO N1 136 685 209 16:17

MA A 02/018
August 10, 2015 What's New in IOF 8F 10
```

We can see that the message indicates that we have archived the job. We will now enter the ARC primary command to display our archived jobs.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- Select Archived Jobs to be Reviewed -----
COMMAND ==> _
          HELP - Display info about this panel
          The Prefix, Category, and Suffix fields must match those specified when
          when the jobs were archived.
Jobname ==>                                     Generic job name (limits initial list)
                                                (Only single trailing "*" supported)
                                                (Refine list further on list panel)
Prefix  ==> IOFDEMO                             Prefix for archive data set names
Catg    ==>                                     Generic job category (prefix extension)
                                                (blank => No category level in dsnames)
                                                (see HELP for generic rules)
Suffix  ==> IOFJOB                             Suffix for archive data set names
                                                (blank => No suffix level in dsnames)
MÁ      A                                     02/015
August 10, 2015                               What's New in IOF 8F
```

This panel is where you ask for a list of archived jobs. Since it remembers the prefix and suffix from our last archive, we will simply press ENTER to see our archived jobs.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- Archived Jobs: Prefix(IOFDemo) Suffix(IOFJOB) ----- Row 1 of 4
COMMAND ==> Scroll ==> PAGE

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

Parms row below - Only jobs that match these input parms will appear
on this list.
Filter row below - Overtyp e a filter column to further refine the list.

----Act-Jobname---Year-Mo-Day-Time run--Weekday---Category-----
Parms -> * * * * *
Filter-> * * * * *
S_   MAKEDEMO  2015 07 28  16:17:00  Tuesday
-   OLDDEMO01  2015 07 28  16:05:00  Tuesday
-   OLDDEMO02  2015 07 28  16:05:00  Tuesday
-   OLDDEMO03  2015 07 28  16:06:00  Tuesday
***** Bottom of data *****

```

MA A 13/003
August 10, 2015 What's New in IOF 8F

This is a list of jobs that have been archived with the specified data set name prefix and suffix. This list is simple, but it could have hundreds of jobs. The filtering fields can be very useful in refining the list. We can see our MAKEDEMO job, so we will select it.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
-----Archived Job Summary-----
COMMAND ==> SCROLL==> CSR
-----IOF Job Summary-----
JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--OWN
MAKEDEMO J004166 OUTPUT 16:17 7/28/2015 TUESDAY N1 IOF
--RC--PGM--STEP--PRSTEP--PROC--COMMENTS-----
0 IEBCOPY COMPOBJ
0 IEBCOPY COMPLOAD
0 ASMA90 C ASM DEMOASM
0 IEWL LINK
-----DDNAME--STEP--PRSTEP--STAT--ACT--C--GRP--D--SIZE--U--DEST-----F
| 1 LOG * H 1 W 23 L N1
| 2 JCL * H 1 W 32 L N1
| 3 MESSAGES * H 1 W 81 L N1
| 4 SYSPRINT COMPOBJ HELD H 2 H 12 L N1
| 5 SYSPRINT COMPLOAD HELD H 2 H 21 L N1
| 6 SYSPRINT C ASM HELD H 2 H 518 L N1
| 7 SYSTEM C ASM HELD H 2 H 1 L N1
| 8 SYSPRINT LINK HELD H 2 H 133 L N1
MA A 14/003
August 10, 2015 What's New in IOF 8F 13

```

This is the *Archived Job Summary* for the archived job. We are now displaying the data from the archived data set, and from not the spool. We'll see in a minute just how close this is to a normal *IOF Job Summary*. From here we can select a sysout for browse just as you would from the normal *IOF Job Summary* panel.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
BROWSE - MESSAGES * - Page 1 Line 1 Cols 1-80
COMMAND ==> SCROLL ==> CURSOR
***** Top of Data *****
STMT NO. MESSAGE
13 IEF001I PROCEDURE DEMOASM WAS EXPANDED USING PRIVATE LIBRARY IOFDEMO.
ICH7000I IOFDEMO LAST ACCESS AT 16:08:14 ON TUESDAY, JULY 28, 2015
IEF236I ALLOC. FOR MAKEDEMO COMPOBJ
IEF237I JES2 ALLOCATED TO SYSPRINT
IEF237I 1500 ALLOCATED TO SYSUT1
IEF237I 1500 ALLOCATED TO SYSUT2
IEF237I DMY ALLOCATED TO SYSIN
IEF142I MAKEDEMO COMPOBJ - STEP WAS EXECUTED - COND CODE 0000
IEF285I IOFDEMO.MAKEDEMO.JOB04166.D0000102.? SYSOUT
IEF285I IOFDEMO.DEMO.OBJ KEPT
IEF285I VOL SER NOS= TSI901.
IEF285I IOFDEMO.DEMO.OBJ KEPT
IEF285I VOL SER NOS= TSI901.
IEF373I STEP/COMPOBJ /START 2015209.1617
IEF032I STEP/COMPOBJ /STOP 2015209.1617
CPU: 0 HR 00 MIN 00.02 SEC SRB: 0 HR 00 MIN 00.00 SEC
VIRT: 1024K SYS: 256K EXT: 168K SYS: 11988K
IEF236I ALLOC. FOR MAKEDEMO COMPLD
IEF237I JES2 ALLOCATED TO SYSPRINT
IEF237I 1500 ALLOCATED TO SYSUT1
IEF237I 1500 ALLOCATED TO SYSUT2
IEF237I DMY ALLOCATED TO SYSIN
IEF142I MAKEDEMO COMPLD - STEP WAS EXECUTED - COND CODE 0000
IEF285I IOFDEMO.MAKEDEMO.JOB04166.D0000103.? SYSOUT
IEF285I IOFDEMO.DEMO.LOAD KEPT
IEF285I VOL SER NOS= TSI901.
IEF285I IOFDEMO.DEMO.LOAD KEPT
IEF285I VOL SER NOS= TSI901.
IEF373I STEP/COMPLD/START 2015209.1617
IEF032I STEP/COMPLD/STOP 2015209.1617
CPU: 0 HR 00 MIN 00.02 SEC SRB: 0 HR 00 MIN 00.00 SEC
VIRT: 1024K SYS: 256K EXT: 168K SYS: 11980K
IEF236I ALLOC. FOR MAKEDEMO C ASM
IEF237I 1700 ALLOCATED TO SYSLIB
IEF237I 1500 ALLOCATED TO
IEF237I DMY ALLOCATED TO SYSLIN
IGD100I VIO ALLOCATED TO DDNAME SYSUT1 DATACLAS ( )
IGD100I VIO ALLOCATED TO DDNAME SYSUT2 DATACLAS ( )
MA A 02/015
August 10, 2015 What's New in IOF 8F 14

```

We are browsing this sysout data set from the archived job, not from the spool.
 We will return now to the *Archive Job Summary*.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
-----Archived Job Summary-----
COMMAND ==>
I OF Job Summary
JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--OWN
MAKEDMO J004166 OUTPUT 16:17 7/28/2015 TUESDAY N1 IOF
--RC--PGM--STEP--PRSTEP--PROC--COMMENTS--
0 IEBCOPY COMPOBJ
0 IEBCOPY COMPLoad
0 ASMA90 C ASM DEMOASM
0 IEWL LINK
-----DDNAME--STEP--PRSTEP--STAT-ACT-C-GRP-D-SIZE-U-DEST-----F
1 LOG * H 1 W 23 L N1
2 JCL * H 1 W 32 L N1
3 MESSAGES * Sel H 1 W 81 L N1
4 SYSPRINT COMPOBJ HELD H 2 H 12 L N1
5 SYSPRINT COMPLoad HELD H 2 H 21 L N1
6 SYSPRINT C ASM HELD H 2 H 518 L N1
7 SYSTEM C ASM HELD H 2 H 1 L N1
8 SYSPRINT LINK HELD H 2 H 133 L N1
Mâ A 02/015
August 10, 2015 What's New in IOF 8F

```

To compare the *Archived Job Summary* for this job with its normal *IOF Job Summary*, we will enter split screen mode.



We will enter "I" for IOF and press ENTER.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- IOF Job List Menu ----- ( 1 ) -----
COMMAND ===> SCROLL ===> CURSOR
----- Output Jobs -----
----- JOBNAME--JOBID--ACT-STAT-OWNER---DEST/DEVICE-----RECS-HELD-DAY--TIME
S_ 1 MAKEDEMO J004166 IOFDEMO N1 136 685 209 16:17
MA A
August 10, 2015 What's New in IOF 8F 06 / 003
```

We are now displaying the *IOF Job List*. We will use the “S” line command to redisplay the normal *IOF Job Summary* for the MAKEDEMO job.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- IOF Job Summary -----
COMMAND ==>
----- SCROLL ==> CURSOR -----
--JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST-----
MAKEDEMO J004166 OUTPUT 16:17 7/28/2015 TUESDAY N1
--RC--PGM--STEP--PRSTEP--PROC--COMMENTS-----
0 IEBCOPY COMPOBJ
0 IEBCOPY COMLOAD
0 ASMA90 C ASM DEMOASM
0 IEWL LINK
----- DDNAME--STEP--PRSTEP--STAT-ACT-C-GRP-D-SIZE-U-DEST-----
-- 1 LOG * H 1 W 23 L N1
-- 2 JCL * H 1 W 32 L N1
-- 3 MESSAGES * H 1 W 81 L N1
-- 4 SYSPRINT COMPOBJ HELD H 2 H 12 L N1
-- 5 SYSPRINT COMLOAD HELD H 2 H 21 L N1
-- 6 SYSPRINT C ASM HELD H 2 H 518 L N1
-- 7 SYSTERM C ASM HELD H 2 H 1 L N1
-- 8 SYSPRINT LINK HELD H 2 H 133 L N1
MA A 03/015
August 10, 2015 What's New in IOF 8F 18
```

This is the normal IOF Job Summary for the MAKEDEMO job. We will now SWAP back to the Archived Job Summary to demonstrate that reviewing an archived job is exactly like reviewing the original job on the spool.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
-----Archived Job Summary-----
COMMAND ==>
-----IOF Job Summary-----
JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--OWN
MAKEDMO J004166 OUTPUT 16:17 7/28/2015 TUESDAY N1 IOF
--RC--PGM--STEP--PRSTEP--PROC--COMMENTS-----
0 IEBCOPY COMPOBJ
0 IEBCOPY COMPLoad
0 ASMA90 C ASM DEMOASM
0 IEWL LINK
-----DDNAME--STEP--PRSTEP--STAT--ACT--C--GRP--D--SIZE--U--DEST-----F
1 LOG * H 1 W 23 L N1
2 JCL * H 1 W 32 L N1
3 MESSAGES * Sel H 1 W 81 L N1
4 SYSPPRINT COMPOBJ HELD H 2 H 12 L N1
5 SYSPPRINT COMPLoad HELD H 2 H 21 L N1
6 SYSPPRINT C ASM HELD H 2 H 518 L N1
7 SYSTEM C ASM HELD H 2 H 1 L N1
8 SYSPPRINT LINK HELD H 2 H 133 L N1
-----
MA A 02/015
August 10, 2015 What's New in IOF 8F 19

```

Notice that the *Archived Job Summary* is virtually identical to the original *IOF Job Summary* for the job. This means that you don't need to learn any new tricks to review your archived jobs because they look just like your normal spool jobs. We will enter SWAP again to take another look at the original *IOF Job Summary* panel for the job.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- IOF Job Summary -----
COMMAND ==>
--JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--
MAKEDMO J004166 OUTPUT 16:17 7/28/2015 TUESDAY N1
--RC--PGM--STEP--PRSTEP--PROC--COMMENTS--
 0 IEBCOPY COMPOBJ
 0 IEBCOPY COMPLoad
 0 ASMA90 C ASM DEMOASM
 0 IEWL LINK
-----DDNAME--STEP--PRSTEP--STAT--ACT--C--GRP--D--SIZE--U--DEST--
-- 1 LOG * H 1 W 23 L N1
-- 2 JCL * H 1 W 32 L N1
-- 3 MESSAGES * H 1 W 81 L N1
-- 4 SYSPRINT COMPOBJ HELD H 2 H 12 L N1
-- 5 SYSPRINT COMPLoad HELD H 2 H 21 L N1
-- 6 SYSPRINT C ASM HELD H 2 H 518 L N1
-- 7 SYSTEM C ASM HELD H 2 H 1 L N1
-- 8 SYSPRINT LINK HELD H 2 H 133 L N1
MA A 03/015
August 10, 2015 What's New in IOF 8F

```

As you can see, the displays are virtually identical. One more SWAP will take us back to the *Archived Job Summary*.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- Archived Job Summary -----
COMMAND ==> EDIT_                               SCROLL==> CSR
----- IOF Job Summary -----
--JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--OWN
MAKEDMO J004166 OUTPUT 16:17 7/28/2015 TUESDAY N1 IOF
--RC--PGM--STEP--PRSTEP--PROC--COMMENTS-----
  0 IEBCOPY COMPOBJ
  0 IEBCOPY COMLOAD
  0 ASMA90 C ASM DEMOASM
  0 IEWL LINK
----- DDNAME--STEP--PRSTEP--STAT-ACT-C-GRP-D-SIZE-U-DEST-----F
- 1 LOG * H 1 W 23 L N1
- 2 JCL * H 1 W 32 L N1
- 3 MESSAGES * Sel H 1 W 81 L N1
- 4 SYSPRINT COMPOBJ HELD H 2 H 12 L N1
- 5 SYSPRINT COMLOAD HELD H 2 H 21 L N1
- 6 SYSPRINT C ASM HELD H 2 H 518 L N1
- 7 SYSTEM C ASM HELD H 2 H 1 L N1
- 8 SYSPRINT LINK HELD H 2 H 133 L N1
MA A 02/019
August 10, 2015 What's New in IOF 8F

```

Here we are again on the *Archive Job Summary*. To demonstrate that we have archived the entire original input job, we will enter the EDIT primary command just as we would on a normal *IOF Job Summary* panel.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT Archived Job MAKEDEMO(J004166) Columns 00001 00072
Command ==> _ Scroll ==> PAGE
***** Top of Data *****
=NOTE= ----- IOF SPOOL EDIT COMMANDS -----
=NOTE= SAVE - SAVE TO A NEW SYSOUT CREATE - NORMAL EDIT CREATE
=NOTE= SUBMIT - SUBMIT JOB REPLACE - NORMAL EDIT REPLACE

000001 //MAKEDEMO JOB 1,JIMOTT,MSGCLASS=H
000002 //PROC JCLLIB ORDER=(IOFDEMO.DEMO.PROCLIB)
000003 //COMPOBJ EXEC PGM=IEBCOPY,PARM=COMPRESS
000004 //SYSPRINT DD SYSOUT=H
000005 //SYSUT1 DD DSN=IOFDEMO.DEMO.OBJ,DISP=SHR
000006 //SYSUT2 DD DSN=IOFDEMO.DEMO.OBJ,DISP=SHR
000007 //SYSIN DD DUMMY
000008 //COMPLoad EXEC PGM=IEBCOPY,PARM=COMPRESS
000009 //SYSPRINT DD SYSOUT=H
000010 //SYSUT1 DD DSN=IOFDEMO.DEMO.LOAD,DISP=SHR
000011 //SYSUT2 DD DSN=IOFDEMO.DEMO.LOAD,DISP=SHR
000012 //SYSIN DD DUMMY
000013 //ASM EXEC DEMOASM,M=DEMO
000014 //C.SYSIN DD DSN=IOFDEMO.DEMO.ASM(DEMO),DISP=SHR
000015 //LINK EXEC PGM=IEWL,PARM='NORENT,LIST,AMODE=31,RMODE=24,COMPAT=LKED'
000016 //DEMOOBJ DD DSN=IOFDEMO.DEMO.OBJ,DISP=SHR
000017 //SYSLMOD DD DISP=SHR,DSN=IOFDEMO.DEMO.LOAD
000018 //SYSPRINT DD SYSOUT=H
000019 //SYSLIN DD *
000020 INCLUDE DEMOOBJ(DEMO)
000021 NAME TEMPNAM8(R)
***** Bottom of Data *****

MA A 04/015
August 10, 2015 What's New in IOF 8F 22
```

As you can see, we are now in ISPF edit for the original input job. Think how useful it can be to go back and see the actual input job for an archived job. We will just return to the *Archive Job Summary*.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
-----Archived Job Summary-----
COMMAND ==>
-----IOF Job Summary-----
JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--OWN
MAKEDEMO J004166 OUTPUT 16:17 7/28/2015 TUESDAY N1 IOF
-----RC--PGM--STEP--PRSTEP--PROC--COMMENTS-----
0 IEBCOPY COMPOBJ
0 IEBCOPY COMPLOAD
0 ASMA90 C ASM DEMOASM
0 IEWL LINK
-----DDNAME--STEP--PRSTEP--STAT-ACT-C-GRP-D-SIZE-U-DEST-----F
1 LOG * H 1 W 23 L N1
2 JCL * H 1 W 32 L N1
3 MESSAGES * Sel H 1 W 81 L N1
4 SYSPRINT COMPOBJ HELD H 2 H 12 L N1
5 SYSPRINT COMPLOAD HELD H 2 H 21 L N1
6 SYSPRINT C ASM HELD H 2 H 518 L N1
7 SYSTEM C ASM HELD H 2 H 1 L N1
8 SYSPRINT LINK HELD H 2 H 133 L N1
MA A 02/015
August 10, 2015 What's New in IOF 8F

```

I hope we have been able to show you just how simple it is to manually archive jobs and review them with IOF/JAMS.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
File Edit Edit_Settings Menu Utilities Compilers Test Help
VIEW      IOFDemo.Demo.Cntl(IOFARCME) - 01.01      Columns 00001 00072
Command ==>
***** ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG> your edit profile using the command RECOVERY ON.
000100
000200      These are sample job steps that we inserted at the end of jobs
000210      that assemble IOF source modules as they are checked back in to
000220      the master library.
000300
000310      ...
000320      ...
000330      ...
000400      //ARCHME EXEC IOFARCME,CATEGORY=IOF8E
000500
000610      ...
000620      ...
000630      ...
000700      //ARCHME EXEC IOFARCME,CATEGORY=IOF8F
000710
000720      -----
000801
000810      These are sample job steps that you might insert to archive
000820      your SMPE jobs for each release.
000840
000850      ...
000860      ...
000870      ...
000880      //ARCHME EXEC IOFARCME,CATEGORY=SMPE21
000891
000892      ...
000893      ...
000894      ...
000895      //ARCHME EXEC IOFARCME,CATEGORY=SMPE22
000896
000900
***** ***** Bottom of Data *****
MA  A
August 10, 2015      What's New in IOF 8F      04 / 015

```

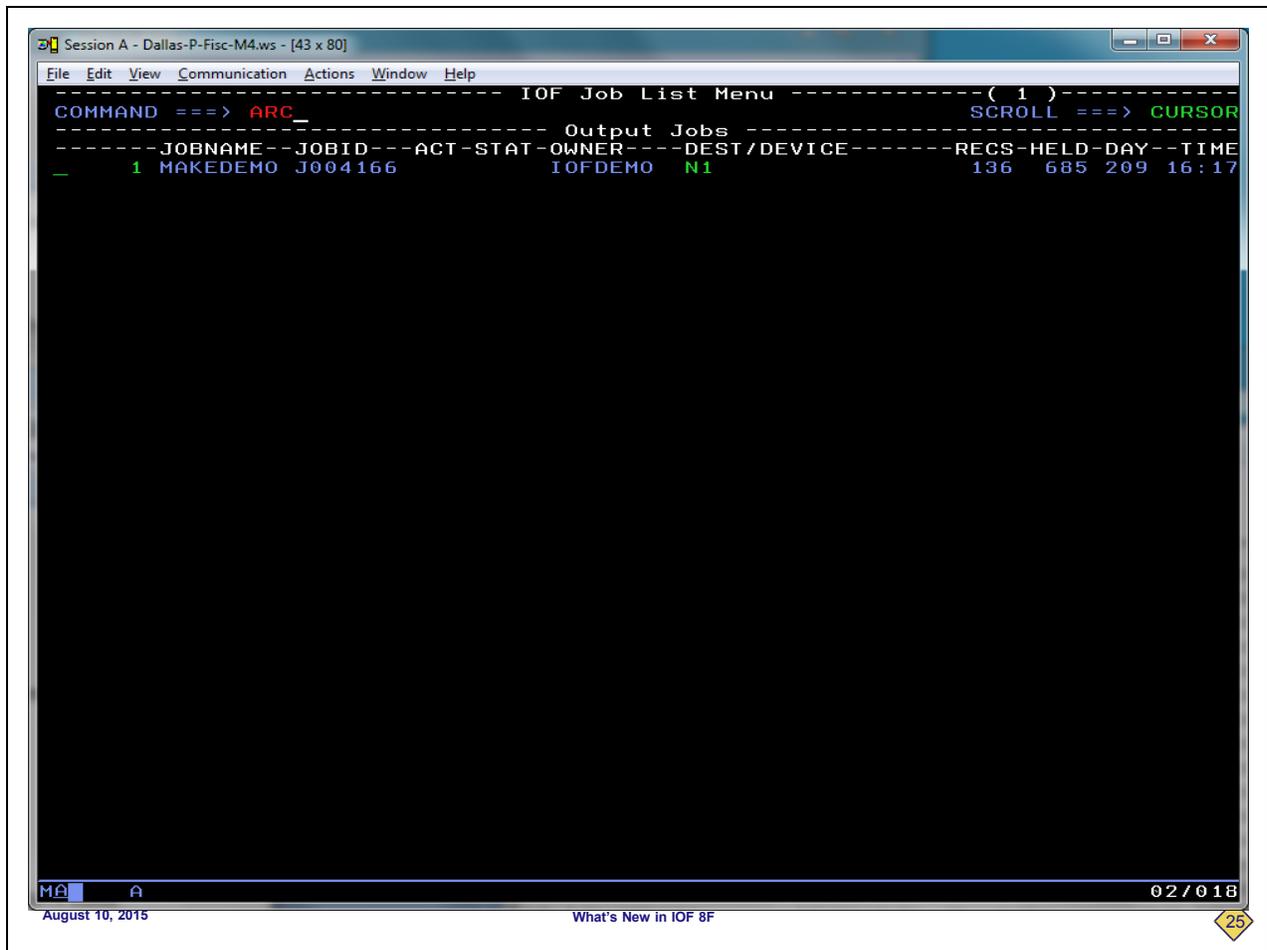
However, in practice, many users may prefer to archive their jobs automatically. The best way to illustrate this is to show you how we use this capability in IOF development. Since we are archiving to z/OS data sets, there's no reason that a job can't archive itself by adding a simple archive step at the end of the job. This screen shows some simple archival steps that we have used in IOF development.

When a developer checks out a source member from a master library, he may compile it many times as it is changed and tested. But when the member is checked back into the master library, a special compile is done that represents the new master source member. That is accomplished with generated batch jobs, and we added a new step to the end of those jobs similar to the ones shown here.

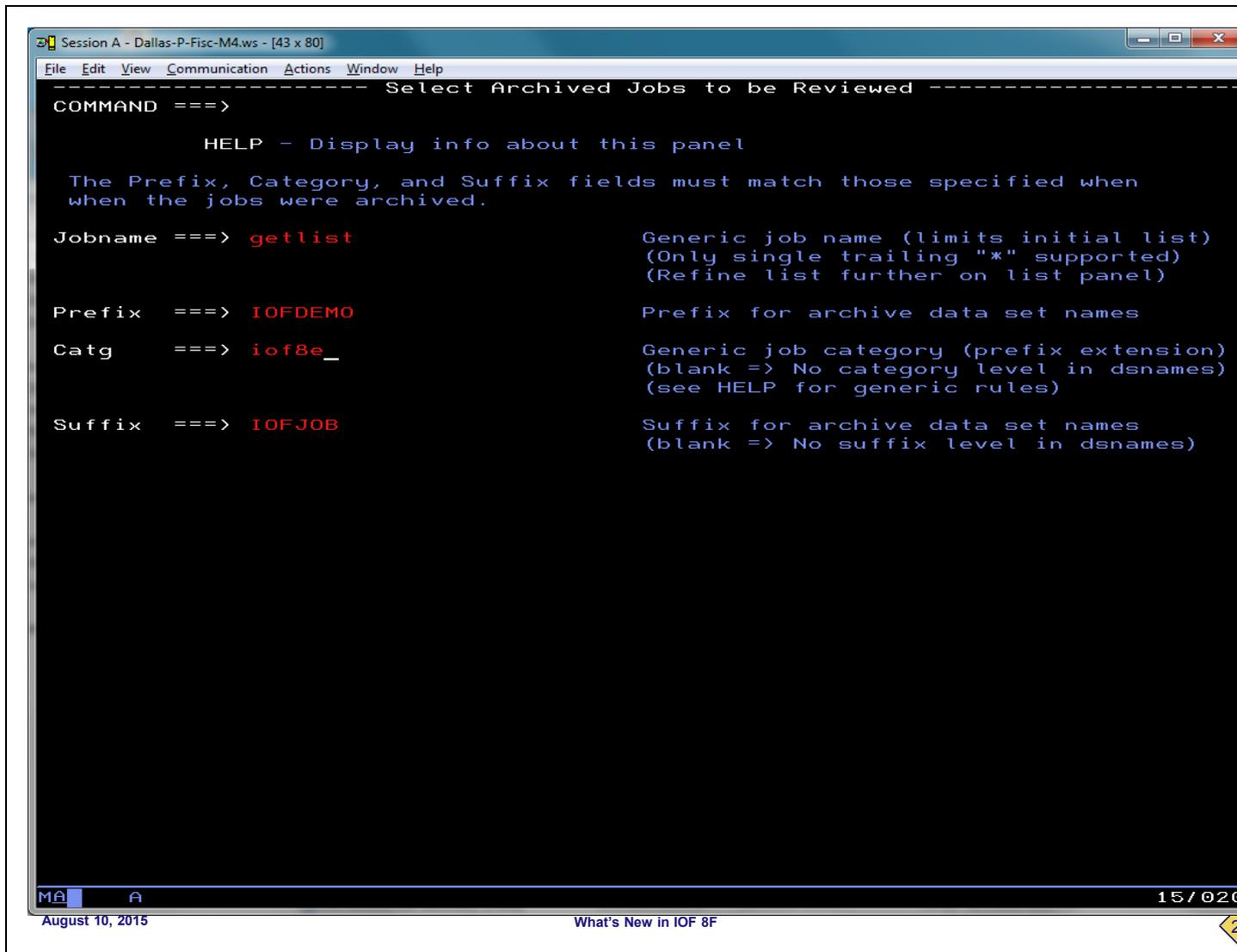
The first example was used during development of IOF Release 8E. The second example was used during the development of 8F. We will show how useful this can be.

The examples at the bottom demonstrate how you might use a similar scheme to organize your various system build jobs.

Now, we will take a look at how handy it can be to have these jobs organized.



This is a normal *IOF Job List*. We will enter the ARC primary command again to look at archived jobs.



This is the interface panel for reviewing archived jobs. It has remembered our prefix and suffix from previous usage.

We want to find all of the compilations that were done for the source member GETLIST during the development for IOF 8E. So, we will enter “**getlist**” in the job name field and “**iof8e**” in the category field.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- Archived Jobs: Prefix(IOFDEMO) Suffix(IOFJOB) ---- Row 1 of 2
COMMAND ==> _ Scroll ==> PAGE

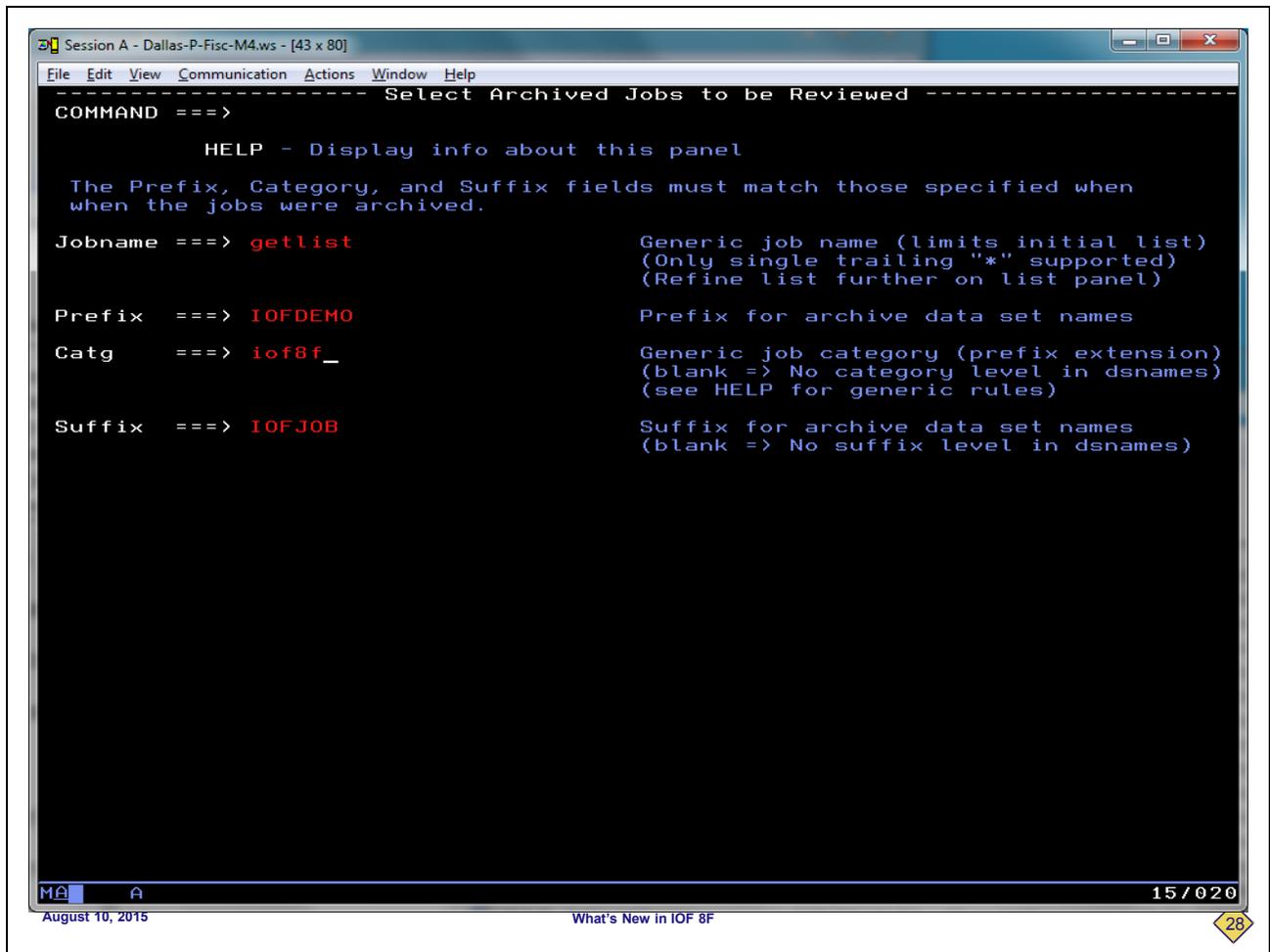
SORT - Toggle sort (jobname/date)      HELP - Info about display

Parms row below - Only jobs that match these input parms will appear
                  on this list.
Filter row below - Overtyp e a filter column to further refine the list.

----Act-Jobname--Year-Mo-Day-Time run--Weekday--Category-----
Parms -> GETLIST * * * * * * * IOF8E
Filter-> GETLIST * * * * * * * IOF8E
-----
GETLIST 2015 07 28 16:07:00 Tuesday IOF8E
GETLIST 2015 07 28 16:07:00 Tuesday IOF8E
***** Bottom of data *****

MA A 02/015
August 10, 2015 What's New in IOF 8F 27
```

Here is a list of the compile jobs for the GETLIST source member for IOF 8E. We could select and review any of those jobs, but for the purposes of this demo, we will just return to the interface menu.



Now, we want to see the GETLIST compile jobs for IOF release 8F. We will enter “**getlist**” in the job name field and “**iof8f**” in the category field.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- Archived Jobs: Prefix(IOFDEMO) Suffix(IOFJOB) ---- Row 1 of 3
COMMAND ==> _ Scroll ==> PAGE

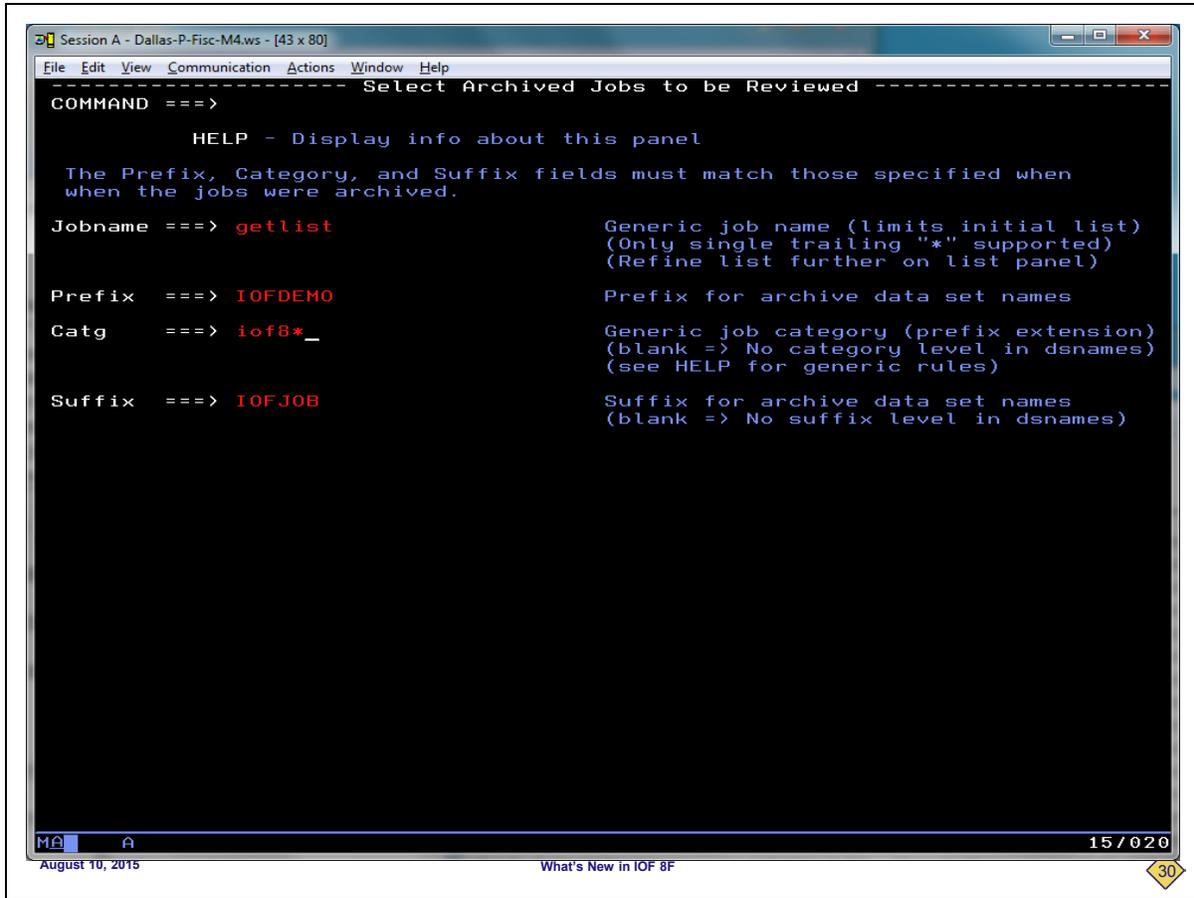
SORT - Toggle sort (jobname/date) HELP - Info about display

Parms row below - Only jobs that match these input parms will appear
on this list.
Filter row below - Overtyp e a filter column to further refine the list.

----Act-Jobname---Year-Mo-Day-Time run--Weekday---Category-----
Parms -> GETLIST * * * * * IOF8F
Filter-> GETLIST * * * * * IOF8F
-----
GETLIST 2015 07 28 16:08:00 Tuesday IOF8F
GETLIST 2015 07 28 16:08:00 Tuesday IOF8F
GETLIST 2015 07 28 16:08:00 Tuesday IOF8F
***** Bottom of data *****

MA A 02/015
August 10, 2015 What's New in IOF 8F 29
```

Now, we see all of the GETLIST compiles for IOF Release 8F. We will return to the interface panel.



To see all of the jobs for both 8E and 8F, we will enter “**getlist**” in the job name field and “**iof8***” in the category field.

```

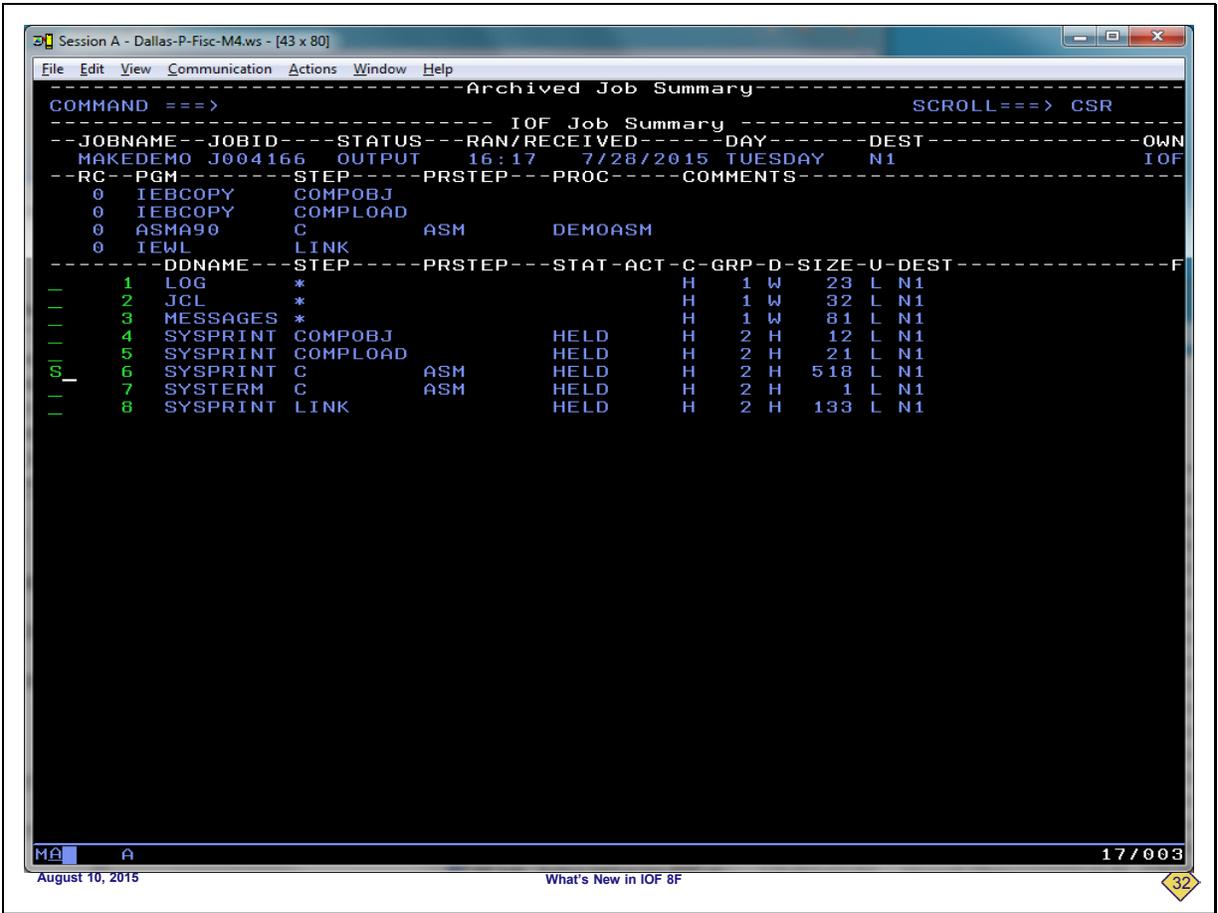
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- Archived Jobs: Prefix(IOFDEMO) Suffix(IOFJOB) ---- Row 1 of 5
COMMAND ==> _ Scroll ==> PAGE
SORT - Toggle sort (jobname/date) HELP - Info about display
Scope row below - Displays maximum scope for each display column
                  (based on your input parms, which limit the total list)
Filter row below - Overtypes fields to refine the current list

---Act---Category---Jobname---Year---Mo---Day---Time run---Weekday-----
Scope -> IOF8*   GETLIST * * * * *
Filter-> IOF8*   GETLIST * * * * *
---
IOF8E   GETLIST 2015 07 28 16:07:00 Tuesday
---
IOF8E   GETLIST 2015 07 28 16:07:00 Tuesday
---
IOF8F   GETLIST 2015 07 28 16:08:00 Tuesday
---
IOF8F   GETLIST 2015 07 28 16:08:00 Tuesday
---
IOF8F   GETLIST 2015 07 28 16:08:00 Tuesday
***** Bottom of data *****

```

MA A 02/015
August 10, 2015 What's New in IOF 8F 31

Here we can see all of the GETLIST jobs for both IOF 8E and IOF 8F. A similar application would be to archive all of your SMPE jobs for z/OS 2.1 with a category of SMPE21 and your 2.2 jobs with a category of SMPE22. Then, you could easily go back at any time in the future and find those jobs. I hope we have shown you how simple it is to automatically archive your jobs and how useful it can be to organize them into categories.



We have returned to an *Archive Job Summary* to discuss some of the IOF/JAMS enhancements for IOF 8F. All of these changes were driven by user requirements. One of the first requirements was to browse the archived sysout data sets with IOF browse instead of ISPF browse or view. Users wanted the same carriage control visual fidelity and other features of IOF browse. To demonstrate this enhancement we will select a sysout data set from this *Archive Job Summary*.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
BROWSE - SYSPRINT ASM C - Page 1 Line 1 Cols 1-80
COMMAND ==>
***** Top of Data *****
High Level Assembler Option Summary

No Overriding ASMAOPT Parameters
Overriding Parameters- TERM,DECK
No Process Statements

Options for this Assembly

NOADATA
ALIGN
NOASA
BATCH
CODEPAGE(047C)
NOCOMPAT
NOBPCS
3 DECK
DXREF
ESD
NOEXIT
FLAG(0, ALIGN, CONT, EXLITW, NOIMPLEN, NOPAGE0, PUSH, RECORD, NOSUBSTR, USING0)
NOFOLD
NOGOFF
NOINFO
LANGUAGE(EN)
NOLIBMAC
LINECOUNT(60)
LIST(121)
MACHINE(, NOLIST)
MXREF(SOURCE)
OBJECT
OPTABLE(UNI, NOLIST)
NOPCONTROL
NOPESTOP
NOPROFILE
NORA2
NORENT

MA A August 10, 2015 What's New in IOF 8F 02 / 0 15
```

You can see that this looks a lot like IOF browse. But, that is even more obvious if we scroll down.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
BROWSE - SYSPRINT ASM C - Page 3 Line 1 Cols 1-80
COMMAND ==> SCROLL ==> CURSOR

Active Usings: None

Loc Object Code Addr1 Addr2 Stmt Source Statement
000000 00000 00489 1 VID START
2 PRINT NOGEN
3 REGISTER
000000 05C0 20 BALR R12,0
R:C 00002 21 USING *,R12
R:B 00000 22 USING WRKDSECT,R11
000002 1821 23 LR R2,R1 Save
000004 45A0 C01A 0001C 25 BAL R10,GETWRK
000008 45A0 C036 00038 27 BAL R10,INITPARM Set
00000C 45A0 C044 0000C 29 VIDLOOP EQU *
000010 00000000 00046 30 BAL R10,PULLFUNC
000014 45A0 C054 00056 33 BAL R10,DOFUNC +0 =
000018 47F0 C00A 0000C 35 B VIDLOOP

```

MA A 02/015
August 10, 2015 What's New in IOF 8F 34

On this slide you can clearly see that IOF browse is honoring the carriage control in the archived sysout data set to display the data just as it would appear on a printer. Now, we will return to the *Archive Job Summary*.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
-----Archived Job Summary-----
COMMAND ==> prt_
SCROLL==> CSR
-----IOF Job Summary-----
JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--OWN
MAKEDEMO J004166 OUTPUT 16:17 7/28/2015 TUESDAY N1 IOF
--RC--PGM--STEP--PRSTEP--PROC--COMMENTS-----
0 IEBCOPY COMPOBJ
0 IEBCOPY COMLOAD
0 ASMA90 C ASM DEMOASM
0 IEWL LINK
-----DDNAME--STEP--PRSTEP--STAT--ACT--C--GRP--D--SIZE--U--DEST-----F
1 LOG * H 1 W 23 L N1
2 JCL * H 1 W 32 L N1
3 MESSAGES * H 1 W 81 L N1
4 SYSPRINT COMPOBJ HELD H 2 H 12 L N1
5 SYSPRINT COMLOAD HELD H 2 H 21 L N1
6 SYSPRINT C ASM HELD Sel H 2 H 518 L N1
7 SYSTEM C ASM HELD H 2 H 1 L N1
8 SYSPRINT LINK HELD H 2 H 133 L N1
-----
MA A 02/018
August 10, 2015 What's New in IOF 8F 35

```

The original IOF/JAMS allowed you to print individual sysout data sets from the *Archived Job Summary*, but users wanted the ability to print the entire job. To demonstrate that feature we will enter the PRT command

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- Snap to Sysout Data Set --- (Screen 1 of 6) -----
COMMAND ==>
Printing: IOFDemo.MAKEDEMO.ELH2MULM.IOFJOB
Blank - Open SNAP data set and return
Down - Display panel with more SNAP attributes

CLASS ==> Sysout class
DEST ==>

OUTDISP ==> Output disposition (WRITE/KEEP/HOLD)
CONVERT ==> Conversion format (html)
CC ==> A Carriage control (A/M/NONE/HTML/ASCII)
OPTCD ==> "J" for 3800 printers
PAGEDEF ==> FORMDEF ==> FORMS ==>

TITLE ==>
NAME ==>
ROOM ==>
BUILDING ==>
DEPT ==>
ADDRESS ==>
==>
==>

MA A 02/015
August 10, 2015 What's New in IOF 8F 36
```

This is a standard IOF SS prompt panel, which means that you can specify virtually any JES2 print characteristics. If we press ENTER on the panel, the entire archived job would be printed using the SS characteristics.
But, we will just return to the Archive Job Summary.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
-----Archived Job Summary-----
COMMAND ==> cpy_                               SCROLL==> CSR
----- IOF Job Summary -----
--JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--OWN
MAKEDMO J004166  OUTPUT   16:17   7/28/2015 TUESDAY  N1  IOF
--RC--PGM--STEP--PRSTEP--PROC--COMMENTS-----
  0 IEBCOPY  COMPOBJ
  0 IEBCOPY  COMPLoad
  0 ASMA90   C          ASM      DEMOASM
  0 IEWL     LINK
-----DDNAME--STEP--PRSTEP--STAT-ACT-C-GRP-D-SIZE-U-DEST-----F
-  1 LOG      *                HELD   H   1 W   23 L N1
-  2 JCL      *                HELD   H   1 W   32 L N1
-  3 MESSAGES *                HELD   H   1 W   81 L N1
-  4 SYSPRINT COMPOBJ          HELD   H   2 H   12 L N1
-  5 SYSPRINT COMPLoad        HELD   H   2 H   21 L N1
-  6 SYSPRINT C          ASM   HELD   Sel H   2 H  518 L N1
-  7 SYSTEM   C          ASM   HELD   H   2 H    1 L N1
-  8 SYSPRINT LINK            HELD   H   2 H  133 L N1
MA  A                                     02 / 018
August 10, 2015                          What's New in IOF 8F

```

Users also said they had the need to ship off jobs to other vendors, so they needed the ability to copy the entire archived job into a sequential data set. To demonstrate that feature we will enter the CPY command.

```
Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- IOF Snap Data Set Options -----
COMMAND ==>
Copying: IOFDEMO.MAKEDEMO.ELH2MULM.IOFJOB
DSNAME      ==> 'IOFDEMO.MAKEDEMO.ELH2MULM.IOFJOB.FLATPDS'

RECFM      ==> VBA           Record format
LRECL      ==> 27990        Logical record length
BLKSIZE    ==> 27998        Block size
CONVERT     ==>            Convert to format (html)

PRIMARY    ==> 4           Primary allocation (in tracks)
SECONDARY  ==> 1           Secondary allocation (in tracks)
UNIT       ==>            Unit name
VOLUME SER. ==>            Volume serial
STORCLAS   ==>            SMS storage class
MGMTCLAS   ==>            SMS management class
DATACLAS   ==>            SMS data class

Special CC ==>            Special carriage control (HTML/ASCII)
MOD (Y or N) ==>        Append data to end of existing data set
PACK (Y or N) ==>        Pack data using ISPF method

LABEL      ==>            Tape data set label type
DATASET NO. ==>        Tape data set sequence number

MA  A  02 / 015
August 10, 2015 What's New in IOF 8F 38
```

This is a standard IOF SD prompt panel for writing data to a sequential data set. There is a suggested data set name, but you can overtype that name. If we press ENTER on the panel, the entire archived job would be copied to the sequential data set specified on the SD panel.

But, we will just return to the *Archive Job Summary*.

```

Session A - Dallas-P-Fisc-M4.ws - [43 x 80]
File Edit View Communication Actions Window Help
----- Archived Job Summary -----
COMMAND ==> _
----- IOF Job Summary -----
--JOBNAME--JOBID--STATUS--RAN/RECEIVED--DAY--DEST--OWN
MAKEDMO J004166 OUTPUT 16:17 7/28/2015 TUESDAY N1 IOF
--RC--PGM--STEP--PRSTEP--PROC--COMMENTS-----
0 IEBCOPY COMPOBJ
0 IEBCOPY COMLOAD
0 ASMA90 C ASM DEMOASM
0 IEWL LINK
----- DDNAME--STEP--PRSTEP--STAT-ACT-C-GRP-D-SIZE-U-DEST-----F
1 LOG * H 1 W 23 L N1
2 JCL * H 1 W 32 L N1
3 MESSAGES * H 1 W 81 L N1
4 SYSPRINT COMPOBJ HELD H 2 H 12 L N1
5 SYSPRINT COMLOAD HELD H 2 H 21 L N1
6 SYSPRINT C ASM HELD Sel H 2 H 518 L N1
7 SYSTEM C ASM HELD H 2 H 1 L N1
8 SYSPRINT LINK HELD H 2 H 133 L N1
MA A 02/015
August 10, 2015 What's New in IOF 8F

```

Users also wanted the ability to email the entire job directly. The new SND command provides that support, but we will not demonstrate it here. From what we have covered so far, it should be clear that IOF now has the ability to browse z/OS data sets. The archived sysouts are just members of an archive data set. Due to the very general design of the IOF browse interface, we have always known that it would not be difficult to use it to browse z/OS data sets. But before IOF/JAMS, there was never a major motivation to do that.

To implement the browsing of archived data sets, IOF 8F has an entirely new function designed to deal with z/OS data sets. It started out just browsing data sets, but other major functions were so easy to do that it expanded into a very general utility. The new ZDS command is described in a separate document.

So, IOF/JAMS is a very powerful archival system that is easy to use without help from tech support. And there are many new enhancements for 8F.