

Using the IOF SEND Facility

In addition to interfacing with the new IOF email interface, the IOF SEND facility has been enhanced to provide access to more SEND features.

This is intended as an overview of the capabilities provided by the IOF SEND facility. For detailed technical specifications, enter a SEND command under IOF and then press HELP on the interface panel.

The IOF SEND Commands

The SEND command in IOF can be used as both a primary command and a line command.

Use the SEND primary command:

- On any panel other than the IOF Job Summary to set default send parms
- On the Job Summary to send the currently selected job
(manually excluded sysouts will not be sent)

Use the SEND line command:

- On the Job List or Group list to send a specific job or output group
- On the Job Summary to send a single sysout data set

The IOF SEND Interface Panels

There are three different interface panels, depending on the type of SEND command that was entered.

A SEND primary command entered on any IOF panel other than the IOF Job Summary will display a panel that allows you to set send defaults:

```
Session D - Dallas-P-S2S-M4.ws - [24 x 80]
File Edit View Communication Actions Window Help
----- Specify Default Send Parms -----
COMMAND ==>

Specify default parms to be used for subsequent SEND commands.

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

To ==>

CC ==>
BCC ==>
From ==> ioftech@triangle-systems.com

Data      ==> ALL          ALL   -> All sysouts in job/group
          ==> JESDS       JESDS -> Just system sysouts
          ==> NONE        NONE  -> Just Job Summary with no sysouts

Summary   ==> YES         YES   -> Use html format, including a Job Summary
          ==> NO         NO    -> Use txt format, no Job Summary

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```

A SEND primary command on the IOF Job Summary, or a SEND line command on the IOF Job List or Output Group List will display a panel for downloading output for the selected job (or output group):

```

Session D - Dallas-P-S2S-M4.ws - [24 x 80]
File Edit View Communication Actions Window Help
----- Send Job Output -----
COMMAND ==>

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

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

PC file name for attachment:
File Name ==> JOB.M87PANOP.J815689.2012-06-05@10.42.ALL.html

Data      ==> ALL          ALL    -> All sysouts in job/group
          ==>             JESDS  -> Just system sysouts
          ==>             NONE   -> Just Job Summary with no sysouts
Summary   ==> YES        YES    -> Include Job Summary (format = html)
          ==>             NO     -> No Job Summary (format = txt)
Format    ==> html       Data format for attachment
Carriage  ==> HTML_     ASCII/ASA/NONE (map ASA/MCH CC for text attachments)
          ==>             HTML/NONE (map ASA/MCH CC for html attachments)

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```

Note that the subject and message text for the email will be set to default values depending on the job data being downloaded. A SEND line command on the IOF Job Summary will display a panel for downloading the selected individual sysout data set:

```

Session D - Dallas-P-S2S-M4.ws - [24 x 80]
File Edit View Communication Actions Window Help
----- Email Sysout Data Set -----
COMMAND ==>

Enter HELP for a complete description of the IOF SEND facilities.

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

PC file name for attachment:
File Name ==> JOB.JOBUPLOD.J815710.2012-06-05@13.42.SYSOUT.SYSTSPRT.____102.txt

Format    ==> txt          Override default format of "txt"
          ==>             html    -> Create html output
          ==>             htmldata -> Data is already in html format
          ==>                                     (file suffix will be "html")
Carriage  ==> NONE        ASCII/ASA/NONE (map ASA/MCH CC for text attachments)
          ==>             HTML/NONE (map ASA/MCH CC for html attachments)

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```

Calling IOFSEND from Another Exec

The IOFSEND exec can be called from another exec to integrate IOF send capability into other application systems. Comprehensive error handling features are provided that produce meaningful messages whether the exec is invoked under ISPF, under TSO READY, or in TSO batch.

Here are a few examples:

If the calling exec is currently on the IOF Job Summary for a job and you want to send the entire job:

```
call iofsend 'to(john.smith@bigcorp.com)' ,  
            'from(mary.jones@bigcorp.com)' ,  
            'all'
```

The calling exec can also exclude certain sysouts (using IOF EXCLUDE commands) before calling IOFSEND with the ALL parm.

If you want to send an individual sysout data set based on its menu number (menu#):

```
call iofsend 'to(john.smith@bigcorp.com)' ,  
            'from(mary.jones@bigcorp.com)' ,  
            'menu('menu#')'
```

If the calling exec is currently on the IOF Job List or Output Group Display, it will normally be scrolling through a list of jobs (or Output Groups) and will have the menu number (menu#) for the desired job. It can then:

```
call iofsend 'to(john.smith@bigcorp.com)' ,  
            'from(mary.jones@bigcorp.com)' ,  
            'jesds' ,  
            'menu('menu#')'
```

Sending Output from a Batch Job

Use the IOFSEND batch procedure as the last step of a job to:

- Email a notification that the job has completed
- Email selected portions of the job's output

Some examples:

Adding the following step to a job will email a notification of the job completion along with an IOF Job Summary, which shows the return codes for all of the job steps.

```
//NOTIFY EXEC IOFSEND,TO='john.smith@bigcorp.com'
```

By using additional parms you can also choose to send along portions of the job output.

Adding the following step to a job will email a notification of the job completion along an html version of the IOF Job Summary and all of the job output. Individual sysouts can be selected from the html Job Summary much as they would be from the IOF Job Summary.

```
//SEND EXEC IOFSEND,TO='john.smith@bigcorp.com',DATA=ALL
```

Additional option for the DATA parm:

```
DATA=JESDS      Send only the JES2 system data sets
```

You can also specify IOFSEND parms as statements in a SYSIN data set:

```
//SEND EXEC IOFSEND
//SYSIN DD *
TO john.smith@bigcorp.com
FROM mary.jones@bigcorp.com
JESDS
```

This can be useful if you need to specify IOFSEND parms other than those accepted on the EXEC statement (TO, FROM, and DATA).

Note that each SYSIN record can only contain a single statement, which is specified as a keyword followed by one or more spaces and then (optionally) a value.

For more details enter HELP on the SEND interface panel.

A sample IOFSEND batch procedure:

```
//IOFSEND PROC TO=,FROM=,DATA=,DSNDS='your.iof.library.prefix'
//*
//* Send current job results using email. For simple applications
//* you can use the TO=, FROM=, and DATA= parms. For more complex
//* applications you should specify the parms in a SYSIN DD.
//*
//* DATA= Send just the IOF Job Summary
//* DATA=JESDS Add LOG, JCL and MESSAGES data sets
//* DATA=ALL Add all sysout data sets
//*
//* Enter HELP on the IOF SEND panel for complete details.
//*
//SEND EXEC PGM=IKJEFT1B,
// PARM='IOFSNDME TO(&TO) &DATA FROM(&FROM) '
//STEPLIB DD DISP=SHR,DSN=&DSNDS..LOAD
//SYSTSPRT DD SYSOUT=*
//SYSPROC DD DISP=SHR,DSN=&DSNDS..CLIST
//SYSHELP DD DISP=SHR,DSN=&DSNDS..HELP
//SYSTSIN DD DUMMY
```

The SNAPJOB Line Command

Use the SNAPJOB line command after setting up an IOF snap target data set (with the SS, SD, or SU command). This command will create a package exactly like the one created by SEND and store it in the current snap target data set. It has parms to control the content and format of the captured job output:

The default (with no parms) is to package the job in html format and include an IOF Job Summary in html format.

NOSUM	Don't include an IOF Job Summary
NODATA	Just include Job Summary with no sysouts
TXT	Create package in text format
INPUT	Include SYSIN data sets