IBM Software Group

IBM Developer for z Systems – for ISPF Developers

Module 6 – Remote Systems - ISPF 3.x and Batch Job Management



Jon Sayles: jsayles@us.ibm.comn

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UNIT

The IDz Workbench



Topics:

- z/OS Dataset Management
- Submit and Manage z/OS Jobs
- Issue TSO Commands From Host Emulation



Submitting Batch JCL Jobs

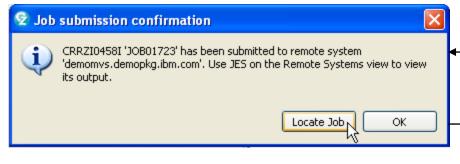
IDz has access to the JES queue

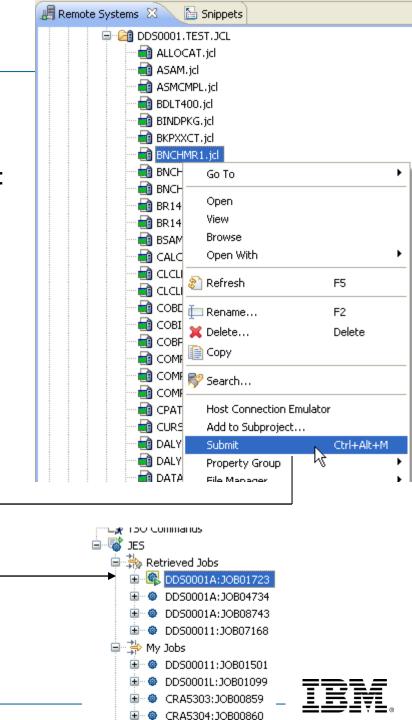
Compatible with JES 2 and JES 3

Can submit batch jobs a number of different ways:

- From Remote Systems explorer:
 - Expand a JCL library
 - Right-click over the .JCL PDS member
 - Select Submit
 - Or use the Hot-key combination
- ▶ After submitting the JCL you can access your batch job results inside the **JES** Filter **3** JES

If you are using IDz v8 you can automatically Locate your job

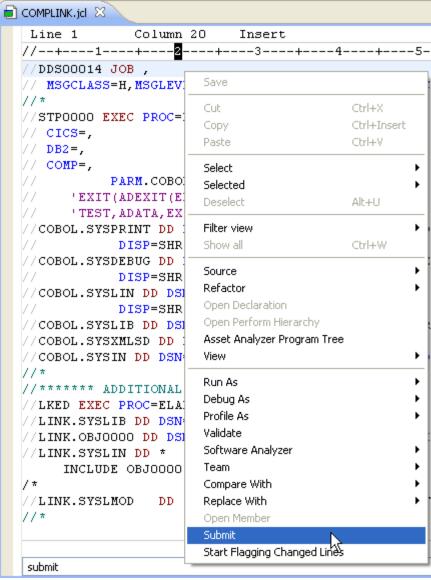


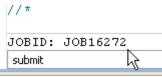


Submit Batch Jobs – while Editing JCL

You can also submit jobs from the IDz editor:

- With a JCL file opened in the editor:
 - Right-click, and from the Context Menu select Submit
 - Type Submit into the command prompt



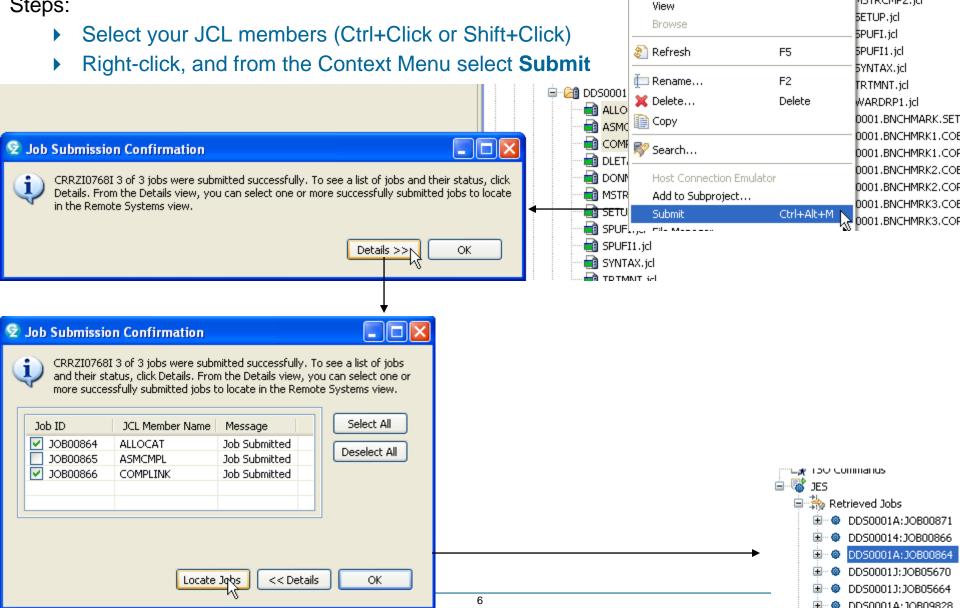


You can abbreviate: **SUD**



Submit Multiple JCL Jobs

You can select multiple jobs in RSE and *submit all selected*. Steps:



DDS0001.BNCHMARK.JCL

ASMCMPL.jcl COMPLINK.jcl

DLETALL.jcl

DONNA.jcl

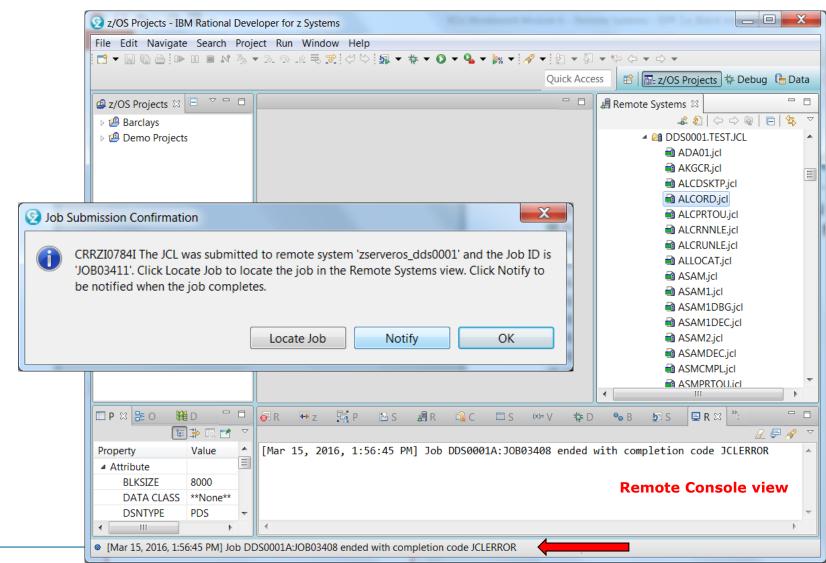
MSTRCMP2.icl

Go To

Open

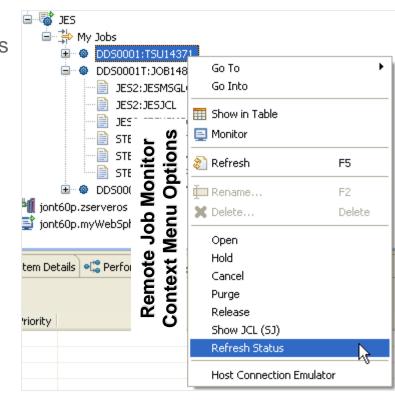
Job Notify

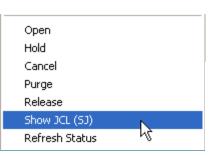
 You can ask IDz to Notify you when a job completes. The notification message will be on the bottom) of your Workbench. Note also that the Remote Console view will show job status information



The Remote Job Monitor and "My Jobs" Filter

- The Remote Job Monitor allows you to manage batch jobs from within IDz:
 - View submitted jobs
 - Select Refresh/F5 to see recently submitted jobs
 - As folder/sub-folder contents
 - In a table-like view
 - ▶ Open job step results in the Content Area
 - ▶ Cancel jobs
 - Not finished
 - Purge jobs
 - Remove the job results
 - ▶ Release jobs
 - Into the gueue when TYPRUN=HOLD
 - ▶ Refresh the job status
 - To find out if the job has ended



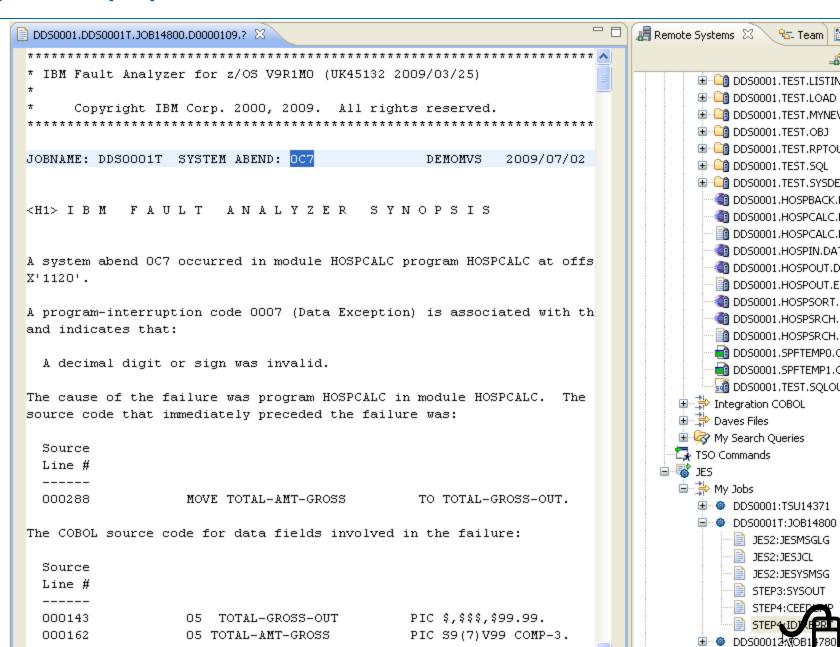


Show JCL – opens the original JCL dataset in the Editor

Note: IDz Job Filters are similar to the "Prefix" (PRE) functionality in SDSF

Showing Job Step Spool File Results

- Expand the Job folder
- Doubleclick an individual job step

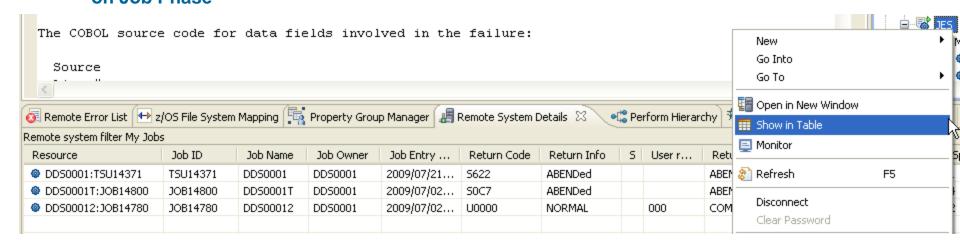


Show All Jobs in a Table Format

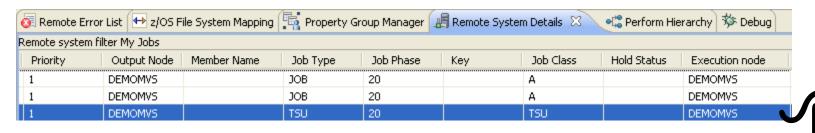
Right-click over the JES icon and select: Show in Table

- Can:
 - Scroll right/left to see different job summary stats
 - Sort job results by all column options in the table

- Organize and display jobs by:
 - Job Owner
 - Job Prefix
 - Job Output Class
 - Job Status
 - Job Class
- This allows you to do things like, aggregate active jobs (IMS regions, for instance) by sorting on Job Phase

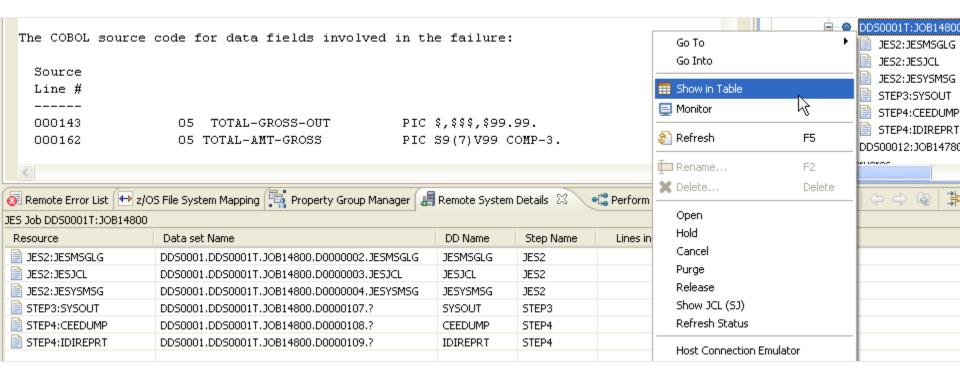


• Double-click an individual job to open the entire list dataset in the content area



Showing Job Step Results – in a Table Format

- 1. Select the individual job icon
- 2. Right-click and select Show in Table
- 3. Can sort job results by all column options in the table
- 4. Double-click an individual job step to open in the content area

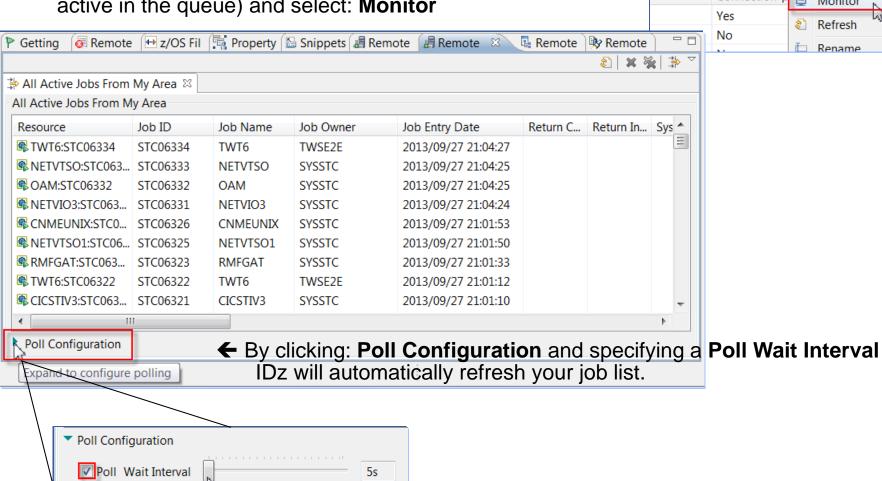


Note that your customization decisions are saved to your Workspace (i.e. They persist between IDz sessions)



Monitor Jobs in a Table Format (support for **ST**)

Right-click over any job filter (especially a filter for jobs that are active in the queue) and select: Monitor



Retrieved Jobs

TWT6:STC063

NETVTSO:STd

⊳ 👰 ∩ΔM·STC063

Connection-p

📕 Remote Monitor 🖫 Re

Yes

No

All Active Jobs From My Area

New

Go Into

Go To

Open in New Window

Show in Table

Monitor

Refresh

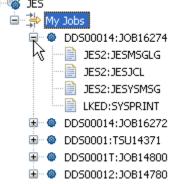
Rename



JES Job Filters

■ The MVS™ Job Entry System (JES) job filters are used to define the search that is done in JES for jobs.

(like My Datasets) the My Jobs filter shows all jobs you have submitted

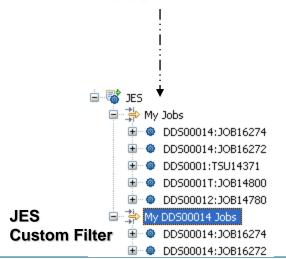


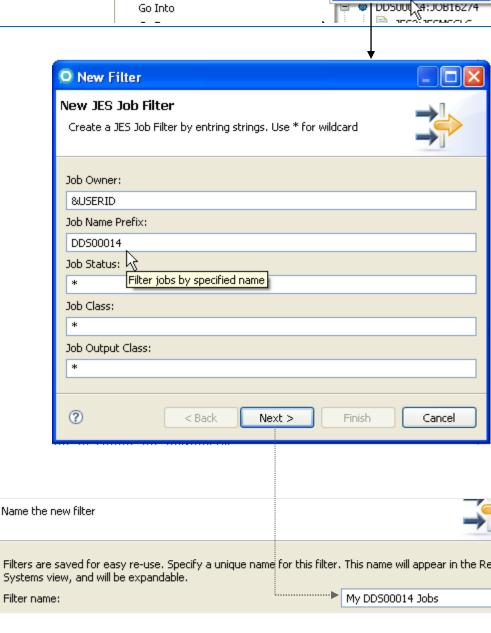
- You can create a custom JES filter, that allows you to customize your view of jobs using filters
- JES job filter search parameters include the following:
 - **▶** Job Owner
 - Job Prefix
 - **▶ Job Output Class**
 - Job Status
 - Job Class

See Slide notes on LIMIT_VIEW and providing Filters for JCL submitted by others

Create a Custom JES Job Filter

- Right-click over JES
 - ▶ Select New JES Job Filter...
- Specify any custom filtering properties:
 - Job Owner
 - &USERID = you
 - **▶ Job Name Prefix**
 - **▶** Job Output Class
 - Job Status
 - Job Class
- Click Next >
- Name the Job Filter
- Click Finish





New

🚅 150 Commanus

🧩 New JES Job Filter...

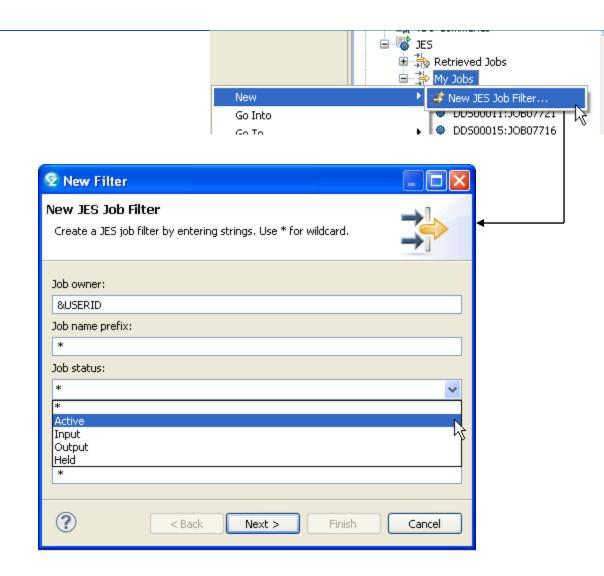


JES Filter Options

By Job Status:

* (all queues)

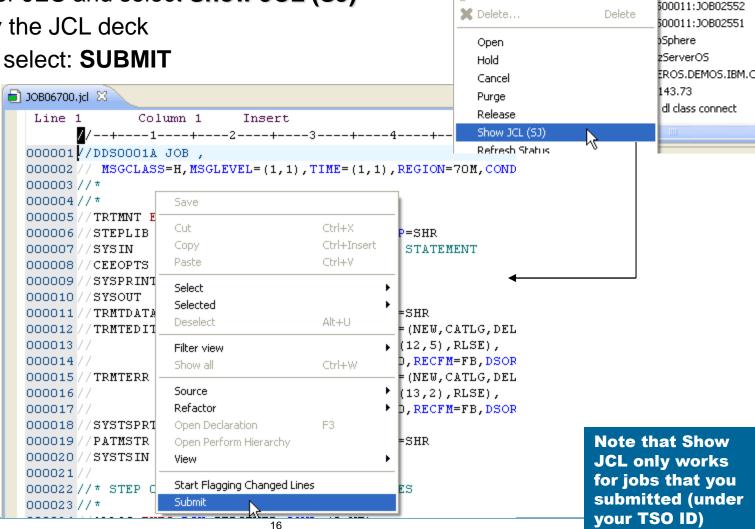
Active
Input Queue
Hold Queue
Output Queue





Show JCL (SJ) and Re-submitting a JOB

- You may end up with JCL errors, and wish to utilize IDz's SJ (Show JCL) to retrieve the original JCL for the job and save or re-submit it. To do this:
- Right-click over JES and select Show JCL (SJ)
- Analyze/Modify the JCL deck
- Right-click and select: SUBMIT
- Refresh the My Jobs filter



□ 🌃 JES

Go To

Go Into

Monitor

🚵 Refresh

Ename...

III Show in Table

F5

F2

\$0001:TSU06693

500011:JOB06568 500011:JOB05673

50001A:JOB03153

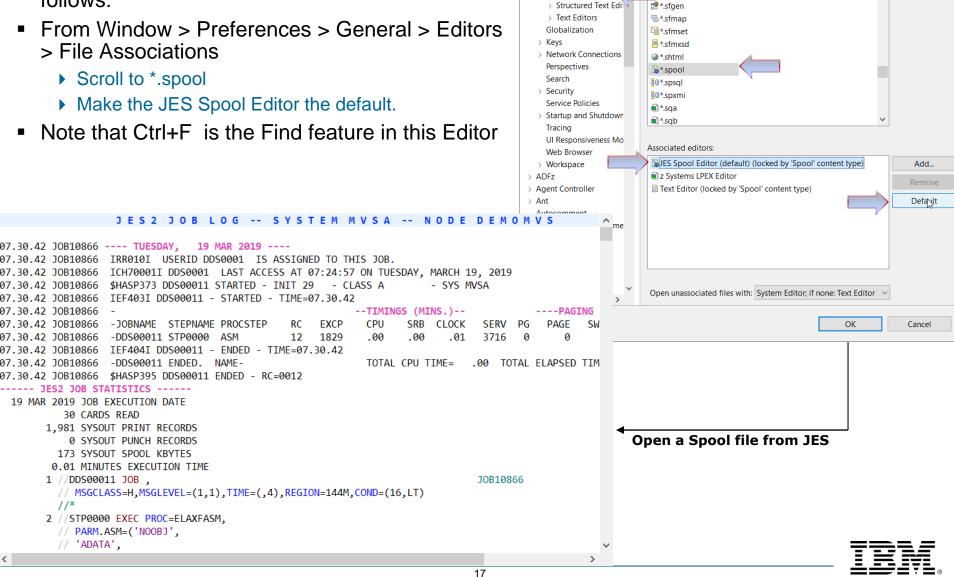
50001A:JOB03152 50001A:JOB05473

50001A:JOB05161

600011:JOB02553

The "Dedicated" JES Spool File Editor – IDz v14.3

Some developers like to use the dedicated Spool File Editor – which can be implemented as follows:



Preferences

type filter text

> Appearance

Editors

Capabilities

> Compare/Patch

Content Types

Autosave File Associations

General

File Associations

File types:

■ *.sbt

*.seaflow

*.segmap

*.server

*.sfesql

See 'Content Types' for content-type based file associations

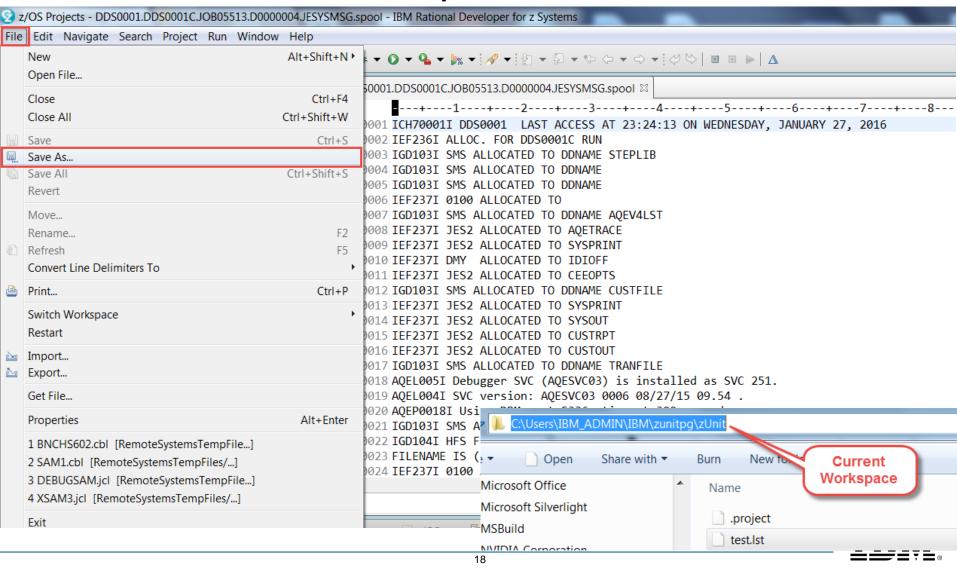
Add..

Remove

Copy JES Spool File Output – 1 of 2

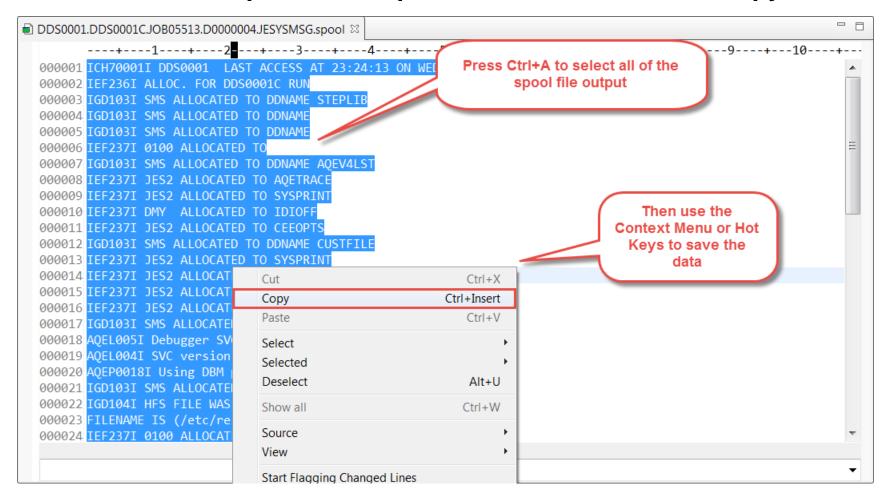
There are three ways to save JES Spool File output:

1. File / Save as menu – which provides access to local folders



Copy JES Spool File Output – 2 of 2

2. From within the spool file output, use Windows Select/Copy/Paste



3. You can use REXX and IDz's Menu Manager, to access SDSF "XDC" commands. Details here: https://www.ibm.com/developerworks/community/files/app#/file/77dd2381-e8fc-44f6-9f6c-4c003015f8c3

Open PDS Member From Within JCL

- Sometimes it's useful to be able to see a PDS member when you're editing JCL
 - ▶ Compile listings
 - Source
 - ▶ PARMLIB members
 - Etc.
- To do this:

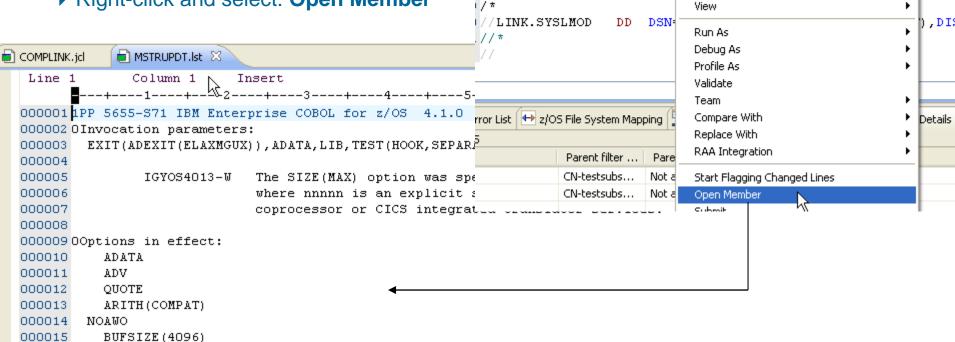
000016

000017

NOCICS

CODEDIGE / 11401

- Select the entire PDS member name
- ▶ Right-click and select: Open Member



COMP=,

PARM.COBOL=('ADATA', 'MAP', 'LIB',

//cobol.sysprint dd dsn=ddsooo1.bnchmark.Listing(mstru

Save

Cut

Copy

Paste

Select

Selected

Deselect

Filter view

Show all

Source

Refactor

Open Declaration

Open Perform Hierarchy

'TEST, ADATA, EXIT (ADEXIT (ELAXMGUX)')

'EXIT (ADEXIT (ELAXMGUX))',

DISP=SHR

DISP=SHR

DISP=SHR

DD DSN=DDS0

//COBOL.SYSDEBUG DD DSN=1

/COBOL.SYSLIN DD DSN=DDS

1//COBOL.SYSLIB DD DSN=DD9

//COBOL.SYSXMLSD DD DUMM

//COBOL.SYSIN DD DSN=DDS(

//****** ADDITIONAL JCL

LKED EXEC PROC=ELAXFLNI

LINK.SYSLIB DD DSN=CEE

LINK.OBJOOOO DD DSN=DD:

INCLUDE OBJOCCO

/LINK.SYSLIN DD *

PDT),

ISP=S

SP=SI

Ctrl+X

Ctrl+V

Alt+U

Ctrl+W

F3

Ctrl+Insert

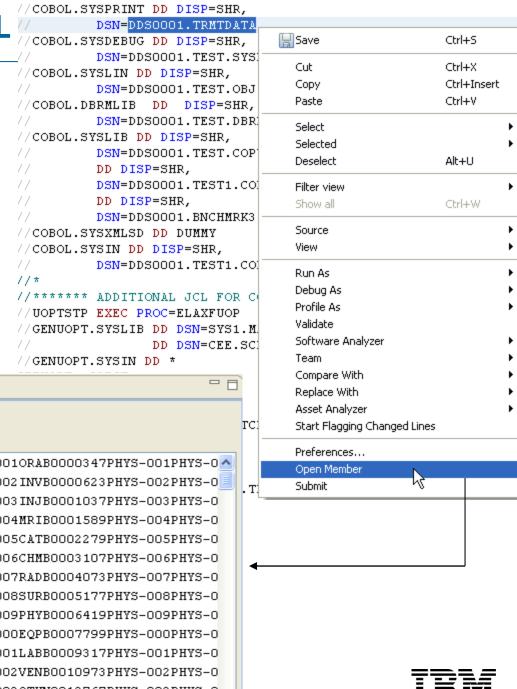
Open QSAM File – from within JCL

- In IDz you can also open QSAM files directly out of a JCL source file using **Open Member**:
 - ▶ Select the entire DSN
 - Right-click and select:Open Member

*TRMTSRCH.id

BNCHS602.cbl

 This opens the QSAM file in the Data File Editor



COMP=',''LIB'''

🔡 DDS0001.TRMZDATA 🔀

Navigating to DSNs – from within a JCL File

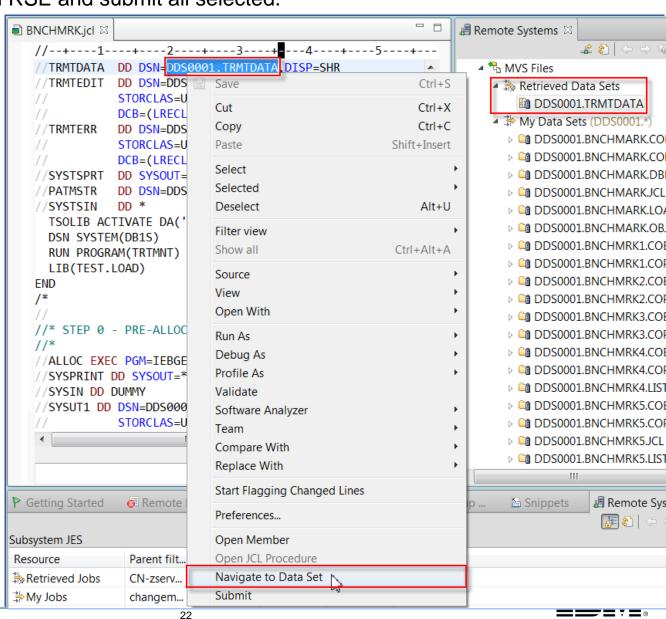
You can select multiple jobs in RSE and submit all selected.

Steps (from within the JCL):

- Select the DSN
- Right-click, and from the Context Menu select:

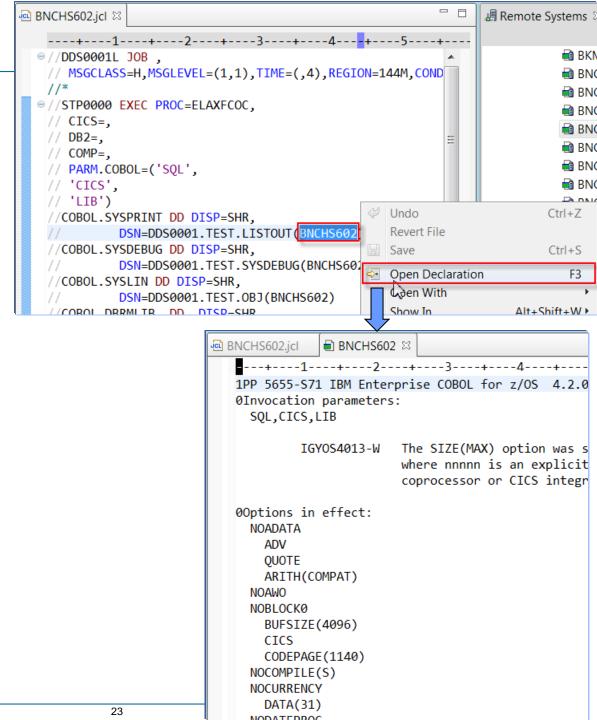
Navigate to Data Set

The DSN will show up under Retrieved Data Sets



Open Declaration

- Using the new JCL Editor you can open QSAM files out of a JCL source file using Open Declaration:
 - Select just the member name
 - Right-click and select:
 Open Declaration
- This opens the appropriate IDz editor for the z/OS Mapped File Type



Copy Job Output from JES

- You may wish to copy the output of a job to some file for save/reuse
 - Open the Job and from inside editor press:
 - Ctrl+Athen Ctrl+C
 - Open receiving file (in the example below Notepad but could be an PDS member or QSAM file with (LRECL=133)) and press: Ctrl+V

