

IBM Education Assistance for z/OS V2R1

Item: Spool Utilization Data

Element/Component: JES3



Agenda

- Trademarks
- Presentation Objectives
- Overview
- Usage & Invocation
- Appendix



Trademarks

- See url <http://www.ibm.com/legal/copytrade.shtml> for a list of trademarks.



Presentation Objectives

- Discuss changes made in JES3 V2R1 to support the capability to obtain spool allocation data for jobs.



Overview

- Need Addressed:

- Provide JES3 spool usage information for each job.
- Provide a way to know which JES3 jobs are using a spool extent.
- JES3 Dump Job (DJ) support for dumping jobs by spool data set.



Overview

- Solution:

- Implement a new mechanism to maintain tracking of spool allocations in-storage.
- Update *INQUIRY,Q,SP=spart,U command to utilize in-storage spool allocation data.
- Provide capability to display the number of track groups used by the job in the each spool data set using *INQUIRY,J=job,SD,U
 - U parameter added!
- Provide capability to display a list of jobs which are users of a spool data set or extent using *INQUIRY,Q,DD=ddn,U,N=nnn
 - U and N= parameters added!
- Provide capability to dump jobs from a spool data set using *START,DJ,DD=ddn
 - DD= parameter added!



Overview

- Benefit / Value:
 - Satisfies customer requirements.
 - Provides a robust spool delete solution by allowing the system programmer or operator to:
 - Identify the jobs that need to be removed from an extent to be deleted without having to initiate the spool delete.
 - Dump the jobs from an extent to be deleted before initiating the spool delete.



Usage & Invocation

- The *INQUIRY,J command has been updated to display information about a job's spooled data.
 - The U (Usage) parameter has been added to display the distribution of a job's data across spool extents.
 - The U parameter is valid for both the SD and SH versions of the command.
- *INQUIRY,J=job,SD,U
 - Displays extent names and track group counts for ALL extents that contain data from the specified job.
- *INQUIRY,J=job,SH,U
 - Displays extent names and track group counts for those extents in SPOOL HOLD status that contain data from the specified job.



Usage & Invocation

- V1R13 Example: ***I,J=WRITRECS,SD**

```
IAT8674 JOB WRITRECS (JOB00016) P=02 CL=W OUTSERV (PENDING WTR)
IAT8677 JOB WRITRECS (JOB00016) DD=SPOOL2, SPOOL3, SPOOL4, SPOOL5
IAT8699 INQUIRY ON JOB STATUS COMPLETE, 1 JOB DISPLAYED
```

- V2R1 Example: ***I,J=WRITRECS,SD,U**

```
IAT8674 JOB WRITRECS (JOB00016) P=02 CL=W OUTSERV (PENDING WTR)
IAT8750 JOB WRITRECS (JOB00016) DD=SPOOL2 4 TRKGPS
IAT8750 JOB WRITRECS (JOB00016) DD=SPOOL3 3 TRKGPS
IAT8750 JOB WRITRECS (JOB00016) DD=SPOOL4 4 TRKGPS
IAT8750 JOB WRITRECS (JOB00016) DD=SPOOL5 4 TRKGPS
IAT8699 INQUIRY ON JOB STATUS COMPLETE, 1 JOB DISPLAYED
```



Usage & Invocation

- The *INQUIRY,Q command displays information about the spool extent (or extents) specified on the DD=ddn parameter.
 - The U= and N= parameters have been added to display a list of jobs which have data on the specified extents.
 - Similar to *INQUIRY,Q,SP=spart command, except focused on extents rather than partitions.



Usage & Invocation

- *INQUIRY,Q,DD=ddn,U,N=nnn

- U

- Displays a sorted list of the largest spool space users for the specified spool extents.
 - A maximum of eight extent names can be specified when you use the U parameter.
 - Track group totals will be displayed for each extent specified.

- N=ALL or nnn or 10

- Specifies the number of jobs for which status information is to be displayed. If ALL is specified, the status of all jobs in the job queue are displayed. If this parameter is omitted, the default is 10 jobs.



Usage & Invocation

- V1R13 Example: ***I,Q,DD=SPOOL2,U,N=ALL**
 –U and N parameters are ignored.

```
IAT8513 SPOOL2      PART1          120 GRPS,      106 LEFT ( 88%)
IAT8611 INQUIRY ON SPOOL DATA SET STATUS COMPLETE
```

- V2R1 Example: ***I,Q,DD=SPOOL2,U,N=ALL**

```
IAT8752 SPOOL2      TOTAL IN USE          14 TRKGPS
IAT8752 SPOOL2      TOTAL IN USE BY JES3      0 TRKGPS
IAT8752 SPOOL2      TOTAL IN USE BY JOBS      14 TRKGPS
IAT8753 SPOOL2      USERS FOUND= 0 JES3  3 JOBS;  3 DISPLAYED
IAT8754 SPOOL2      : JOB PRTSIMO2 (JOB00021)      8 TRKGPS,      7%
IAT8754 SPOOL2      : JOB WRITRECS (JOB00023)      4 TRKGPS,      3%
IAT8754 SPOOL2      : JOB RUNON      (JOB00018)      2 TRKGPS,      2%
IAT8755 INQUIRY ON SPOOL DATA SET USAGE COMPLETE
```



Usage & Invocation

- The *START,DJ,DD=*ddn* command dumps all jobs that have data on a specified spool extent.
 - The DD=*ddn* is a new parameter that allows the caller to specify one or more spool extents.
 - The DD=*ddn* parameter also will be allowed for *START,DJ commands with the RESET parameter specified.
 - The Dump Job DSP must have been called for Out Mode via the *CALL,DJ,OUT= command.
 - If the Dump Job DSP was started for Input Mode via the *CALL,DJ,IN= command, the DD= parameter on the *START command will be flagged as an unrecognized operand (IAT7203).



Usage & Invocation

- V1R13 Example: ***START,DJ,DD=SPOOL3**
–DD= parameter not recognized.

```
IAT7203 DJ05BA (JOB00014): UNRECOGNIZED OPERAND: DD
IAT7220 DJ05BA (JOB00014): FUNCTION COMPLETE ON UNIT 05BA
IAT7228 ISSUE START OR CANCEL FOR DJ (JOB00014) (05BA)
```

- V2R1 Example: ***START,DJ,DD=SPOOL3**

```
IAT7229 DJ05BA (JOB00027): SUCCESSFULLY DUMPED JOB RUNON (JOB00018)
IAT7450 JOB RUNON (JOB00018) PURGED
IAT7229 DJ05BA (JOB00027): SUCCESSFULLY DUMPED JOB WRITRECS (JOB00023)
IAT7450 JOB WRITRECS (JOB00023) PURGED
IAT7230 DJ05BA (JOB00027): DUMP PROCESSING COMPLETE FOR DD NAME SPOOL3
IAT7253 DJ05BA (JOB00027): 0000002 JOBS SUCCESSFULLY DUMPED TO TAPE
IAT7220 DJ05BA (JOB00027): FUNCTION COMPLETE ON UNIT 05BA
IAT7228 ISSUE START OR CANCEL FOR DJ (JOB00027) (05BA)
```



Appendix

- JES3 documents updated:
 - z/OS V2R1.0 JES3 Commands (SA32-1008)
 - z/OS V2R1.0 JES3 Messages (SA32-1007)

