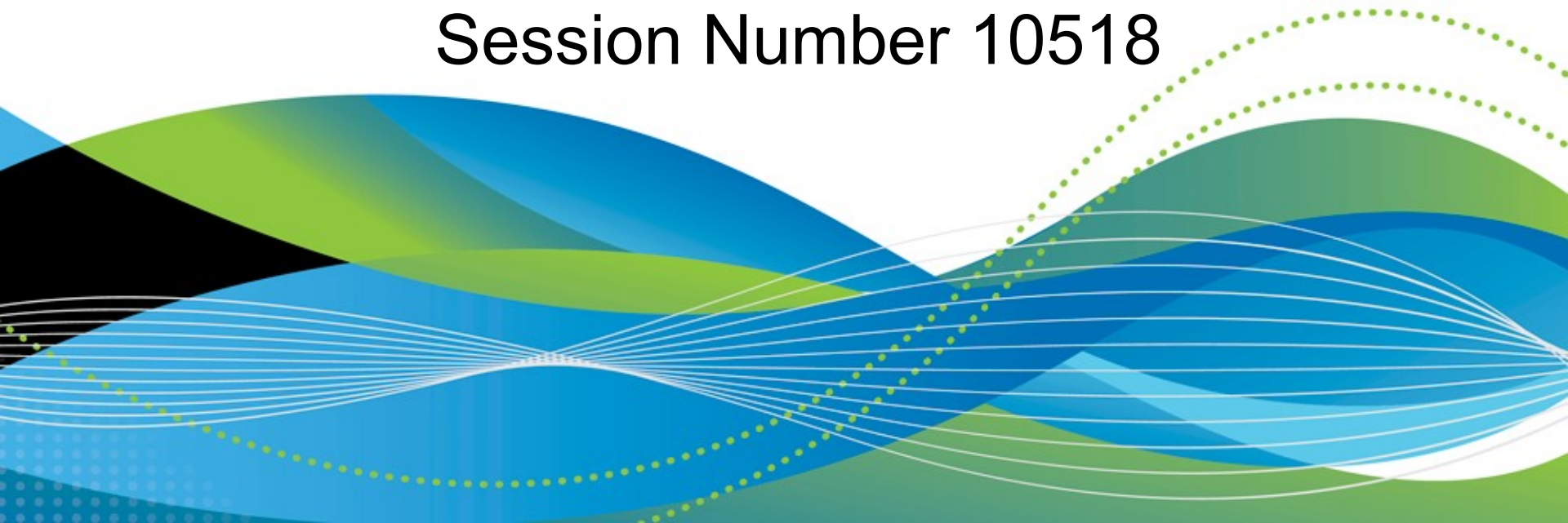


WebSphere Application Server PotPourri

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David Follis



Taking Action on Java Out Of Memory (OOM)

- The JVMTI (Tool Interface) provides a way to take action when various events occur
- One such event is 'heap resource exhaustion'
- Function added to WAS to register a JVMTI exit and optionally take some action when an Out Of Memory occurs
- Controls:
 - `ras_java_oom_action=NONE` | WTO | SVCDUMP
 - `ras_java_oom_interval=600` | # of seconds
 - `MODIFY server,JAVAOOM,INTERVAL=` | `ACTION=` | `RESET`
 - `MODIFY server,DISPLAY,JAVAOOM`
- BBOO0404E JVM OUT OF MEMORY IN ASID=nnnnX
- Available in 8.0.0.3 (soon) and in 7.0.0.x (eventually)

John Hutchinson



Writing DB2 Accounting (SMF Type 101) Records for each Commit

- **DB2:**

Z-Parms: Specify **ACCUMACC = NO** - Accounting interval (default = 10 intervals)

-START TRACE (ACCTG) CLASS (1,2,3) DEST (SMF)

- **WAS Data sources > [datasource] > Custom properties:**

AccountingInterval = COMMIT

- DB2 writes record each time application commits work. (If no open cursors)
- If open cursors, records written at the next valid accounting interval.

If not "**COMMIT**", records produced when data source connection is terminated

Mike Loos



Unix find command...

- Can be used to find all files in a tree that have been changed since a date/time. Example:

```
:/wasv8config/s8cell/s8dmnode  
-> touch -t 201203061010 reference.file
```

```
:/wasv8config/s8cell/s8dmnode  
-> date  
Wed Mar 7 10:12:25 EST 2012
```

```
:/wasv8config/s8cell/s8dmnode  
-> touch -t 201203061010 reference.file
```

```
:/wasv8config/s8cell/s8dmnode  
-> avim DeploymentManager/profiles/default/config/cells/s8cell/security.xml  
<?xml version="1.0" encoding="UTF-8"?>  
.  
. many more lines of xml....  
.  
F" simpleAuthConfig="system.ICSF">
```

```
"/SYSC/tmp/security.xml_tmp_MJLOOS_07_03_12_10:18:41" 426 lines, 52813  
characters written  
:/wasv8config/s8cell/s8dmnode
```

Unix find command...

```
:/wasv8config/s8cell/s8dmnode  
-> find . -newer reference.file  
.  
./DeploymentManager/profiles/default/config/cells/s8cell/security.xml  
./DeploymentManager/profiles/default/OTiS/log  
./DeploymentManager/profiles/default/OTiS/log/log128.dat  
./DeploymentManager/profiles/default/OTiS/log/log129.dat  
:/wasv8config/s8cell/s8dmnode  
->
```

BPXMTEXT USS Command

- bpxmtext can be used to find information on error codes.
 - example:

```
:/wasv8config/s8cell/s8dmnode  
-> unmount /wasv8config/s8cell/s8dmnode  
FOMF0504I unmount error: 72 58801AB  
EBUSY: The resource is busy  
JRFsInUse: The requested file system is still in use
```

```
:/wasv8config/s8cell/s8dmnode  
-> bpxmtext 58801AB  
BPXFSUMT 05/14/10  
JRFsInUse: The requested file system is still in use
```

Action: A normal unmount was requested for the file system. There is at least one process still using the file system, so the request to unmount cannot be honored.

```
:/wasv8config/s8cell/s8dmnode  
->
```

Mike Stephen



Versions, Dates, and Service Levels...

	GA	End of Marketing	End of Support
Version 6.0	3/25/2005	2/23/2009	9/30/2010
Version 6.1	6/30/2006	7/25/2011	9/30/2012
Version 7	9/26/2008		
Version 8	6/17/2011		

- If delivered by Stack Products, EOS is the Stack Product
- Service Level Naming Convention Change
 - V6.1; V7 – even #'s z/OS ONLY, odd #'s common
 - V8 – all levels are common
- <http://www.ibm.com/support/docview.wss?uid=swg21570083>
- http://www.ibm.com/software/support/lifecycle/index_a_z.html

What's Slowing WebSphere Down?

- RACF AUDIT was active for the following classes:
 - DIRACC, DIRSRCH, FSOBJ, FSSEC - AUDIT ALL.
 - None of these classes were RACLISTed
 - Issued command SETR LOGOPTIONS(NEVER(DIRACC))
 - for all above classes to turn off auditing
 - Following the change
 - Portal restarted in 4 minutes compared to 30 minutes
 - F ZFS,QUERY,ALL showed avg access time 0.003 instead of 1.6
 - CPU usage returned to normal which means that the zAAPs were being used instead of the GCP.
 - When running a load the GCP% is now close to zero.
- "The total response times are now excellent"**

Wrapup



WebSphere Application Server on z/OS



Session	Day	Time	Room	Title	Speaker
10560	Monday	9:30	International Ballroom F	Version 8 – Overview and Update	David Follis
10580	Monday	11:00	Cottonwood A/B	Back to Basics	Mike Loos
10633	Wednesday	1:30	International Ballroom C	Installation Manager – The Cross Platform Installer for WAS	Mike Loos
10561	Wednesday	3:00	Cottonwood A/B	Version 8 – New z/OS Exploitation Features	David Follis
10562	Thursday	11:00	Cottonwood A/B	Batch Update	John Hutchinson
10581	Thursday	1:30	Cottonwood A/B	Getting Started with Version 8 – Part Zero!	Mike Loos
10518	Thursday	6:00	Cottonwood A/B	Potpourri	Anybody
10516	Friday	8:00	Dogwood B	Level 2 Update	Mike Stephen
10563	Friday	9:30	Pine	Hands on Lab	Mike Stephen, David Follis, Ken Irwin

Comments? Suggestions?

Was this a good set of sessions?

What did you like?

What did you not like?

Should we repeat these next time or consolidate?

Should we keep the 'back to basics' sessions?

Any sessions you would like to see?

Any suggestions for the lab?

Anyone else care to share any WAS on z/OS experiences?

Any questions about anything?

Any final suggestions/complaints/comments?

Anything? Anybody?