


Known incompatibilities with JVM versions, options and parameters

Information

Environment
Affects Versions: all

Known problem							
The following matrix provides information about problems with special JVM versions and options on different OS.							
 Please keep in mind that this matrix only provides information about tested OS, JVM version and JVM options. There might be further issues with JVMs and JVM options on other OS. Additionally special combination of JVM options might also harm the SUD.							
Sun / Oracle JVM							
VM Vendor	VM Version	VM option	OS	Issues	Memory Dump	Thread Dump	Class Unloading
Sun	1.4.2_00, 1.4.2_14, 1.4.2_09, 1.4.2_08, 1.4.2_01		Suse Linux		crashes SUD		
Sun	1.4.2_07, 1.4.2_02, 1.4.2_16, 1.4.2_13, 1.4.2_06,	-XX:+CMSCClassUnloadingEnabled	Suse Linux		crashes SUD		
Sun	1.4.2_*	-XX:+CMSCClassUnloadingEnabled			Selective memory dump does not contain data		
Sun	1.4.2_08, 1.4.2_11, 1.4.2_09, 1.4.2_15, 1.4.2_12	-XX:+UseParallelGC	Windows XP SP2/Linux		crashes SUD		
Sun	1.4.2_08	-XX:+AggressiveHeap	Windows XP SP2		OOM error		
Sun	1.4.2_08	-XX:+UseTLAB	Windows XP SP2				
Sun	1.4.2_08	-Xincgc	Windows XP SP2				
Sun	1.5.0_00/01/02 32-bit and 64-bit		Linux				

Sun	1.5.0_10	-Xincgc	Windows XP SP2		crashes dump		
Sun	1.5.0_10	-XX:+UseConcMarkSweepGC (-Xconcg) or -XX:+AggressiveHeap or -Xincgc or -XX:+RequireSharedSpaces	Windows XP SP2		crashes dump		
Sun	1.5.0_10	-XX:+TraceClassLoading	Windows XP SP2		crashes JVM and wants to send a bug report to M\$		
Sun	1.5.0_10	-XX:+UseTLAB	Windows XP SP2		Requested array size exceeds VM limit		
Sun	1.5.x	-XX:+TraceClassUnloading or -XX:+PrintGCDetails	unknown				
Sun	1.5.x	-XX:+UseConcMarkSweepGC	unknown		not available		
Sun	1.5.x	-Xdebug	unknown				
Sun	1.5.0_13	-XX:+UseConcMarkSweepGC	Linux x64			crash	
Sun	1.5.0_20, 1.5.0_21		any	random crashes due to a bug in JVMTI interface			
Sun	1.6.x	-XX:+TraceClassLoading	Suse 9.x				
Sun	1.6.0_14		Solaris_x86				
Sun	1.6.0_18, 1.6.0_19, 1.6.0_20		any	random crashes due to a bug in JVMTI interface			
Sun	1.6.0_24 .26 / .29 / .30 most likely .31		any	general unstable JVM / can crash on memdumps with capture string values enabled			
Sun	1.6.x	-verbose	any	seg fault due to bug in verbose logging of jvm workaround implemented in dynaTrace 5.5			

Oracle	1.7.x	-verbose	any	seg fault due to bug in verbose logging of jvm workaround implemented in dynaTrace 5.5				
Oracle	1.7.0_25 - 1.7.0_100		Linux	seg fault on taking automatic OOM memory dump because of JVM bug: JD K-6584008 Resolved in 1.7.0_101	crash			

JRockit JVM

VM Vendor	VM Version	VM option	OS	Issues	Memory Dump	Thread Dump	Class Unloading	Application Startup	HotSensor Placement
Bea	1.5.0_08 (64-bit), 1.5.0_10 (64-bit), 1.5.0_11 (64-bit)		Suse Linux		crash				
Bea	1.4.2_08 (R24.5)		all		incomplete				
Bea	1.5.0_04-b05 (R26.0)/1.5.0_06-b05 (R26.4)		Linux/Windows		freeze VM				
Bea	1.5.0_08 (R27.1)		all		extended: lasts very long simple: freeze on startup (JLT-5513)				
Bea	1.5.0_10, 1.6.0 (32 + 64-bit) (R27.2)		all		simple and extended crash (GC after untagging) after 2nd dump	freeze on startup			warning in client but no problems with JVM 6
Bea	1.5.0_11, 1.6.0_01 (32 + 64-bit) (R27.3)		all		simple and extended crash (GC after untagging) after 2nd dump	freeze on startup (could not reproduce with JVM 6)			warning in client but no problems with JVM 6
Bea	1.6.0_01 (32 + 64-bit) (R27.3.1)		all		simple and extended crash (GC after untagging) after 2nd dump				warning in client but no problems
Bea	1.6.0_02 (R27.4)		all						warning in client but no problems
Bea	1.6.0_03 (R27.5)		all						warning in client but no problems
Bea	1.5.0_10 (R27.2)	-Xgcprio:pausetime or -Xgc:gencon	Windows XP SP2		core dump				
Bea	1.5.0_10 (R27.2)	-Xgc:singlecon	Windows XP SP2						
Bea	all R27.x	all	all		Potential VM freeze for simple/extended dump. Client warns.				
Bea	1.4.2 (R24.4)			Autosensors and CPU Sampling disabled - might crash JVM.					

IBM JVM

VM Vendor	VM Version	VM option	OS	Issues	Memory D
IBM	1.4.2 SR1	-Xdisableexplicitgc	Windows		Could not g Dump begin
IBM	1.4.2 SR1	-Xnocompactexplicitgc or -Xgthreads5	Windows		Sometimes sometimes
IBM	1.4.2 SR7+		all		
IBM	1.4.2 SR7+ 64 bit		all		
IBM	1.4.2 x64 SR < 11		linux		dump will b
IBM	all 1.4.2 (32bit)	all	all		differing val
IBM	all 1.4.2		all	Autosensors and CPU Sampling disabled due to potential deadlock	
IBM	1.4.2 (SR9)		AIX		dump silent
IBM	1.5.0 SR5+ / 1.6.0 GA+		all		
IBM	below 1.5.0 SR7 / 1.6.0 SR1		all		
IBM	all 1.5		all		dump incon
IBM	1.5.0		all		dump incon tag is NULL
IBM	1.5.0 (SR2)		Windows (32bit)	JVM might hang	
IBM	1.6.0.SR9 <FP3		all		
IBM	1.6.0 (SR10)		AIX		dump may : —JvmtiExt p(): Could r elements (JVMTI_ER
IBM	1.6.0.SR11 (64bit/32bit untested)	n/a	Linux (maybe Windows)	Memorydump triggered on out of memory exception does not work	out of mem description string
IBM	1.6.0 SR1_FP1	-Xshareclasses:name=webspherev80	Linux/windows	Agent crashes at startup, need to set: -Xshareclasses:none	