

Project : aragozin

We introduce some terms for avoiding confusions.

- **Explicit version declaration in Maven:** a library version is declared as a hard-coded value in version tag, e.g., `<version>2.5</version>`.
- **Implicit version declaration in Maven:** a library version is declared as a referenced value in version tag through a declared property, e.g., `<version>${guava.version}</version>`.
- **Inconsistent library:** a library whose multiple versions are used in multiple modules of a project; e.g., module A declares guava 2.5 but module B declares guava 2.6.
- **False consistent library:** a library that is used in multiple modules of a project with the same version declared separately; e.g., module A declares guava 2.5 explicitly and module B declares guava 2.5 explicitly. Therefore, such a consistency is likely to turn into inconsistency when there is an incomplete library update.

I. Overview

Your project have 3 inconsistent libraries.

II. Inconsistent Libraries

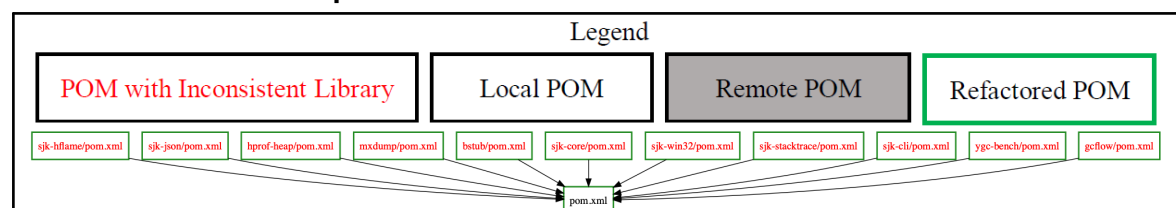
1. junit:junit

The distinct versions are 4.10, 4.11.

Index	Module	Type	Property	Version
1	sjk-hflame	explicit	NA	4.11
2	sjk-win32	explicit	NA	4.10
3	mxdump	explicit	NA	4.11
4	hprof-heap	explicit	NA	4.11
5	sjk-stacktrace	explicit	NA	4.11
6	sjk-json	explicit	NA	4.11
7	bstub	explicit	NA	4.10
8	gcfLOW	explicit	NA	4.11
9	ygc-bench	explicit	NA	4.11
10	sjk-cli	explicit	NA	4.11
11	sjk-core	explicit	NA	4.11

Harmonization Recommendation

Inheritance Relationship of POMs in All Related Modules



The pom in red references the property value declared in the pom in green.

The inconsistent library versions in Modules 1-11 are harmonized into version 4.13-beta-2.

Harmonization Effort

Index	Module	NA (NAC)	NDA (NDAC)	NMA (NMAC)
1	sjk-hflame	0	0	0
2	sjk-win32	0	0	0
3	mxdump	0	0	0
4	hprof-heap	8(12)	0(0)	6(10)
5	sjk-stacktrace	11(18)	0(0)	9(16)
6	sjk-json	0	0	0
7	bstub	0	0	0
8	gcflow	1(7)	0(0)	1(7)
9	ygc-bench	1(1)	0(0)	1(1)
10	sjk-cli	0	0	0
11	sjk-core	4(10)	0(0)	4(10)

NA (Number of APIs): the number of called library APIs in one module.

NAC (Number of API Calls): the number of library API calls in one module.

NDA (Number of Deleted APIs): the number of called library APIs that are deleted in the recommended library version.

NDAC (Number of Deleted API Calls): the number of library API calls that are deleted in the recommended library version.

NMA (Number of Modified APIs): the number of called library APIs whose call graphs (A control flow graph which represents calling relationships between subroutines in the library) are modified in the recommended library version.

NMAC (Number of Modified API Calls): the number of library API calls to modified library APIs.

Files related:

Module	File	Type	API	
hprof-heap	hprof-heap/src/test/java/org/gridkit/jvmtool/heapdump/io/PagedVirtualMemoryTest.java	Modified	org.junit.Assert.fail(java.lang.String)	
	hprof-heap/src/test/java/org/gridkit/jvmtool/util/BitMapTest.java	Modified	org.junit.Assert.assertTrue(boolean)	
	hprof-heap/src/test/java/org/netbeans/lib/profiler/heap/BaseHeapTest.java	Modified	org.junit.Assert.assertEquals(java.lang.Object, java.lang.Object)	
	hprof-heap/src/test/java/org/netbeans/lib/profiler/heap/OffsetMapperTest.java		Modified	org.junit.Assert.assertTrue(boolean)
				org.junit.Assert.assertEquals(long, long)
hprof-heap/src/test/java/org/gridkit/jvmtool/heapdump/HeapPathParserTest.java	Modified	org.junit.Assert.fail(java.lang.String)		
sjk-stacktrace	sjk-stacktrace/src/test/java/org/gridkit/jvmtool/stacktrace/StackTraceReaderTest.java	Modified	org.junit.rules.TestName.getMethodName()	
			org.junit.Assert.assertEquals(java.lang.String, java.lang.Object, java.lang.Object)	
			org.junit.Assert.fail(java.lang.String)	
sjk-stacktrace/src/test/java/org/gridkit/jvmtool/stacktrace/analytics/FilterParserCorpusTest.java	Modified	org.junit.Assert.assertEquals(long, long)		

sjk-stacktrace	sjk-stacktrace/src/test/java/org/gridkit/jvmtool/codecs/stacktrace/ThreadEventReaderTest.java	Modified	org.junit.rules.TestName.getMethodName()
			org.junit.Assert.assertEquals(java.lang.String,java.lang.Object,java.lang.Object)
			org.junit.Assert.fail(java.lang.String)
	sjk-stacktrace/src/test/java/org/gridkit/jvmtool/stacktrace/StackTreeCoderTest.java	Modified	org.junit.Assert.assertEquals(long,long)
	sjk-stacktrace/src/test/java/org/gridkit/jvmtool/stacktrace/RegExMicrobenchmark.java	Modified	org.junit.rules.TestName.getMethodName()
gcflow	gcflow/src/test/java/org/gridkit/jvmtool/gcflow/GcKnowledgeBaseCheck.java	Modified	org.junit.Assume.assumeTrue(boolean)
ygc-bench	ygc-bench/src/test/java/org/gridkit/benchmark/gc/YoungGcStarter.java	Modified	org.junit.Assert.assertTrue(boolean)
sjk-core	sjk-core/src/test/java/org/gridkit/jvmtool/CliCheck.java	Modified	org.junit.Assert.assertArrayEquals(java.lang.Object[],java.lang.Object[])
			org.junit.Assert.assertEquals(java.lang.Object,java.lang.Object)
	sjk-core/src/test/java/org/gridkit/jvmtool/cmd/StackSampleAnalyzerCmdTest.java	Modified	org.junit.rules.ExpectedException.none()

The inconsistent library versions in Modules 1-11 are harmonized into version 4.13-beta-1.

Harmonization Effort

Index	Module	NA (NAC)	NDA (NDAC)	NMA (NMAC)
1	sjk-hflame	0	0	0
2	sjk-win32	0	0	0
3	mxdump	0	0	0
4	hprof-heap	8(12)	0(0)	2(3)
5	sjk-stacktrace	11(18)	0(0)	7(12)
6	sjk-json	0	0	0
7	bstub	0	0	0
8	gcflow	1(7)	0(0)	1(7)
9	ygc-bench	1(1)	0(0)	0(0)
10	sjk-cli	0	0	0
11	sjk-core	4(10)	0(0)	2(8)

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NMAC (Number of Modified API Calls): the number of library API calls to modified library APIs.

Files related:

Module	File	Type	API
hprof-heap	hprof-heap/src/test/java/org/netbeans/lib/p rofiler/heap/BaseHeapTest.java	Modified	org.junit.Assert.assertEquals(java.lang.Object, java.lang.Object)
	hprof-heap/src/test/java/org/netbeans/lib/p rofiler/heap/OffsetMapperTest.java	Modified	org.junit.Assert.assertEquals(long,long)
sjk-stacktrace	sjk-stacktrace/src/test/java/org/gridkit/jvmt ool/stacktrace/StackTraceReaderTest.java	Modified	org.junit.rules.TestName.getMethodName()
			org.junit.Assert.assertEquals(java.lang.String, java.lang.Object,java.lang.Object)
	sjk-stacktrace/src/test/java/org/gridkit/jvmt ool/stacktrace/analytcs/FilterParserCorpu sTest.java	Modified	org.junit.Assert.assertEquals(long,long)
	sjk-stacktrace/src/test/java/org/gridkit/jvmt ool/codec/stacktrace/ThreadEventReader Test.java	Modified	org.junit.rules.TestName.getMethodName()
			org.junit.Assert.assertEquals(java.lang.String, java.lang.Object,java.lang.Object)
	sjk-stacktrace/src/test/java/org/gridkit/jvmt ool/stacktrace/StackTreeCoderTest.java	Modified	org.junit.Assert.assertEquals(long,long)
sjk-stacktrace/src/test/java/org/gridkit/jvmt ool/stacktrace/RegExMicrobenchmark.jav a	Modified	org.junit.rules.TestName.getMethodName()	
gcflow	gcflow/src/test/java/org/gridkit/jvmtool/gcfl ow/GcKnowledgeBaseCheck.java	Modified	org.junit.Assume.assumeTrue(boolean)
sjk-core	sjk-core/src/test/java/org/gridkit/jvmtool/Cl iCheck.java	Modified	org.junit.Assert.assertArrayEquals(java.lang.O bject[],java.lang.Object[])
			org.junit.Assert.assertEquals(java.lang.Object, java.lang.Object)

The inconsistent library versions in Modules 1-11 are harmonized into version 4.11.

Harmonization Effort

Index	Module	NA (NAC)	NDA (NDAC)	NMA (NMAC)
1	sjk-hflame	0	0	0
2	sjk-win32	0	0	0
3	mxdump	0	0	0
4	hprof-heap	8(12)	0(0)	0(0)
5	sjk-stacktrace	11(18)	0(0)	0(0)
6	sjk-json	0	0	0
7	bstub	0	0	0

8	gcflow	1(7)	0(0)	0(0)
9	ygc-bench	1(1)	0(0)	0(0)
10	sjk-cli	0	0	0
11	sjk-core	4(10)	0(0)	0(0)

NA (Number of APIs): the number of called library APIs in one module.

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NMAC (Number of Modified API Calls): the number of library API calls to modified library APIs.

The inconsistent library versions in Modules 1-11 are harmonized into version 4.13.

Harmonization Effort

Index	Module	NA (NAC)	NDA (NDAC)	NMA (NMAC)
1	sjk-hflame	0	0	0
2	sjk-win32	0	0	0
3	mxdump	0	0	0
4	hprof-heap	8(12)	0(0)	2(3)
5	sjk-stacktrace	11(18)	0(0)	7(12)
6	sjk-json	0	0	0
7	bstub	0	0	0
8	gcflow	1(7)	0(0)	1(7)
9	ygc-bench	1(1)	0(0)	0(0)
10	sjk-cli	0	0	0
11	sjk-core	4(10)	0(0)	2(8)

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Files related:

Module	File	Type	API
hprof-heap	hprof-heap/src/test/java/org/netbeans/lib/p rofiler/heap/BaseHeapTest.java	Modified	org.junit.Assert.assertEquals(java.lang.Object, java.lang.Object)
	hprof-heap/src/test/java/org/netbeans/lib/p rofiler/heap/OffsetMapperTest.java	Modified	org.junit.Assert.assertEquals(long,long)
	sjk-stacktrace/src/test/java/org/gridkit/jvmt ool/stacktrace/StackTraceReaderTest.java	Modified	org.junit.rules.TestName.getMethodName()
			org.junit.Assert.assertEquals(java.lang.String, java.lang.Object,java.lang.Object)

sjk-stacktrace	sjk-stacktrace/src/test/java/org/gridkit/jvmtool/stacktrace/analytics/FilterParserCorpusTest.java	Modified	org.junit.Assert.assertEquals(long,long)
	sjk-stacktrace/src/test/java/org/gridkit/jvmtool/codec/stacktrace/ThreadEventReaderTest.java	Modified	org.junit.rules.TestName.getMethodName()
			org.junit.Assert.assertEquals(java.lang.String,java.lang.Object,java.lang.Object)
	sjk-stacktrace/src/test/java/org/gridkit/jvmtool/stacktrace/StackTreeCoderTest.java	Modified	org.junit.Assert.assertEquals(long,long)
	sjk-stacktrace/src/test/java/org/gridkit/jvmtool/stacktrace/RegExMicrobenchmark.java	Modified	org.junit.rules.TestName.getMethodName()
gcflow	gcflow/src/test/java/org/gridkit/jvmtool/gcflow/GcKnowledgeBaseCheck.java	Modified	org.junit.Assume.assumeTrue(boolean)
sjk-core	sjk-core/src/test/java/org/gridkit/jvmtool/ClientCheck.java	Modified	org.junit.Assert.assertArrayEquals(java.lang.Object[],java.lang.Object[])
			org.junit.Assert.assertEquals(java.lang.Object,java.lang.Object)

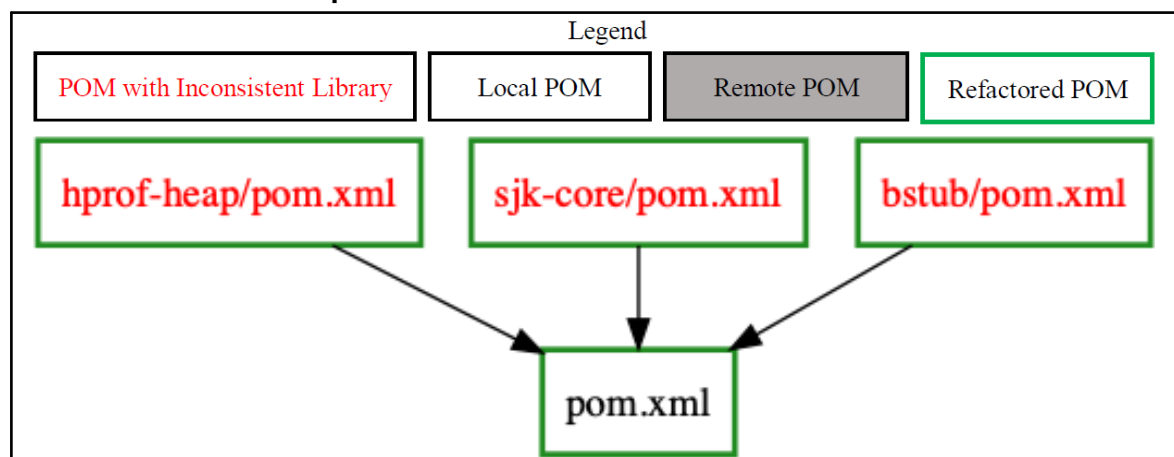
2. org.gridkit.lab:jvm-attach-api

The distinct versions are 1.5, 1.2.

Index	Module	Type	Property	Version
1	hprof-heap	explicit	NA	1.5
2	bstub	implicit	jvm-attach.version	1.2
3	sjk-core	explicit	NA	1.5

Harmonization Recommendation

Inheritance Relationship of POMs in All Related Modules



The pom in red references the property value declared in the pom in green.

The inconsistent library versions in Modules 1-3 are harmonized into version 1.5.

Harmonization Effort

Index	Module	NA (NAC)	NDA (NDAC)	NMA (NMAC)
1	hprof-heap	1(1)	0(0)	0(0)
2	bstub	0	0	0
3	sjk-core	6(8)	0(0)	0(0)

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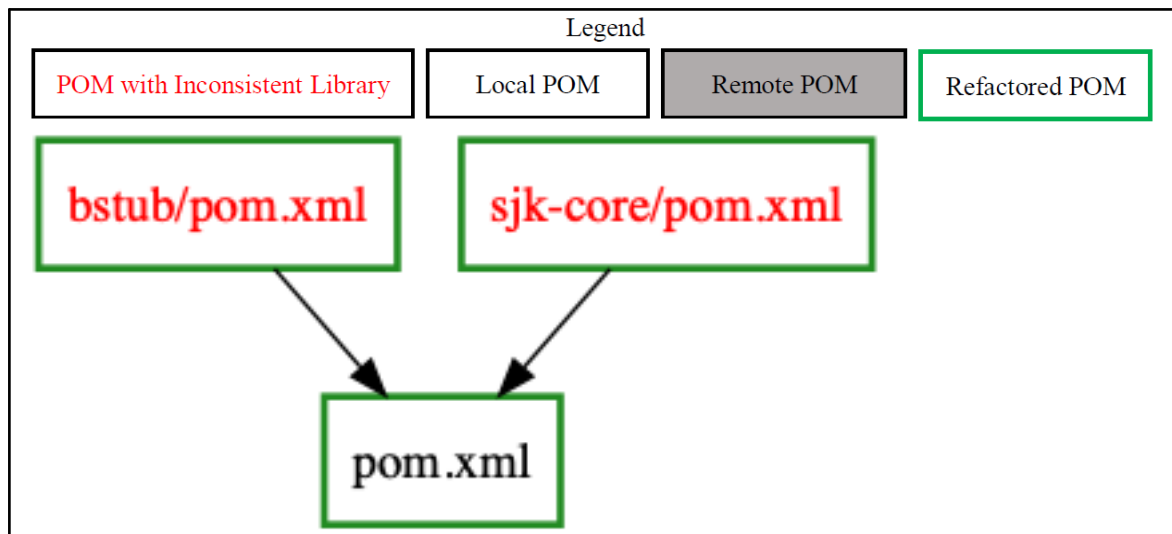
3. org.gridkit.jvmtool:sjk-cli

The distinct versions are 0.4.1-SNAPSHOT, 0.16-SNAPSHOT.

Index	Module	Type	Property	Version
1	bstub	implicit	project.version	0.4.1-SNAPSHOT
2	sjk-core	implicit	project.version	0.16-SNAPSHOT

Harmonization Recommendation

Inheritance Relationship of POMs in All Related Modules



The pom in red references the property value declared in the pom in green.

The inconsistent library versions in Modules 1-2 are harmonized into version 0.16-SNAPSHOT.

Harmonization Effort

Index	Module	NA (NAC)	NDA (NDAC)	NMA (NMAC)
1	bstub	0	0	0
2	sjk-core	0	0	0

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