

Item 69

git_comments:

git_commits:

1. **summary:** Merged revision(s) 1702717 from lucene/dev/trunk:
message: Merged revision(s) 1702717 from lucene/dev/trunk: LUCENE-6795: Add CHANGES entry also to Solr (SystemInfoHandler improvements) git-svn-id:
https://svn.apache.org/repos/asf/lucene/dev/branches/branch_5x@1702718 13f79535-47bb-0310-9956-ffa450edef68

github_issues:

github_issues_comments:

github_pulls:

github_pulls_comments:

github_pulls_reviews:

jira_issues:

1. **summary:** Remove all accessClassInPackage permissions / remove uses
AccessibleObject#setAccessible() to make ready for Java 9 Jigsaw
description: With jigsaw builds this stuff is not allowed, its no longer an option of security manager or not. So we should remove these permissions and fix the test leaks, crappy code, remove hacks, etc. If the hack is really somehow needed for some special reason (e.g. well known case like mmap), it needs to gracefully handle not being able to do this, the code and tests should still "work" if it cannot do the hack. Otherwise there will be problems for java 9.

jira_issues_comments:

1. Commit 1702139 from [~rcmuir] in branch 'dev/trunk' [<https://svn.apache.org/r1702139>] LUCENE-6795: remove reflection hack completely, see <http://mail.openjdk.java.net/pipermail/nio-dev/2015-September/003322.html>
2. Commit 1702141 from [~rcmuir] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702141>] LUCENE-6795: remove reflection hack completely, see <http://mail.openjdk.java.net/pipermail/nio-dev/2015-September/003322.html>
3. Commit 1702144 from [~rcmuir] in branch 'dev/trunk' [<https://svn.apache.org/r1702144>] LUCENE-6795: fix some test issues (mostly static leaks)
4. Commit 1702148 from [~rcmuir] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702148>] LUCENE-6795: fix some test issues (mostly static leaks)
5. **body:** Commit 1702149 from [~rcmuir] in branch 'dev/trunk' [<https://svn.apache.org/r1702149>] LUCENE-6795: remove unnecessary reflection, everything in question is public
label: code-design
6. **body:** Commit 1702151 from [~rcmuir] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702151>] LUCENE-6795: remove unnecessary reflection, everything in question is public
label: code-design
7. Commit 1702152 from [~rcmuir] in branch 'dev/trunk' [<https://svn.apache.org/r1702152>] LUCENE-6795: remove assert that is no longer allowed with jigsaw
8. Commit 1702153 from [~rcmuir] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702153>] LUCENE-6795: remove assert that is no longer allowed with jigsaw
9. Commit 1702154 from [~rcmuir] in branch 'dev/trunk' [<https://svn.apache.org/r1702154>] LUCENE-6795: remove zero-byte file
10. Commit 1702155 from [~rcmuir] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702155>] LUCENE-6795: remove zero-byte file
11. lucene tests are passing now under the jigsaw nightly.

12. Hi, I started to look into Solr. In fact after some fruitful discussions with the Jigsaw people I figured out what the "main" issue is. Also for Solr we should put `{{AccessibleObject#setAccessible()}}` onto the forbidden-apis list and only allow it for some very special cases (which are also supported by Oracle): The MMapDir cleaner. Any comments? Solr has some violations on this, because it tries to make hidden fields or methods available that are part of the Java runtime. With Java 9 Jigsaw (soon to be merged into Java 9 mainline), any call to `setAccessible()` on any class which is part of the Java runtime fails. PERIOD. No way to work around that. There are only some "exceptions" for some APIs (see [JEP 260][<http://openjdk.java.net/jeps/260>]), but the general rule holds. If you try to make one of the internal members accessible, `setAccessible` throws a new `RuntimeException`. This lead to some discussions (e.g. the Groovy runtime engine is completely broken by that, see GROOVY-7587). Oracle is working on solutions for that, but the general rule holds: [<http://mail.openjdk.java.net/pipermail/jigsaw-dev/2015-September/004530.html>] I will now fix some issues in Solr. One of those is the `SystemInfoHandler`. This just uses the `OperatingSystemMXBean` in a "wrong way", because it tries to call hidden methods, which are only implemented by an interface. So it fails. You just need to cast to correct interface and then you can call the methods as usual. I will commit this fix in a minute.
13. Commit 1702613 from [~thetaphi] in branch 'dev/trunk' [<https://svn.apache.org/r1702613>] LUCENE-6795: Fix `SystemInfoHandler` to work with Java 9 Jigsaw
14. Commit 1702614 from [~thetaphi] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702614>] Merged revision(s) 1702613 from lucene/dev/trunk: LUCENE-6795: Fix `SystemInfoHandler` to work with Java 9 Jigsaw
15. Commit 1702628 from [~thetaphi] in branch 'dev/trunk' [<https://svn.apache.org/r1702628>] LUCENE-6795: Improve `SystemInfoHandler` to get the bean directly instead of downcasting (thanks Peter Levart from jigsaw-dev), also more fixes with UOE thrown by `RuntimeMXBean#getBootClassPath()`
16. Commit 1702629 from [~thetaphi] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702629>] Merged revision(s) 1702628 from lucene/dev/trunk: LUCENE-6795: Improve `SystemInfoHandler` to get the bean directly instead of downcasting (thanks Peter Levart from jigsaw-dev), also more fixes with UOE thrown by `RuntimeMXBean#getBootClassPath()`
17. Commit 1702656 from [~thetaphi] in branch 'dev/trunk' [<https://svn.apache.org/r1702656>] LUCENE-6795: Make `SystemInfoHandler` more dynamic, add support for IBM J9 `OperatingSystemMXBean`
18. Commit 1702657 from [~thetaphi] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702657>] Merged revision(s) 1702656 from lucene/dev/trunk: LUCENE-6795: Make `SystemInfoHandler` more dynamic, add support for IBM J9 `OperatingSystemMXBean`
19. Commit 1702669 from [~thetaphi] in branch 'dev/trunk' [<https://svn.apache.org/r1702669>] LUCENE-6795: Improve `SystemInfoHandler` for IBM J9 `OperatingSystemMXBean` (some properties may throw UOE)
20. Commit 1702670 from [~thetaphi] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702670>] Merged revision(s) 1702669 from lucene/dev/trunk: LUCENE-6795: Improve `SystemInfoHandler` for IBM J9 `OperatingSystemMXBean` (some properties may throw UOE)
21. Patch to ban `setAccessible`. Only Lucene for now. Solr has some violations, but this is easy to fix. It starts almost successfully in single-core mode with Java 9 Jigsaw. Once I have done Solr I will commit this. There is the `JakartaRegexCapabilities` in Lucene's sandbox module. This is long outdated, we should remove in trunk and deprecate in 5.x. Any comments on this?
22. **body:** great cleanup! +1 to deprecate/remove that slow regex query.
label: code-design
23. Final patch, also for Solr.
24. Small fix with `SolrDispatchFilter`
25. Commit 1702690 from [~thetaphi] in branch 'dev/trunk' [<https://svn.apache.org/r1702690>] LUCENE-6795: Forbid `AccessibleObject#setAccessible` and suppress legitimate uses / wrap with `doPrivileged`
26. Commit 1702691 from [~thetaphi] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702691>] Merged revision(s) 1702690 from lucene/dev/trunk: LUCENE-6795: Forbid `AccessibleObject#setAccessible` and suppress legitimate uses / wrap with `doPrivileged`
27. Committed. I will open new issue to remove `RegexQuery` in Sandbox.
28. Commit 1702692 from [~thetaphi] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702692>] LUCENE-6795: Improve `RamUsageTester` in 5.x (no lambdas available)
29. Commit 1702693 from [~thetaphi] in branch 'dev/trunk' [<https://svn.apache.org/r1702693>] LUCENE-6795: Improve `RamUsageTester` in trunk
30. Commit 1702714 from [~thetaphi] in branch 'dev/trunk' [<https://svn.apache.org/r1702714>] LUCENE-6795: Add CHANGES entry.

31. Commit 1702715 from [~thetaphi] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702715>] Merged revision(s) 1702714 from lucene/dev/trunk: LUCENE-6795: Add CHANGES entry.
32. Commit 1702717 from [~thetaphi] in branch 'dev/trunk' [<https://svn.apache.org/r1702717>] LUCENE-6795: Add CHANGES entry also to Solr (SystemInfoHandler improvements)
33. Commit 1702718 from [~thetaphi] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702718>] Merged revision(s) 1702717 from lucene/dev/trunk: LUCENE-6795: Add CHANGES entry also to Solr (SystemInfoHandler improvements)
34. Commit 1702770 from [~thetaphi] in branch 'dev/trunk' [<https://svn.apache.org/r1702770>] LUCENE-6795: Fix Solr tests that break RamUsageTester on Java 9 Jigsaw
35. Commit 1702772 from [~thetaphi] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702772>] Merged revision(s) 1702770 from lucene/dev/trunk: LUCENE-6795: Fix Solr tests that break RamUsageTester on Java 9 Jigsaw
36. Commit 1702831 from [~thetaphi] in branch 'dev/trunk' [<https://svn.apache.org/r1702831>] Revert the AbstractZkTestCase changes for now was: LUCENE-6795: Fix Solr tests that break RamUsageTester on Java 9 Jigsaw
37. Commit 1702833 from [~thetaphi] in branch 'dev/branches/branch_5x' [<https://svn.apache.org/r1702833>] Merged revision(s) 1702831 from lucene/dev/trunk: Revert the AbstractZkTestCase changes for now was: LUCENE-6795: Fix Solr tests that break RamUsageTester on Java 9 Jigsaw