

Runtime Infrastructure - Bug #8656

Dependency de.intarsys.opensource:jPod to be replaced by org.apache.pdfbox:pdfbox

04/19/2024 10:01 AM - Galya B

Status:	Test	Start date:	
Priority:	Normal	Due date:	
Assignee:	Galya B	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:		case_num:	
billable:	No		
vendor_id:	GCD		
Description			

History

#1 - 04/19/2024 10:04 AM - Galya B

Dependency de.intarsys.opensource:jPod is used only in ReportServlet.java and can be replaced by org.apache.pdfbox:pdfbox.

#2 - 04/30/2024 05:04 AM - Galya B

What is the user / pass for the reporting login in testcases? I tried admin/admin, but I get socket closed (1011) - Cannot call method public void com.goldencode.p2j.report.server.ReportProtocol#onConnect(org.eclipse.jetty.websocket.api.Se in the front-end and no logs in the back-end and the loader doesn't disappear.

#3 - 04/30/2024 05:15 AM - Constantin Asofiei

I assume you've ran the report tasks? The default user is admin and the default password is the app's name as configured in build.properties.

#4 - 04/30/2024 05:16 AM - Constantin Asofiei

But ReportServlet is from FWD Admin console - for that try admin/test123.

#5 - 04/30/2024 07:50 AM - Galya B

ant report_server gives a lot of errors and eventually fails. Ends up with:

```
[java] com.goldencode.ast.AstException: Error processing ./words/words.p
[java]   at com.goldencode.p2j.uast.AstGenerator.processFile (AstGenerator.java:1034)
[java]   at com.goldencode.p2j.uast.ScanDriver.lambda$scan$0 (ScanDriver.java:406)
[java]   at com.goldencode.p2j.uast.ScanDriver.scan (ScanDriver.java:442)
[java]   at com.goldencode.p2j.uast.ScanDriver.scan (ScanDriver.java:271)
[java]   at com.goldencode.p2j.convert.TransformDriver.runScanDriver (TransformDriver.java:393)
[java]   at com.goldencode.p2j.convert.TransformDriver.front (TransformDriver.java:258)
[java]   at com.goldencode.p2j.convert.TransformDriver.executeJob (TransformDriver.java:989)
[java]   at com.goldencode.p2j.convert.ConversionDriver.main (ConversionDriver.java:1272)
[java] Caused by: java.lang.NullPointerException
[java]   at com.goldencode.p2j.uast.ProgressParser.primary_expr (ProgressParser.java:59255)
[java]   at com.goldencode.p2j.uast.ProgressParser.chained_object_members (ProgressParser.java:23324)
[java]   at com.goldencode.p2j.uast.ProgressParser.un_type (ProgressParser.java:58952)
[java]   at com.goldencode.p2j.uast.ProgressParser.prod_expr (ProgressParser.java:58819)
[java]   at com.goldencode.p2j.uast.ProgressParser.sum_expr (ProgressParser.java:42577)
[java]   at com.goldencode.p2j.uast.ProgressParser.compare_expr (ProgressParser.java:58405)
[java]   at com.goldencode.p2j.uast.ProgressParser.log_not_expr (ProgressParser.java:58257)
[java]   at com.goldencode.p2j.uast.ProgressParser.bitwise_xor_expr (ProgressParser.java:58188)
[java]   at com.goldencode.p2j.uast.ProgressParser.log_and_expr (ProgressParser.java:58127)
[java]   at com.goldencode.p2j.uast.ProgressParser.expr (ProgressParser.java:13341)
[java]   at com.goldencode.p2j.uast.ProgressParser.primary_expr (ProgressParser.java:59304)
[java]   at com.goldencode.p2j.uast.ProgressParser.chained_object_members (ProgressParser.java:23324)
[java]   at com.goldencode.p2j.uast.ProgressParser.un_type (ProgressParser.java:58952)
```

```

[java] at com.goldencode.p2j.uast.ProgressParser.prod_expr (ProgressParser.java:58819)
[java] at com.goldencode.p2j.uast.ProgressParser.sum_expr (ProgressParser.java:42577)
[java] at com.goldencode.p2j.uast.ProgressParser.compare_expr (ProgressParser.java:58405)
[java] at com.goldencode.p2j.uast.ProgressParser.log_not_expr (ProgressParser.java:58257)
[java] at com.goldencode.p2j.uast.ProgressParser.bitwise_xor_expr (ProgressParser.java:58188)
[java] at com.goldencode.p2j.uast.ProgressParser.log_and_expr (ProgressParser.java:58127)
[java] at com.goldencode.p2j.uast.ProgressParser.expr (ProgressParser.java:13341)
[java] at com.goldencode.p2j.uast.ProgressParser.where_clause (ProgressParser.java:41703)
[java] at com.goldencode.p2j.uast.ProgressParser.record_phrase (ProgressParser.java:40009)
[java] at com.goldencode.p2j.uast.ProgressParser.each_first_last_spec (ProgressParser.java:38942)
[java] at com.goldencode.p2j.uast.ProgressParser.for_stmt (ProgressParser.java:27301)
[java] at com.goldencode.p2j.uast.ProgressParser.block_list (ProgressParser.java:27134)
[java] at com.goldencode.p2j.uast.ProgressParser.inner_block (ProgressParser.java:9456)
[java] at com.goldencode.p2j.uast.ProgressParser.single_block (ProgressParser.java:8395)
[java] at com.goldencode.p2j.uast.ProgressParser.block (ProgressParser.java:7520)
[java] at com.goldencode.p2j.uast.ProgressParser.external_proc (ProgressParser.java:7447)
[java] at com.goldencode.p2j.uast.AstGenerator.parse (AstGenerator.java:1599)
[java] at com.goldencode.p2j.uast.AstGenerator.processFile (AstGenerator.java:1022)
[java] ... 7 more
[java]
[java] ./words/words.p
[java] Failure in file './words/words.p':
[java] ERROR:
[java] java.lang.NullPointerException
[java] at com.goldencode.p2j.uast.MemberData.lambda$parseFinished$0 (MemberData.java:307)
[java] at com.goldencode.p2j.uast.MemberData.parseFinished (MemberData.java:328)
[java] at com.goldencode.p2j.uast.ClassDefinition.lambda$null$15 (ClassDefinition.java:1561)
[java] at java.util.LinkedHashMap$LinkedValues.forEach (LinkedHashMap.java:608)
[java] at com.goldencode.p2j.uast.ClassDefinition.lambda$parseFinished$16 (ClassDefinition.java:1561)
[java] at java.util.LinkedHashMap$LinkedKeySet.forEach (LinkedHashMap.java:559)
[java] at com.goldencode.p2j.uast.ClassDefinition.parseFinished (ClassDefinition.java:1561)
[java] at com.goldencode.p2j.uast.SymbolResolver.lambda$parseFinished$1 (SymbolResolver.java:1286)
[java] at java.lang.Iterable.forEach (Iterable.java:75)
[java] at com.goldencode.p2j.uast.SymbolResolver.parseFinished (SymbolResolver.java:1286)
[java] at com.goldencode.p2j.uast.ScanDriver.scan (ScanDriver.java:500)
[java] at com.goldencode.p2j.uast.ScanDriver.scan (ScanDriver.java:271)
[java] at com.goldencode.p2j.convert.TransformDriver.runScanDriver (TransformDriver.java:393)
[java] at com.goldencode.p2j.convert.TransformDriver.front (TransformDriver.java:258)
[java] at com.goldencode.p2j.convert.TransformDriver.executeJob (TransformDriver.java:989)
[java] at com.goldencode.p2j.convert.ConversionDriver.main (ConversionDriver.java:1272)

```

But has many more issues. The log is 34MB, can't upload it here.

#6 - 04/30/2024 07:57 AM - Greg Shah

The ant report_server is related to FWD Analytics and is not related to ReportServlet from our admin console. The issue you've found is something unrelated to this task.

#7 - 04/30/2024 02:15 PM - Galya B

- Status changed from New to WIP

- Assignee set to Galya B

#8 - 04/30/2024 02:24 PM - Galya B

- Status changed from WIP to Review

- % Done changed from 0 to 100

8656a r15159 based on trunk r15156 ready for review.

jPod was originally used only for merging big pdf documents in ReportServlet.mergeSplitDocuments. I renamed the method to writeMergedDocuments and moved the common logic out of writeOriginalDocument to writeDocument. Method writeSplittedDocument wasn't used since the beginning of the class existence in 2017, so I removed it.

The changes are tested with 10_000 users (245 pdf pages). The original code created a file of 41.9MB, that got somehow compressed with merging files (printing in landscape triggers merge files) to 29MB and 15.8MB, when printing or downloading a pdf respectively. The new code keeps the file size of the original pdf, when merging files.

#9 - 04/30/2024 02:29 PM - Galya B

A side observation is that the server struggles with such big data when generating the report (ReportsManager.buildReport) performed before the pdf is sent to the browser. I couldn't find the criteria of splitting the documents, but for so much data it only created two splits. I guess it's not relevant to most customers. Just a note for a future performance testing.

#10 - 04/30/2024 03:32 PM - Sergey Ivanovskiy

Galya B wrote:

A side observation is that the server struggles with such big data when generating the report (ReportsManager.buildReport) performed before the pdf is sent to the browser. I couldn't find the criteria of splitting the documents, but for so much data it only created two splits. I guess it's not relevant to most customers. Just a note for a future performance testing.

There is the maximal report pages number parameter given in request parameters for a target report. This value splits large documents. I guess that de.intarsys.opensource:jPod was used intentionally because the apache pdf api had memory issue and does not work with the customer reports. I do not know if that memory issue was gone out or fixed with new versions of apache pdf api.

#11 - 05/01/2024 01:24 AM - Galya B

Sergey Ivanovskiy wrote:

Galya B wrote:

A side observation is that the server struggles with such big data when generating the report (`ReportsManager.buildReport`) performed before the pdf is sent to the browser. I couldn't find the criteria of splitting the documents, but for so much data it only created two splits. I guess it's not relevant to most customers. Just a note for a future performance testing.

There is the maximal report pages number parameter given in request parameters for a target report. This value splits large documents. I guess that `de.intarsys.opensource.jPod` was used intentionally because the apache pdf api had memory issue and does not work with the customer reports. I do not know if that memory issue was gone out or fixed with new versions of apache pdf api.

There was an issue at one point indeed, but then I added `MemoryUsageSetting` to `pdfMerger.mergeDocuments` to define the max size of a partition of data to be kept in memory by the merger and things worked out. By default it uses the whole available memory with `MemoryUsageSetting.setupMainMemoryOnly()` and this is an issue.

#12 - 05/01/2024 04:18 AM - Greg Shah

Sergey/Hynek: Please review.

#13 - 05/01/2024 06:25 AM - Hynek Cihlar

Code review 8656a revisions 15156..15159.

The code changes remove the zipping part for the split pdfs. Was this part of the requirements for this issue?

Otherwise the changes look good.

#14 - 05/01/2024 08:44 AM - Galya B

Hynek Cihlar wrote:

The code changes remove the zipping part for the split pdfs. Was this part of the requirements for this issue?

I've mentioned in [#8656-8](#) that

Method `writeSplittedDocument` wasn't used since the beginning of the class existence in 2017, so I removed it.

There is no better reasoning behind it.

#15 - 05/01/2024 09:50 AM - Hynek Cihlar

- *Status changed from Review to Internal Test*

Galya B wrote:

Hynek Cihlar wrote:

The code changes remove the zipping part for the split pdfs. Was this part of the requirements for this issue?

I've mentioned in [#8656-8](#) that

Method `writeSplittedDocument` wasn't used since the beginning of the class existence in 2017, so I removed it.

I had missed that. I have no more concerns.

What regression testing have you done? Do you plan more tests?

#16 - 05/01/2024 09:53 AM - Galya B

I did a comparison of the original behavior and output and the new one and shared the results in [#8656-8](#). I can do more load testing, but this is likely to lead to revealing other weak points and non-related changes. I think I've tested the behavior directly related to the change well.

#17 - 05/01/2024 10:11 AM - Hynek Cihlar

- *Status changed from Internal Test to Merge Pending*

#18 - 05/01/2024 10:29 AM - Greg Shah

You can merge to trunk now.

#19 - 05/01/2024 10:42 AM - Galya B

- *Status changed from Merge Pending to Test*

8656a was merged to trunk as rev. 15183 and archived.