

Apache FOP

Experience running Apache FOP on Apache Harmony

Project website: [Apache FOP](#)

2006-11-12, with Harmony snapshot r468731 on Windows

The "readme.fo" example from the FOP distribution ran just fine which is a very good sign. Problems started when running the same file with replaced default fonts which caused a problem because the [TrueType](#) loading code uses the "UnicodeBig" encoding. Changing that to "UTF-16BE" solved this particular problem. There's another use of "UnicodeBig" in the PDF library, where I cannot just replace the encoding with "UTF-16BE" because the FEFF marker needs to be generated.

Running "images.fo" showed that ImageIO will probably need a closer look. Furthermore, I got a "Can't open color profile" that I'll have to investigate more closely when I have time.

Anyway, this was just a quick test with a couple of test files and it shows that from now on I definitely have to keep on eye on FOP's compatibility with Harmony.

Keep up the great work, guys!

2008-02-22, with Harmony r618795 on Windows XP

We've recently refactored the whole image loading part of FOP and the new framework now makes heavy use of ImageIO (as we've dropped support for JDK 1.3). I can build FOP using Harmony JDK but the unit tests fail because `javax.imageio.ImageIO.getReaderMIMETypes` is not implemented, yet. Maybe I'll find some time to look into the missing pieces.

BTW, while building FOP from scratch there's the following crash which doesn't occur when you run the build a second time. It is reproducible and always at the same location.

```

[xslt] Processing C:\Dev\FOP\main\xml-fop-temp\src\codegen\fonts\TimesItalic.xml to C:\Dev\FOP\main\xml-
fop-temp\build\gensrc\org\apache\fop\fonts\base14\T
imesItalic.java
[xslt] Loading stylesheet C:\Dev\FOP\main\xml-fop-temp\src\codegen\fonts\font-file.xsl
Windows reported exception: 0xc0000005
Registers:
EAX: 0x87010101, EBX: 0x13fb5f90, ECX: 0x00000000, EDX: 0x0048ca68
ESI: 0x0048ca68, EDI: 0x13ed5b88, ESP: 0x01acf764, EBP: 0x0048ca68
EIP: 0x0064af40

Crashed module:
Memory region 0x0064a000:0x00728000

Working directory:
C:\Dev\FOP\main\xml-fop-temp

Command line:
"C:\Dev\J2SE\harmony-jdk-618795\jre\bin\java.exe" "-classpath" "C:\Dev\apache.org\releases\apache-ant-1.7.0
\lib\ant-launcher.jar" "-Dant.home=C:\Dev\apache.org\
releases\apache-ant-1.7.0" "org.apache.tools.ant.launch.Launcher" "-cp" ".;C:\Program Files\Java\jre1.6.0
_03\lib\ext\QTJava.zip"

Environment variables:
<snip/>
JAVA_HOME=C:\Dev\J2SE\harmony-jdk-618795
<snip/>
NUMBER_OF_PROCESSORS=2
OS=Windows_NT
<snip/>
PROCESSOR_ARCHITECTURE=x86
PROCESSOR_IDENTIFIER=x86 Family 6 Model 15 Stepping 6, GenuineIntel
PROCESSOR_LEVEL=6
PROCESSOR_REVISION=0f06
<snip/>
_JAVACMD=C:\Dev\J2SE\harmony-jdk-618795\bin\java.exe
_USE_CLASSPATH=yes

Loaded modules:

VM attached threads:

[000004EC] 'ref handler'
[000004F4] 'finalizer'
[000004F8] 'finalizer'
--->[00000508] 'profiler thread'
[000007CC] 'main'

Stack trace:
0: method_get_return_type_class (?:-1)
1: java/lang/EMThreadSupport.onTimeout()V (EMThreadSupport.java:-2)
2: java/lang/EMThreadSupport.run()V (EMThreadSupport.java:68)
3: java/lang/EMThreadSupport$1.run()V (EMThreadSupport.java:44)
4: java/lang/Thread.run()V (Thread.java:657)
5: java/lang/Thread.runImpl()V (Thread.java:668)
<end of stack trace>

```

2010-07-27, with Harmony snapshot r979889 on Windows

The crash issue still occurs, the crashed module is either jitrino.dll or harmonyvm.dll ([build-crash.dmp](#)). The FOP can be built successful without any issue after a second try. However, there are some problems on unit tests. The major one is that junit-transcoder test suite cannot be completed (I killed the process after 20 minutes waiting [junit-transcoder.dmp](#)).

PS: The crash always occurs on Ubuntu 10.04

Results

ClassLib	OS	SVN reversion	Tests	Failure s	Error s	Success	Time(s)
RI 1.6.0_18-b07	Windows Xp Sp3	N/A	971	0	0	100%	90.049
Harmony5	Windows Xp Sp3	r979889	967	5	26	96.97%	113.910

Failures

<ac:structured-macro ac:name="unmigrated-wiki-markup" ac:schema-version="1" ac:macro-id="b23839b2-bb6d-4c95-a942-335d6114e8ff"><ac:plain-text-body><![CDATA[	org.apache.fop.intermediate.IntermediateFormatTestSuite@afp-extension_1.xml	[different]Expected number of element attributes '1' but was '0'	]]></ac:plain-text-body></ac:structured-macro>
<ac:structured-macro ac:name="unmigrated-wiki-markup" ac:schema-version="1" ac:macro-id="e02438f3-1b05-4106-a917-50e09feddfcd"><ac:plain-text-body><![CDATA[	org.apache.fop.intermediate.IntermediateFormatTestSuite@block_uax14_linebreaking.xml	[different]Expected number of element attributes '2' but was '1'	]]></ac:plain-text-body></ac:structured-macro>
<ac:structured-macro ac:name="unmigrated-wiki-markup" ac:schema-version="1" ac:macro-id="e1dcd7eb-fe87-4964-b33e-10f6320f1e09"><ac:plain-text-body><![CDATA[	org.apache.fop.intermediate.IntermediateFormatTestSuite@block_white-space_4.xml	[different]Expected number of element attributes '2' but was '1'	]]></ac:plain-text-body></ac:structured-macro>
<ac:structured-macro ac:name="unmigrated-wiki-markup" ac:schema-version="1" ac:macro-id="d9c47fdb-a3a5-4a6b-8463-f3f7eaeef8964"><ac:plain-text-body><![CDATA[	org.apache.fop.intermediate.IntermediateFormatTestSuite@ps-extension_1.xml	[different]Expected number of element attributes '1' but was '0'	]]></ac:plain-text-body></ac:structured-macro>
<ac:structured-macro ac:name="unmigrated-wiki-markup" ac:schema-version="1" ac:macro-id="e67cd929-30ae-4d59-91f2-dfc2f232116c"><ac:plain-text-body><![CDATA[	org.apache.fop.intermediate.IntermediateFormatTestSuite@ps_extension_2.xml	[different]Expected number of element attributes '1' but was '0'	]]></ac:plain-text-body></ac:structured-macro>

Errors

org.apache.fop.intermediate.IntermediateFotmatTestSuite@block-container_absolute-position_fox-transform.xml	org.w3c.dom.DOMException: NAMESPACE_ERR
org.apache.fop.intermediate.IntermediateFotmatTestSuite@foreign-attributes.xml	org.w3c.dom.DOMException: NAMESPACE_ERR
org.apache.fop.intermediate.IntermediateFotmatTestSuite@fox_external-document_2.xml	java.lang.NullPointerException
org.apache.fop.intermediate.IntermediateFotmatTestSuite@inline_block_nested_bug36248.xml	java.lang.NumberFormatException
org.apache.fop.intermediate.IntermediateFotmatTestSuite@leader_background-color.xml	java.lang.NumberFormatException
org.apache.fop.intermediate.IntermediateFotmatTestSuite@leader_leader-pattern_dots.xml	java.lang.NumberFormatException
org.apache.fop.intermediate.IntermediateFotmatTestSuite@leader_leader-pattern_rule.xml	java.lang.NumberFormatException
org.apache.fop.intermediate.IntermediateFotmatTestSuite@leader_leader-pattern_space.xml	java.lang.NumberFormatException
org.apache.fop.intermediate.IntermediateFotmatTestSuite@leader_leader-pattern_use-content.xml	java.lang.NumberFormatException
org.apache.fop.intermediate.IntermediateFotmatTestSuite@leader_text-align.xml	java.lang.NumberFormatException
org.apache.fop.intermediate.IntermediateFotmatTestSuite@markers_6a.xml	java.lang.NumberFormatException
org.apache.fop.intermediate.IntermediateFotmatTestSuite@markers_6b.xml	java.lang.NumberFormatException
org.apache.fop.layoutengine.LayoutEngineTestSuite@block-container_absolute-position_fox-transform.xml	org.w3c.dom.DOMException: NAMESPACE_ERR
org.apache.fop.layoutengine.LayoutEngineTestSuite@block-container_background-image_background-position-relative.xml	
org.apache.fop.layoutengine.LayoutEngineTestSuite@external-graphic_breaking.xml	
org.apache.fop.layoutengine.LayoutEngineTestSuite@external-graphic_png.xml	
org.apache.fop.layoutengine.LayoutEngineTestSuite@external-graphic_rfc2397.xml	
org.apache.fop.layoutengine.LayoutEngineTestSuite@external-graphic_size_1.xml	
org.apache.fop.layoutengine.LayoutEngineTestSuite@external-graphic_size_2.xml	
org.apache.fop.layoutengine.LayoutEngineTestSuite@foreign-attributex.xml	org.w3c.dom.DOMException: NAMESPACE_ERR
org.apache.fop.layoutengine.LayoutEngineTestSuite@fox_external-document_1.xml	
org.apache.fop.layoutengine.LayoutEngineTestSuite@fox_external-document_2.xml	java.lang.NullPointerException
org.apache.fop.layoutengine.LayoutEngineTestSuite@inline_vertical-align_2.xml	
org.apache.fop.layoutengine.LayoutEngineTestSuite@table-cell_background-image.xml	
org.apache.fop.layoutengine.LayoutEngineTestSuite@table_backgrounds.xml	