

# Apache Commons

I've started going through the Apache Commons projects running tests and sample code.

## beanutils

One problem (that appears as two errors out of 556) that also fails on Sun 5.0 RI but passes on IBM 1.4.2.

```
testMemoryLeak2(org.apache.commons.beanutils.locale.LocaleBeanificationTestCase)java.lang.OutOfMemoryError  
at org.apache.commons.beanutils.locale.LocaleBeanificationTestCase.testMemoryLeak2  
(LocaleBeanificationTestCase.java:182)  
at java.lang.reflect.AccessibleObject.invokeV(AccessibleObject.java:205)
```

## betwixt

2 failures out of 644. I suspect they are Hashtable.Entry introspection assumptions and thus possibly invalid tests? The test xml looks like:

```
<Hashtable>  
  <empty>false</empty>  
  <entry>  
    <key>two</key>  
    <keyHash>115276</keyHash>  
    <value>deux</value>  
  </entry>  
  <entry>  
    <key>one</key>  
    <keyHash>110182</keyHash>  
    <value>un</value>  
  </entry>  
  <entry>  
    <key>three</key>  
    <keyHash>110339486</keyHash>  
    <value>trois</value>  
  </entry>  
</Hashtable>
```

whereas the expected xml does not include the keyHash items.

```
1) testHashMapWriteEmpty(org.apache.commons.betwixt.TestMaps)junit.framework.AssertionFailedError: (Unequal  
child nodes@entry) expected:<2> but was:<3>  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.testIsomorphic(XmlTestCase.java:300)  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.testIsomorphic(XmlTestCase.java:312)  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.testIsomorphic(XmlTestCase.java:312)  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.xmlAssertIsomorphic(XmlTestCase.java:175)  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.xmlAssertIsomorphic(XmlTestCase.java:151)  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.xmlAssertIsomorphic(XmlTestCase.java:141)  
   at org.apache.commons.betwixt.TestMaps.testHashMapWriteEmpty(TestMaps.java:68)  
   at java.lang.reflect.AccessibleObject.invokeV(AccessibleObject.java:205)  
2) testHashMapWriteNotEmpty(org.apache.commons.betwixt.TestMaps)junit.framework.AssertionFailedError: (Unequal  
child nodes@entry) expected:<2> but was:<3>  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.testIsomorphic(XmlTestCase.java:300)  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.testIsomorphic(XmlTestCase.java:312)  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.testIsomorphic(XmlTestCase.java:312)  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.xmlAssertIsomorphic(XmlTestCase.java:175)  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.xmlAssertIsomorphic(XmlTestCase.java:151)  
   at org.apache.commons.betwixt.xmlunit.XmlTestCase.xmlAssertIsomorphic(XmlTestCase.java:141)  
   at org.apache.commons.betwixt.TestMaps.testHashMapWriteNotEmpty(TestMaps.java:105)  
   at java.lang.reflect.AccessibleObject.invokeV(AccessibleObject.java:205)
```

## chain

2 errors both the same issue. Needs further investigation.

```
ClassCastException: org.apache.commons.chain.impl.ContextBase$MapEntryImpl incompatible with java.util.  
HashMap$Entry
```

## cli

Raised [HARMONY-552](#) but there are still 8 failures and 1 error. Some look like ordering issues and might be invalid tests. Needs further investigation.

## codec

2 errors both the same issue. Needs further investigation.

```
testDefaultEncoding(org.apache.commons.codec.net.URLCodecTest)org.apache.commons.codec.EncoderException:  
UnicodeBig  
    at org.apache.commons.codec.net.URLCodec.encode(URLCodec.java:247)  
    at org.apache.commons.codec.net.URLCodecTest.testDefaultEncoding(URLCodecTest.java:274)  
    at java.lang.reflect.AccessibleObject.invokeV(AccessibleObject.java:205)
```

## collections

Wow! There are an impressive number of tests. I've raised some JIRAs - [HARMONY-389](#), [HARMONY-390](#), [HARMONY-403](#) - but there are still more failures to investigate. Quite a few failures seem to relate to hashCode issues mentioned in [HARMONY-403](#).

## configuration

Requires [HARMONY-528](#). Even with this there are several dozen failures and errors to investigate.

## daemon

Compiles. There don't seem to be any tests. Need to try the sample code.

## dbutils

All tests pass.

## digester

All tests pass.

## discovery

All tests pass.

## fileupload

All tests pass.

## httpclient

Tests require a jks keystore. It should be possible to convert them and fix the tests to use the default keystore type rather than jks specifically.

## io

One error. Raised [HARMONY-517](#) with fix.

## jelly

All tests pass.

## jexl

All tests pass.

## jxpath

3 failures to investigate.

```
1)
Evaluating <format-number(123456789, 'D.0', 'test')> expected:<123456789.0> but was:<D123456789.0>
junit.framework.AssertionFailedError: Evaluating <format-number(123456789, 'D.0', 'test')> expected:<123456789.
0> but was:<D123456789.0>
    at org.apache.commons.jxpath.JXPathTestCase.assertXPathValue(JXPathTestCase.java:54)
    at org.apache.commons.jxpath.ri.compiler.CoreFunctionTest.testFormatNumberFunction(CoreFunctionTest.java:
176)

2)
Evaluating pointer </product:name> expected:<...goods...> but was:<...product...
junit.framework.ComparisonFailure: Evaluating pointer </product:name> expected:<...goods...> but was:<...
product...
    at org.apache.commons.jxpath.JXPathTestCase.assertXPathPointer(JXPathTestCase.java:124)
    at org.apache.commons.jxpath.JXPathTestCase.assertXPathValueAndPointer(JXPathTestCase.java:140)
    at org.apache.commons.jxpath.ri.model.XMLModelTestCase.testNamespaceMapping(XMLModelTestCase.java:806)

3)
Evaluating pointer </product:name> expected:<...goods...> but was:<...product...
junit.framework.ComparisonFailure: Evaluating pointer </product:name> expected:<...goods...> but was:<...
product...
    at org.apache.commons.jxpath.JXPathTestCase.assertXPathPointer(JXPathTestCase.java:124)
    at org.apache.commons.jxpath.JXPathTestCase.assertXPathValueAndPointer(JXPathTestCase.java:140)
    at org.apache.commons.jxpath.ri.model.XMLModelTestCase.testNamespaceMapping(XMLModelTestCase.java:806)
```

## lang

Raised [HARMONY-487](#), [HARMONY-489](#), [HARMONY-493](#), and [HARMONY-498](#). The remaining failures might be reflection differences which could be invalid tests?

## logging

All tests pass - the log4j ones at least.

## math

5 failures still to investigate.

## modeler

Requires javax.management. All tests pass with mx4j, see [HARMONY-560](#).

## net

Latest svn needs String.contains(CharSequence). Version 1.4.1 needed [HARMONY-502](#) to pass all tests.

## pool

All tests pass. They seem to be a little unstable. Some tests fail/hang on sun50.

## primitives

All tests pass.

## validator

Raised [HARMONY-539](#), but there are still a couple more issues to investigate.

## todo

attributes, dbcp, el, email, launcher, transaction, and vfs still need to be tested.