





Introducing Java driver core framework






 Closed

 zhenlineo wants to merge 1 commit into neo4j:2.3 from zhenlineo:2.3-move-java-driver-to-main-repo

 Conversation 18

 Commits 1

 Files changed 141

+15,453 -1     



zhenlineo commented Apr 9, 2015

Collaborator

No description provided.

Labels

None yet

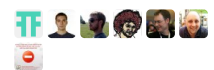
Milestone

No milestone

Assignee

No one assigned

7 participants



 Introducing Java driver core framework

  c642e92

 lutovich commented on the diff Apr 9, 2015

...in/java/org/neo4j/mjolnir/launcher/ConfigOptions.java

[View full changes](#)



((5 lines not shown))

```
+ * This file is part of Neo4j.  
+ *  
+ * Neo4j is free software: you can redistribute it and/or modify  
+ * it under the terms of the GNU Affero General Public License as  
+ * published by the Free Software Foundation, either version 3 of the  
+ * License, or (at your option) any later version.  
+ *  
+ * This program is distributed in the hope that it will be useful,  
+ * but WITHOUT ANY WARRANTY; without even the implied warranty of  
+ * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
+ * GNU Affero General Public License for more details.  
+ *  
+ * You should have received a copy of the GNU Affero General Public License  
+ * along with this program. If not, see <http://www.gnu.org/licenses/>.  
+ */  
+/**
```



lutovich added a note Apr 9, 2015

Collaborator

Redundant license header

Add a line note

 lutovich commented on the diff Apr 9, 2015

driver/driver-test-server/pom.xml

[View full changes](#)

		((37 lines not shown))
37	+	<dependency>
38	+	<groupId>com.offbytwo</groupId>
39	+	<artifactId>docopt</artifactId>
40	+	<version>0.6.0.20150202</version>
41	+	</dependency>
42	+	
43	+	<dependency>
44	+	<groupId>ch.qos.logback</groupId>
45	+	<artifactId>logback-classic</artifactId>
46	+	</dependency>
47	+	
48	+	<!--Test dependencies -->
49	+	<dependency>
50	+	<groupId>org.hamcrest</groupId>
51	+	<artifactId>hamcrest-all</artifactId>
52	+	<version>1.3</version>



lutovich added a note Apr 9, 2015

Collaborator

Versions should be inherited from parent pom

Add a line note



lutovich commented on the diff Apr 9, 2015

driver/driver-test-server/pom.xml

[View full changes](#)

		((24 lines not shown))
24	+	<dependencies>
25	+	<dependency>
26	+	<groupId>org.neo4j.ndp</groupId>
27	+	<artifactId>neo4j-ndp-transport-http</artifactId>
28	+	<version>\${project.version}</version>
29	+	</dependency>
30	+	
31	+	<dependency>
32	+	<groupId>org.neo4j</groupId>
33	+	<artifactId>neo4j-primitive-collections</artifactId>
34	+	<version>\${project.version}</version>
35	+	</dependency>
36	+	
37	+	<dependency>
38	+	<groupId>com.offbytwo</groupId>
39	+	<artifactId>docopt</artifactId>



lutovich added a note Apr 9, 2015

Collaborator

Unfortunately now we parse cmd args with `org.neo4j.helpers.Args` and do not use this library. Also import tool has some custom args syntax that docopt can't handle. It would be good to discuss the possibility to unify things.



jakewins added a note Apr 10, 2015

Collaborator

+1. I'm a big fan of docopt, but using the same thing everywhere trumps that. Lets swap it over to `Args`, and we can improve `Args` instead as needed.

Add a line note



lutovich commented on the diff Apr 9, 2015

driver/java/pom.xml

[View full changes](#)

...	...	@@ -0,0 +1,87 @@
	1	+<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3
	2	+ xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
	3	+ http://maven.apache.org/xsd/maven-4.0.0.xsd">
	4	+ <modelVersion>4.0.0</modelVersion>
	5	+ <properties>
	6	+ <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
	7	+ </properties>
	8	+ <!--The module should not rely on a parent-->
	9	+ <!--The module should not rely on a parent-->



lutovich added a note Apr 9, 2015

Collaborator

In this case why should it be in the same repo/dir structure with database?



jakewins added a note Apr 9, 2015

Collaborator

We're planning to do a call on that next wednesday (will send an invite), but we agreed tentatively that we'd move the java driver to the main code base, noting that we can move it back out if it is causing problems.

But I think the comment here is correct - the neo4j drivers are not versioned in lock-step with Neo4j itself - drivers need to be able to do patch releases and so on without a new Neo4j version, and drivers will support multiple versions of Neo4j. Drivers also do not need shared dependency management with Neo4j..

Add a line note



lutovich commented on the diff Apr 9, 2015

...a/driver/src/main/java/org/neo4j/driver/Identity.java

[View full changes](#)

		((15 lines not shown))
	15	+ * GNU Affero General Public License for more details.
	16	+ *
	17	+ * You should have received a copy of the GNU Affero General Public License
	18	+ * along with this program. If not, see <http://www.gnu.org/licenses/>.
	19	+ */
	20	+package org.neo4j.driver;
	21	+
	22	+/**
	23	+ * A unique identifier for an {@link org.neo4j.driver.Entity}.
	24	+ * <p>
	25	+ * The identity can be used to correlate entities in one response with ent:
	26	+ * entity is guaranteed to be stable within the scope of a session. Beyond
	27	+ * stable 'ids' for your entities, you may choose to add an 'id' property w
	28	+ * unique value.
	29	+ */
	30	+public interface Identity



lutovich added a note Apr 9, 2015

Collaborator

Maybe also force to implement toString ?


Add a line note



lutovich commented on the diff Apr 9, 2015

...java/driver/src/main/java/org/neo4j/driver/Value.java

[View full changes](#)

 ((57 lines not shown))

```
57 + * </pre>
58 + * <p>
59 + * You can also easily iterate over the users:
60 + * <p>
61 + * <pre>
62 + * {@code
63 + * for(Value user : value.get("users")) {
64 + * {
65 + *     System.out.println(user.get("name").stringValue());
66 + * }
67 + * }
68 + * </pre>
69 + */
70 +public interface Value extends Iterable<Value>
71 +{
72 +    /** @return the value as a Java String, if possible. */
```



Iutovich added a note Apr 9, 2015

Collaborator

Javadoc about what happens if 'not possible' would be useful

Add a line note



Iutovich commented on the diff Apr 9, 2015

...rg/neo4j/driver/internal/messaging/MessageFormat.java

[View full changes](#)

 ((11 lines not shown))

```
11 + *
12 + * This program is distributed in the hope that it will be useful,
13 + * but WITHOUT ANY WARRANTY; without even the implied warranty of
14 + * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
15 + * GNU Affero General Public License for more details.
16 + *
17 + * You should have received a copy of the GNU Affero General Public License
18 + * along with this program. If not, see <http://www.gnu.org/licenses/>.
19 + */
20 +package org.neo4j.driver.internal.messaging;
21 +
22 +import java.io.IOException;
23 +import java.io.InputStream;
24 +import java.io.OutputStream;
25 +
26 +public interface MessageFormat
```



Iutovich added a note Apr 9, 2015

Collaborator

Is this same thing as `org.neo4j.ndp.messaging.v1.MessageFormat` ?

Add a line note



Iutovich commented Apr 9, 2015

Collaborator

I think this PR has some things worth discussing:

- 1) imho there is some confusion in pom files as top one `driver/java/pom.xml` does depend on neo4j parent and some other pom files down the tree do not have any parent
- 2) should driver live in same repo as database?
- 3) why there are many copy-pasted classes (from #4355)?



jakewins commented Apr 9, 2015

Collaborator

Thanks for all the feedback so far @Iutovich!

Here's the thinking on the copies: the messaging and packstream implementations are duplicated between the Neo4j implementation and the Java Driver, partially because they have different needs (the java driver implementation of messaging is using the Drivers type system API, for instance), partially because the driver is not released lock-step with Neo4j (and can't depend on Neo4j), but mostly because

the java driver is meant to serve as a reference implementation.

In its role as a reference implementation, it should be organized and coded in a way that serves as a blueprint for other languages. All other drivers will need to contain their own message protocol implementations, so the reference driver should as well to show how to do it. Likewise, other drivers will not be able to depend on Neo4j internals for various things - so neither should the reference driver.



daidegrohmann commented Apr 9, 2015

Collaborator

@**jakewins** if the java-driver does not share any code with the database I don't really see any benefit in having it in the main repo, can you explain why we should merge this in?



daidegrohmann commented on the diff Apr 9, 2015

driver/java/pom.xml

[View full changes](#)

```
...      ...      @@ -0,0 +1,87 @@
1      +<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3
2      +      xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
3      +      http://maven.apache.org/xsd/maven-4.0.0.xsd">
4      +      <modelVersion>4.0.0</modelVersion>
5      +      <properties>
6      +      <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
7      +      </properties>
8      +
9      +      <!--The module should not rely on a parent-->
10     +
11     +      <groupId>org.neo4j.driver</groupId>
12     +      <artifactId>neo4j-java-driver-parent</artifactId>
13     +      <version>2.3-SNAPSHOT</version>
```



daidegrohmann added a note Apr 9, 2015

Collaborator

Why should the driver be tight to the release cycle of the database?



jakewins added a note Apr 10, 2015

Collaborator

It shouldn't, this is my mistake. This should be 1.0

Add a line note



Mats-SX commented on

driver/java/driver/src/main/java/org/neo4j/driver/Record.java in c642e92
Apr 9, 2015

Collaborator

Typo in javadoc: "the field field" -> "the field name"



Mats-SX commented on

driver/java/driver/src/main/java/org/neo4j/driver/Result.java in c642e92
Apr 9, 2015

Collaborator

Typo in javadoc: "the field field" -> "the field name"



jakewins commented Apr 10, 2015

Collaborator

@**daidegrohmann** it's not for sure at all that it should, there are arguments in both directions. I'll send you a link to some ad-hoc discussion we had on this with **@simpsonjulian** the other day. The conclusion there was that we'd try having it in the same code base, and if we run into issues doing it that way we'll break it out. Thinking about it now, I'm realizing that the versioned branching that happens in this repo will pose a hurdle, and that having tons of tags for all the different driver releases in this repo will be very confusing ("java-driver-1.2.0", "pascal-driver-2.3"). I'll send you an invite to the call on this.



simpsonjulian commented Apr 10, 2015

Owner

@davidegrohmann @jakewins I have zero skin in this game; but what I was trying to say the other day was that due to

- (we assume) Neo4j's dependence on the Java driver, and
- the lack of a release process for the Java driver, and
- (we assume) the user expectation to see the drivers to have the same version as a neo4j release, then it made sense to keep that driver in the Neo4j project unless there was a reason not to.

If you've found a compelling reason not to, then you should talk to **@benbc** and friends about the release process.



nigelsmall commented Apr 10, 2015

Owner

I disagree with the assertion in **@simpsonjulian**'s third point. I don't think there would necessarily be an expectation for a driver to have the same version as the server. The Java driver will (ultimately) be closer to a pool of drivers in other languages rather than the server itself and will probably, necessarily have to support multiple server versions. Limiting ourselves to only updating a driver when the server is also updated, just to maintain simplicity of versioning, feels like an arbitrary constraint.



zhenlineo commented Apr 10, 2015

Collaborator

More comments are welcome but close this pr for now until we've decided where to put the driver



zhenlineo closed this Apr 10, 2015

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