

Princeton Results - Test 4

Setup

1. Version of Fedora
 - a. 4.5.1-SNAPSHOT | Build #fd6f9da9 (2016-02-19) (<https://github.com/fcrepo4/fcrepo4/pull/986> before squashing)
2. Fedora Configuration
 - a. `JAVA_OPTS="-Dfcrepo.home=/var/lib/tomcat7/fcrepo4-data -Djava.awt.headless=true -Xmx8g"`
 - b. See below
3. System details
 - a. Fedora: VMWare VM configured with 4x 2.8GHz CPU, 16GB RAM
 - b. JMeter: separate identical VM
 - c. Network: 1000Mb/s ethernet
 - d. OS: Ubuntu 14.04.3 LTS
 - e. JVM: Oracle JDK 1.8.0_66-b17
 - f. Servlet container: Tomcat 7.0.52
4. Initial State of the Repository
 - a. empty
5. Number of Client Threads
 - a. 1

Test

```
$HOME/jmeter/bin/jmeter -Dfedora_4_server=lib-fedora1 -Dfedora_4_context=fcrepo/rest -n -t $HOME/jmeter/fedora.jmx
```

Results

LevelDB

1. Summary: 737,824 in 19,341s = 38.1/s, Avg: 21, Min: 8, Max: 5,413, Err: 1 (0.00%)
2. Logs:
 - a. jmeter: [leveldb-jmeter.log](#)
 - b. containers: [leveldb-containers.csv.gz](#)
 - c. perf: [leveldb-perf.log](#)

PostgreSQL

1. Additional config:
 - a. `JAVA_OPTS="{JAVA_OPTS} -Dfcrepo.modeshape.configuration=classpath:/config/jdbc-postgresql/repository.json"`
 - b. PostgreSQL 9.3 running on same VM as Fedora
2. Summary: 3,751,531 in 190,599s = 19.7/s, Avg: 46, Min: 7, Max: 19,416, Err: 0 (0.00%)
3. Logs:
 - a. jmeter: [postgres-jmeter.log](#)
 - b. containers: [postgres-containers.csv.gz](#)
 - c. perf: [postgres-perf.log](#)
4. Note: the test was interrupted by a network interruption after 3.7 million containers were created

PostgreSQL (Modeshape 5)

1. Version of Fedora
 - a. 4.5.2-SNAPSHOT | Build #c94f9a93 (2016-06-06) (modeshape5 branch)
2. Additional config:
 - a. `JAVA_OPTS="{JAVA_OPTS} -Dfcrepo.modeshape.configuration=classpath:/config/jdbc-postgresql/repository.json -XX:+UseG1GC -XX:+DisableExplicitGC"`
 - b. PostgreSQL 9.3 running on same VM as Fedora
3. Summary: 17,017,228 in 564,606s = 30.1/s, Avg: 28, Min: 1, Max: 5,050, Err: 1 (0.00%)
4. Test status: Test errored after receiving the error: "ERROR 23:31:38.442 (RepositoryExceptionMapper) Caught a repository exception: org.modeshape.persistence.relational.RelationalProviderException: java.sql.BatchUpdateException: Batch entry 1 INSERT INTO MODESHAPE_REPOSITORY (ID, CONTENT) VALUES ('936198c7505d64b3fa6b43-e4ad-432c-ae0a-7de3ae9046a6', ?) was aborted. Call getNextException to see the cause."
5. Logs:

- a. jmeter log: [test4-postgres-mode5.log](#)
- b. jmeter data: [test4-postgres-mode5.csv.1.gz](#), [test4-postgres-mode5.csv.2.gz](#)
- c. jmeter perf: [test4-postgres-mode5-perf.log](#)

PostgreSQL (Modeshape 5.1)

- 1. Version of Fedora
 - a. 4.5.2-SNAPSHOT | Build #4f31e2f9 (2016-06-28) (modeshape5 branch with update to 5.1 from awoods:fcrepo-2062)
- 2. Additional config:
 - a. `JAVA_OPTS="{JAVA_OPTS} -Dfcrepo.modeshape.configuration=classpath:/config/jdbc-postgresql/repository.json -XX:+UseG1GC -XX:+DisableExplicitGC"`
 - b. PostgreSQL 9.5 running on the same VM as Fedora
- 3. Summary: 4,139,423 in 113,995s = 36.3/s, Avg: 23, Min: 1, Max: 2,351, Err: 0 (0.00%)
- 4. Test status: Test manually stopped
- 5. Logs:
 - a. jmeter log: [test4-postgres-mode51.log](#)
 - b. jmeter data: [test4-postgres-mode51.csv.gz](#)
 - c. jmeter perf: [test4-postgres-mode51-pref.log](#)