Fedora 4 Properties CRUD Performance Testing

Platform Profile:

- Test - Platform Profile: saez workstation

Repository Profile:

- Basic: Test - Repository Profile: Basic File LevelDB
- Fcrepo4 Git commit: https://github.com/futures/fcrepo4/commit/2afdcf07f701fb4026acbe93fe256fc43a5883ee

Setup Profile:

- Test - Setup Profile: 10,000 x 1KB

Benchtool

The benchmarking tool is available on github: https://github.com/fcrepo4-labs/benchtool

```
git clone git@github.com:fcrepo4-labs/benchtool.git
cd benchtool
mvn install
```

Benchtool is running on a different host.

Create Property Test Matrix

Workflow profile: Test - Workflow Profile: Benchtool Property Create

Benchtool command (one thread):

```
java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f http://saez:8080 -s 1K -n 10000 -t 1 -a ingest -pp
```

Threads	Containers	Binary Size	Create Property Time (ms)
1	10000	1KB	2,031,308 ms
2	10000	1KB	1,939,065 ms
4	10000	1KB	1,880,343 ms
8	10000	1KB	1,911,114 ms

Read Property Test Matrix

Workflow profile: Test - Workflow Profile: Benchtool Property Read

Benchtool command (one thread):

```
java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f http://saez:8080 -s 1K -n 10000 -t 1 -a read -pp
```

Threads	Containers	Binary Size	Read Property Time (ms)
1	10000	1KB	32,299 ms
2	10000	1KB	17,541 ms
4	10000	1KB	11,097 ms
8	10000	1KB	10,271 ms

Update Property Test Matrix

Workflow profile: Test - Workflow Profile: Benchtool Property Update

Benchtool command (one thread):

```
java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f http://saez:8080 -s 1K -n 10000 -t 1 -a update -pp
```

Threads	Containers	Binary Size	Update Property Time (ms)
1	10000	1KB	2,073,580 ms
2	10000	1KB	1,907,739 ms
4	10000	1KB	2,051,586 ms
8	10000	1KB	1,887,010 ms

Delete Property Test Matrix

Workflow profile: Test - Workflow Profile: Benchtool Property Delete

Benchtool command (one thread):

```
java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f http://saez:8080 -s 1K -n 10000 -t 1 -a delete -pp
```

Threads	Containers	Binary Size	Delete Property Time (ms)
1	10000	1KB	1,998,672 ms
2	10000	1KB	1,850,666 ms
4	10000	1KB	2,064,493 ms
8	10000	1KB	1,890,930 ms