

# AuthZ - No AuthZ Fedora 4 Comparison Performance Testing

## Platform Profile:

- [Test - Platform Profile: saez workstation](#)

## Repository Profile:

- Without Authorization Enabled: [Test - Repository Profile: Basic](#)
- With Authorization Enabled: [Test - Repository Profile: Basic with authorization](#)
- Fcrepo4 Git commit: <https://github.com/sprater/fcrepo4/commit/fa517f25580372784cbd015c13a69e941a3955d1>

## Setup Profile:

- [Test - Setup Profile: 1000 x 1MB](#)

## 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.

## Ingest Test Matrix

Workflow profile: [Test - Workflow Profile: Benchtool Ingest](#)

Benchtool command (one thread):

```
no authz: java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f http://saez:8080 -s 1048576 -n 1000 -t 1 -a ingest
```

```
with authz: java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f http://saez:8080 -s 1048576 -n 1000 -t 1 -a ingest -u adminuser -p turnip2
```

| Threads | Containers | Binary Size | AuthZ Time (ms) | No AuthZ Time (ms) |
|---------|------------|-------------|-----------------|--------------------|
| 1       | 1000       | 1MB         | 535,091 ms      | 510,248 ms         |
| 2       | 1000       | 1MB         | 464,909 ms      | 408,316 ms         |
| 4       | 1000       | 1MB         | 402,695 ms      | 387,168 ms         |
| 8       | 1000       | 1MB         | 393,567 ms      | 384,786 ms         |

## Read Test Matrix

Workflow profile: [Test - Workflow Profile: Benchtool Read](#)

Benchtool command (one thread):

```
no authz: java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f http://saez:8080 -s 1048576 -n 1000 -t 1 -a read
```

```
with authz: java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f http://saez:8080 -s 1048576 -n 1000 -t 1 -a read -u adminuser -p turnip2
```

| Threads | Containers | Binary Size | AuthZ Time (ms) | No AuthZ Time (ms) |
|---------|------------|-------------|-----------------|--------------------|
| 1       | 1000       | 1MB         | 8504 ms         | 6481 ms            |
| 2       | 1000       | 1MB         | 4343 ms         | 3299 ms            |
| 4       | 1000       | 1MB         | 4409 ms         | 3463 ms            |
| 8       | 1000       | 1MB         | 3910 ms         | 3472 ms            |

## Update Test Matrix

Workflow profile: [Test - Workflow Profile: Benchtool Update](#)

Benchtool command (one thread):

no authz: java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f http://saez:8080 -s 1048576 -n 1000 -t 1 -a update

with authz: java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f <http://saez:8080> -s 1048576 -n 1000 -t 1 -a update -u adminuser -p turnip2

| Threads | Containers | Binary Size | AuthZ Time (ms) | No AuthZ Time (ms) |
|---------|------------|-------------|-----------------|--------------------|
| 1       | 1000       | 1MB         | 200,431 ms      | 174,545 ms         |
| 2       | 1000       | 1MB         | 137,125 ms      | 124,240 ms         |
| 4       | 1000       | 1MB         | 141,977 ms      | 128,048 ms         |
| 8       | 1000       | 1MB         | 135,004 ms      | 149,371 ms         |

## Delete Test Matrix

Workflow profile: [Test - Workflow Profile: Benchtool Delete](#)

Benchtool command (one thread):

no authz: java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f http://saez:8080 -s 1048576 -n 1000 -t 1 -a delete

with authz: java -jar target/bench-tool-0.0.1-SNAPSHOT-jar-with-dependencies.jar -f <http://saez:8080> -s 1048576 -n 1000 -t 1 -a delete -u adminuser -p turnip2

| Threads | Containers | Binary Size | AuthZ Time (ms) | No AuthZ Time (ms) |
|---------|------------|-------------|-----------------|--------------------|
| 1       | 1000       | 1MB         | 126,261 ms      | 112,387 ms         |
| 2       | 1000       | 1MB         | 96,281 ms       | 92,130 ms          |
| 4       | 1000       | 1MB         | 100,309 ms      | 92,542 ms          |
| 8       | 1000       | 1MB         | 101,414 ms      | 92,472 ms          |