

# Training - Administrator Introduction

These training archives may be out of date, but have been retained and kept available for the community's benefit in reviewing previous sessions.

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## Learning Outcomes

- Deploying Fedora
- Explore features
- Gain insight into content modeling
- Set up a federation over a local filesystem
- Set up JMS message consumer
- Set up external triplestore

## Prerequisites

- Java7 installed
- WAR file(s) downloaded
- Configuration files downloaded
- Tomcat installed (optional)

## Downloads

### War files

### Required

- One click run of Fedora 4: [fcrepo-webapp-4.0.0-beta-03-jetty-console.war](#)
- One click run of external message consumer: [fcrepo-message-consumer-webapp-4.0.0-beta-03-jetty-console.war](#)

### Optional

- [fcrepo-webapp-4.0.0-beta-03-auth.war](#) (optional, only needed if deploying to Tomcat with authorization)
- [fcrepo-message-consumer-webapp-4.0.0-beta-03.war](#) (optional, only needed if deploying to Tomcat)
- [fcrepo-webapp-4.0.0-beta-03.war](#) (optional, only needed if deploying to Tomcat)

## Configuration files

- [repository.json](#)
- [repository-federation.json](#)
- [fedora-node-types-training.cnd](#)
- [fedora-node-types-indexing.cnd](#)

## Triplestore

- Download and unpack **Jena Fuseki** ([ZIP](#) or [TAR](#)) prior to the training

## Deploying Fedora4

In OSX or Windows you can simply double-click the **fcrepo-webapp-4.0.0-beta-03-auth.war** file to launch the Fedora 4 console. Then click Start and wait for the application to load in your browser.

You can also run the application from the command line using the following command:

```
java -jar fcrepo-webapp-4.0.0-beta-03-jetty-console.war --headless
```

Note: The location where Fedora writes to disk can be specified with the following flag:

```
java -Dfcrepo.home=/path/fedora/data -jar fcrepo-webapp-4.0.0-beta-03-jetty-console.war --headless
```

## Using Admin Features

### Transactions ([docs](#))

### Versioning ([docs](#))

Create a version with a label

```
curl -XPOST http://localhost:8080/rest/item/fcr:versions/my-label
```

### Import/Export ([docs](#))

### Federation aka Projection ([docs](#))

- Modify [repository-federation.json](#) for local system ("externalSources:federated-directory:directoryPath")

```
java -Dfcrepo.modeshape.configuration=file:/path/to/repository-federation.json -jar fcrepo-webapp-4.0.0-beta-03-jetty-console.war --headless
```

## Content Modeling

- Modify [repository-federation.json](#) to point to [fedora-node-types-training.cnd](#)

```
"node-types" : ["/path/to/fedora-node-types-training.cnd"]
```

- Run:

```
java -Dfcrepo.modeshape.configuration=file:/path/to/repository-federation.json -jar fcrepo-webapp-4.0.0-beta-03-jetty-console.war --headless
```

- Examine default property created on new objects
- Examine effect of applied type

```
<> a carl:page
```

## External Triplestore

1. Setup Fuseki ([docs](#))
  - a. Start Fuseki

```
./fuseki-server --update --mem /test
```

b. Verify running at `http://localhost:3030`

2. Modify `repository-federation.json` to point to `fedora-node-types-indexing.cnd`

```
"node-types" : [ "/path/to/fedora-node-types-indexing.cnd" ]
```

3. Start Fedora

```
java -Dfcrepo.modeshape.configuration=file:/path/to/repository-federation.json -jar fcrepo-webapp-4.0.0-beta-03-jetty-console.war --headless
```

4. Start `fcrepo-message-consumer`

```
java -jar fcrepo-message-consumer-webapp-4.0.0-beta-03-jetty-console.war --headless --port 9090
```

5. Create/Update some objects and perform some queries ([examples](#))

## Additional Resources

1. F3->F4 mapping
  - [Fedora 3 Object representation in Fedora 4](#)
  - [How to Migrate a Fedora 3 Content Model to a Fedora 4 Node Type](#)
2. Node types
  - <https://docs.jboss.org/author/display/MODE40/Defining+custom+node+types>