

# Setting Up Jena Fuseki with Update in Windows 10



Fariz Darari · Follow

3 min read · Dec 10, 2018



32



A documentation, just let me know if something is missing from the following steps.

First thing to do is, download Apache Jena Fuseki from:  
<https://jena.apache.org/download/index.cgi>

I am using Fuseki 2 from apache-jena-fuseki-3.9.0.zip.

Now, unzip your downloaded file.

Name	Date modified	Type	Size
bin	28/09/2018 18:31	File folder	
webapp	28/09/2018 18:15	File folder	
fuseki	28/09/2018 18:15	File	13 KB
fuseki.service	28/09/2018 18:15	SERVICE File	3 KB
fuseki.war	28/09/2018 18:30	WAR File	22.762 KB
fuseki-backup	28/09/2018 18:15	File	2 KB
fuseki-server	28/09/2018 18:15	File	3 KB
fuseki-server.bat	28/09/2018 18:15	Windows Batch File	2 KB
fuseki-server.jar	28/09/2018 18:31	Executable Jar File	25.444 KB
LICENSE	28/09/2018 18:15	File	30 KB
NOTICE	28/09/2018 18:15	File	10 KB
README	28/09/2018 18:15	File	3 KB

Unzipped Fuseki

Create a folder named *data*.

Open a command prompt and check out Fuseki help, by typing the following command:

```
fuseki-server --help
```

```

fuseki [--config=FILE] [--mem|--desc=AssemblerFile|--file=FILE] [--port PORT] /DatasetPathName
Fuseki
  --desc=
    Assembler description file
  --mem
    Create an in-memory, non-persistent dataset for the server
  --file=FILE
    Create an in-memory, non-persistent dataset for the server, initialised
  --file
    Create command line persistent datasets with TDB2
  --tdb2
    Use an existing TDB database (or create if does not exist)
  --loc=DIR
    Create an in-memory, non-persistent dataset using TDB (testing only)
  --memTDB
    Listen on this port number
  --port
    Listen only on the localhost interface
  --localhost
    Global timeout applied to queries (value in ms) -- format is X[,Y]
  --timeout=
    Allow updates (via SPARQL Update and SPARQL HTTP Update)
  --update
    Use a configuration file to determine the services
  --config=
    Set up the server (not services) with a Jetty XML file
  --jetty-config=FILE
    Enable GZip compression (HTTP Accept-Encoding) if request header set
  --gzip=on|off
  Symbol definition
  --set
    Set a configuration symbol to a value
  General
  -v --verbose
    Verbose
  -q --quiet
    Run with minimal output
  --debug
    Output information for debugging
  --help
  --version
    Version information
  --strict
    Operate in strict SPARQL mode (no extensions of any kind)

```

### Fuseki help

Get familiarize with all the commands. Then, run the following command to start the Fuseki server.

```
fuseki-server --loc=data --update /your-dataset
```

The location (loc) is to store your RDF data and can be set up to any other path. The /your-dataset part is the dataset name, and you can rename it to whatever suits you. By default, port 3030 will be used by the Fuseki server.

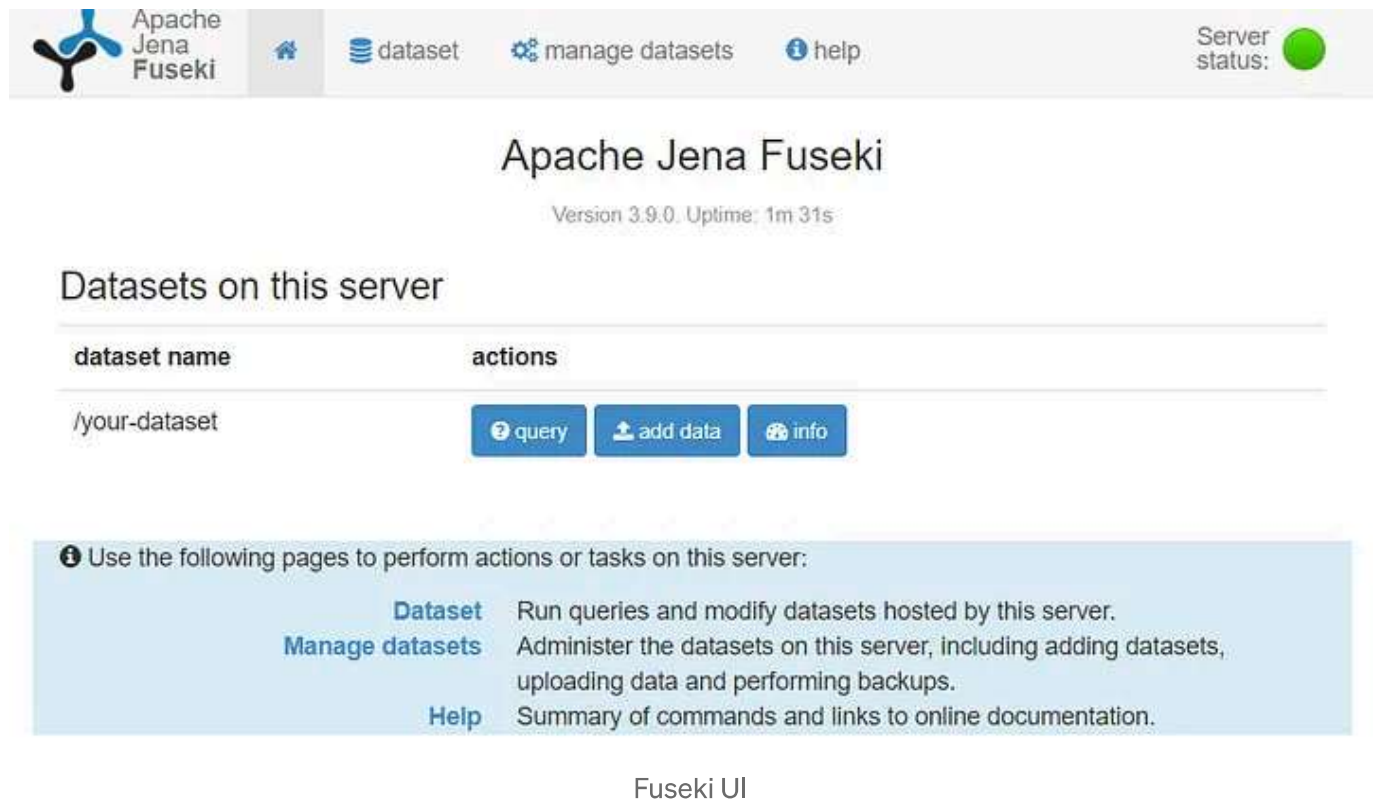
```

[2018-12-10 00:08:50] Server    INFO    Running in read-only mode for /your-dataset
[2018-12-10 00:08:51] Server    INFO    Apache Jena Fuseki 3.9.0
[2018-12-10 00:08:52] Config    INFO    FUSEKI_HOME=C:\Users\Fariz\Documents\apps\apache-j
[2018-12-10 00:08:52] Config    INFO    FUSEKI_BASE=C:\Users\Fariz\Documents\apps\apache-j
[2018-12-10 00:08:52] Config    INFO    Shiro file: file://C:\Users\Fariz\Documents\apps\ap
ro.ini
[2018-12-10 00:08:54] Config    INFO    Template file: templates/config-tdb-dir
[2018-12-10 00:08:54] Config    INFO    TDB dataset: directory=data
[2018-12-10 00:08:57] Config    INFO    Register: /your-dataset
[2018-12-10 00:08:57] Server    INFO    Started 2018/12/10 00:08:57 ICT on port 3030

```

### Running Fuseki

This is how Fuseki UI looks like.



Try to query your data (obviously, the result will be empty though since no data has been uploaded). Go to the following address:

<http://localhost:3030/dataset.html?tab=info&ds=/your-dataset>

Open in app ↗

Sign up

Sign in

Medium

Search

Write



**Dataset:** /your-dataset ▼

? query
 upload files
 edit
 info

## SPARQL query

To try out some SPARQL queries against the selected dataset, enter your q

EXAMPLE QUERIES

Selection of triples
 Selection of classes

PREFIXES

rdf
 rdfs
 owl
 xsd
 +

SPARQL ENDPOINT

/your-dataset/sparql

CONTENT TYPE (SE

JSON

```

1 SELECT ?subject ?predicate ?object
2 WHERE {
3     ?subject ?predicate ?object
4 }
5 LIMIT 25
  
```

Get at most 25 triples of whatever S-P-O

The next step is to upload your data, using HTTP SPARQL Update. This can be done from the following HTML form (save it as fuseki-post.html).

```

<form action="http://localhost:3030/your-dataset/update"
method="post">
  <fieldset>
    <legend>Fuseki SPARQL Update</legend>
    <textarea name="update" rows="10" cols="30">Put your SPARQL
  
```

```
update query here...</textarea><br>
  <input type="submit" value="Submit">
</fieldset>
</form>
```

Then, open your fuseki-post.html using any Web browser. Edit the text area with the following SPARQL Update query.

```
PREFIX dc: <http://purl.org/dc/elements/1.1/>
INSERT DATA
{
  <http://example/book1> dc:title "A new book" ;
                        dc:creator "A.N.Other" .
}
```

Click Submit, and you should see the success message.

# Success

## Update succeeded

If you see this, this means your SPARQL update updates :)

Run the SPARQL query as shown above (the one with LIMIT 25).

QUERY RESULTS

Table Raw Response

Showing 1 to 2 of 2 entries

Search:

	subject	predicate	object
1	<http://example/book1>	<http://purl.org/dc/elements/1.1/title>	"A new book"
2	<http://example/book1>	<http://purl.org/dc/elements/1.1/creator>	"A.N.Other"

Showing 1 to 2 of 2 entries

Query results containing the SPARQL updates

Great, you have now successfully set up Jena Fuseki for SPARQL Update.

#enjoy

References:

- <https://jena.apache.org/documentation/fuseki2/>
- <https://www.w3.org/TR/sparql11-update/>
- <https://www.slideshare.net/fadirra/semantic-web-intro-040411>

Sparql

Rdf

Jena

Fuseki

Knowledge Graph

