



LOD-e Participation Pilot project: Installation Guide

Date: 23/02/2017
Doc. Version: 1.0

Document Control Information

Settings	Value
Document Title:	Installation Guide of LODEP pilot project
Project Title:	Link open data electronic participation (LODEP)
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Doc. Version:	1.0
Sensitivity:	Public
Date:	28/02/2017

Document Approver(s) and Reviewer(s):

NOTE: All Approvers are required. Records of each approver must be maintained. All Reviewers in the list are considered required unless explicitly listed as Optional.

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Document history:

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Changes to this document are summarized in the following table in reverse chronological order (latest version first).

Revision	Date	Created by	Short Description of Changes
0.3	20/02/2017	Vivien Toully / Brahim Batouche	Initialisation of the document
0.3.1	23/02/2017	SP Landercy	Review of all sections + comments
0.3.2	23/02/2017	Vivien Toully	Review versionning
1.0	28/02/2017	SP Landercy	Initial Version

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1. INTRODUCTION

2. INSTALLATION

2.1. Pre-requisites

- Apache Maven 3.0.5
- Maven home: /usr/share/maven
- Java version: 1.8.0_102, vendor: Oracle Corporation
- Java home: /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.102-4.b14.el7.x86_64/jre
- Default locale: en_US, platform encoding: UTF-8
- OS name: "linux", version: "3.10.0-514.el7.x86_64", arch: "amd64", family: "unix"
- Virtuoso 7.2.4

2.2. Installation tasks

- Connect at the server with i_lod:
\$sush i_lod
- Create variable with the install folder path :
Ex: INSTALL_DIR = /applications/lod/users/lod /lodepart
- If installing from scratch, create the directory:
\$mkdir -p \$INSTALL_DIR
- Change current directory:
\$cd \$INSTALL_DIR
- Check out the project source code from svn
\$svn co --username=\${USERNAME} http://svn-int.opoce.cec.eu.int:8080/publications/svn/LODEPART/deliveries/lodepart_v3.0
- Edit the properties file and check if the values are correct :
\$vim config.properties

Property name	Property value
G_USER	http://lodepart/user
G_LANG	http://lodepart/lang
G_CONTAINER	http://lodepart/container
G_PARTICIPATION	http://lodepart/participation
G_EUROVOC	http://lodepart/eurovoc
DOCUMENTS_PATH	static/documents
ONTOLOGY_PATH	static/ontologies
G_CONTAINER_PATH	static/graphs/contrainerGraph
PORT_SERVER	8080

CELLAR_SPARQL_ENDPOINT	http://publications.europa.eu/webapi/rdf/sparql
SPARQL_ENDPOINT	<a href="http://<virtuoso_server>/sparql">http://<virtuoso_server>/sparql (ex: http://lod-tk:8890/sparql)
SPARQL_ENDPOINT_SRV ¹	<a href="http://<virtuoso_server>/sparql">http://<virtuoso_server>/sparql (ex: http://lod-tk:8890/sparql)
SPARQL_ENDPOINT_AUTH	<a href="http://<virtuoso_server>/sparql-auth">http://<virtuoso_server>/sparql-auth (ex: http://lod-tk:8890/sparql-auth)
TRIPLE_STORE_USERNAME	dba
TRIPLE_STORE_PASSWORD	dba ²
TRIPLE_STORE_URI	<a href="http://<web_server>/sparql">http://<web_server>/sparql (ex: http://lod-tk:8080)
CALLBACK	<a href="http://<web_server>/public/callback">http://<web_server>/public/callback
ERRORCALLBACK	<a href="http://<web_server>/public/errorcallback">http://<web_server>/public/errorcallback
SEND_MAIL	true
FROM_MAIL	author@mycompagny.com (Ex: OPDL-EPARTICIPATION@publications.europa.eu)
HOST_MAIL	localhost
PORT_MAIL	25

3. INITIALIZE DATABASE

We use Virtuoso³ as triple-store, but the application work for any other triple-store, in adapting only the Sparql end-points.

3.1. Virtuoso

- Load name space (prefix): go to isql to http://<virtuoso_server>/conductor/isql.vspj, then copy/paste the content of src\main\resources\static\ontologies\prefixes and execute it. After execution we have a message “The statement execution did not return a result set”.
- Load graph: language and eurovoc: go to conductor to http://<virtuoso_server>/conductor and to LinkedData and to QuadStoreUpload. The select the file from src\main\resources\static\graphs, set the name of the graph and upload the data (wait few minutes to load eurovoc graph).

1. File languagesGraph: its named graph <http://lodepart/lang>

2. File eurovocGraph⁴: its named graph <http://lodepart/eurovoc>

Or File CountryGraph: its named graph <http://lodepart/country>

¹ This parameters is used in the back-end, however SPARQL_ENDPOINT is used for the front-end

²The default password is ‘dba’, but we have to modify it for security reason.

³ <https://virtuoso.openlinksw.com>

⁴ If you can’t load eurovocGraph because its size is so big, then you have to load CountryGraph to ensure the functionality of the application.

- Change the password of dba use: go to conductor>SystemAdmin>UserAccounts, then edit dba user and modify the password. Next edit the config.properties file at the root of project and change the property TRIPLE_STORE_PASSWORD with the same password.

3.2. Application

- Connect at the server with lod:
\$sush lod
- Build the application :
\$mvn install
- Launch the application :
\$mvn spring-boot:run &
- Wait some seconds to ensure that the application is work, through a browser at <web_server>, e.g. <http://lod-tk:8080>
- In other tab launch <web_server>/load-users, e.g. <http://lod-tk:8080/load-users>
- Now login with : admin@ext.publications.europa.eu / password⁵
- Click on the user menu and on admin
- Click on the button *Load all the documents* (the task can take 5-10 minutes)

⁵ Then modify the password for security reason.

TECHNICAL TESTS

[Test Case]	Virtuoso
Description	To verify that Virtuoso is accessible and works properly
Actors	DBA
Preconditions	Virtuoso is installed and deployed. Documents are loaded.
Start Date and Time	//
End Date and Time	//
Steps	1. Connect to the SPARQL endpoint via <a href="http://<VIRTUOSO_SERVER>:8890/sparql">http://<VIRTUOSO_SERVER>:8890/sparql Run the following query SELECT * WHERE {?s ?p ?o} LIMIT 100 2. Connect to the SPARQL endpoint via the account with permission to write triples <a href="http://<VIRTUOSO_SERVER>:8890/sparql-auth">http://<VIRTUOSO_SERVER>:8890/sparql-auth Run the following query WITH GRAPH <test> INSERT {<s> <p> <o>.}
Expected Results	A list of triples returned by the SPARQL endpoint
Actual Results	//

[Test Case]	Lodepart
Description	To verify if the website works correctly
Actors	Any users who have access to the website
Preconditions	The website is deployed
Start Date and Time	//
End Date and Time	//
Steps	Connect to the website <a href="http://<WEB_SERVER>/">http://<WEB_SERVER>/
Expected Results	The website is accessible
Actual Results	Users can see the documents and comments