

Prerequisites (required software to be installed)

1. Java, for example, *jdk1.6.0_26*
2. Apache Tomcat server, for example, *apache-tomcat-7.0.16*
3. Virtuoso RDF server

OBIS configuration

1. Create *appconfig.properties* file in some directory and write appropriate parameters (or use default values):

```
# === data and web ontology OWL file properties
dataOntologyFile      = Data.owl
webOntologyFile       = WebApplication.owl
workspaceFolder       = C:\\ISBP\\webbuilder\\

# === data ontology properties
defaultNamespace      = http://lumii.lv/ontologies/data.owl#
defaultNamespacePrefix = data

# === data repository properties
virtuosoServerURL     = jdbc:virtuoso://localhost:1111
virtuosoServerUsername = dba
virtuosoServerPassword = dba
virtuosoRepositoryName = WebAppRepository
```

2. Copy data ontology file (which name is provided with `dataOntologyFile` parameter) to the directory from `workspaceFolder` parameter.
Be sure that used namespace and used namespace prefix in data ontology corresponds to the values provided in `defaultNamespace` and `defaultNamespacePrefix` parameters
3. Open `<apache tomcat>\conf\context.xml`
4. Copy this line under `<Context>` tag (modify the *value* attribute with the correct path to *appconfig.properties* created in the step 1)

```
<Environment name="appConfigFile" value="<path to appconfig properties file>\appconfig.properties" type="java.lang.String" override="true"/>
```

5. Save and close *context.xml* file

Prepare Virtuoso RDF repository

1. Create repository with the name which is provided in *appconfig.properties* -> `virtuosoRepositoryName` parameter
2. Load data ontology in this repository

3. Enable rule inference for created repository:
 - a. Navigate to *virtuoso-opensource\bin* and run *isql.exe*
 - b. Execute `rdfs_rule_set ('rdfs', '<virtuosoRepositoryName>');`

OBIS startup

1. Delete folders *App* un *WebBuilderApp* and war files *App.war* and *WebBuilderApp.war* under *<apache tomcat>\webapps* (if exist). This step is mandatory for new system version upgrades.
2. Copy the latest *App.war* and *WebBuilderApp.war* files under *<apache tomcat>\webapps*
3. Run *<apache tomcat>\bin\startup.bat* file
4. Web Application Builder can be accessed: <http://localhost:8080/WebBuilderApp/>
5. Generated Web Application can be accessed: <http://localhost:8080/App/>