

# E-TrustEx Web build, configure and run procedure

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## 1. OVERVIEW

### 1.1. PURPOSE

This document will describe how to build e-TrustEx Web from an archive file.

### 1.2. INTENDED READERSHIP

This document is specifically intended for developers.

### 1.3. CONTEXT

Build and deploy the e-TrustEx Web application starting from the open source distribution archive.

This build is intended to work with Wildfly 10.0.0.Final application server and MySQL 5.7.

## 2. BUILD E-TRUSTEX WEB APPLICATION

### 2.1. PREREQUISITES

To build e-TrustEx Web, we need the following tools:

- JDK 1.8
- Maven 3.3.9
- The latest version of the e-TrustEx Web source distribution archive provided by the European Commission

For the application server, we will have to choose one of the following:

- WildFly 10.1.0.Final

### 2.2. BUILDING E-TRUSTEX WEB

**Step 1** – Configure custom properties in "wildfly" profile section in parent pom.xml:

```
<etrustex.environment>wildfly</etrustex.environment>
<context.root>e-trustex</context.root>
<project.java.debug>true</project.java.debug>
<application.base.domain>http://127.0.0.1:8080</application.base.domain>
<database.schema>etx_web</database.schema>
<datasource.name>java:/jdbc/EtxWebDb</datasource.name>
<jms.connection.factory>java:/JmsXA</jms.connection.factory>
<jms.etxWebMailQueue>java:/queue/EtxWebMailQueue</jms.etxWebMailQueue>
<jms.etxWebRetrieveMetadataJMSQueue>java:/queue/EtxWebRetrieveMetadataJMSQueue</jms.etxWebRetrieveMetadataJMSQueue>
<jms.etxWebRetrieveBundleJMSQueue>java:/queue/EtxWebRetrieveBundleJMSQueue</jms.etxWebRetrieveBundleJMSQueue>
<jms.etxWebSendStatusJMSQueue>java:/queue/EtxWebSendStatusJMSQueue</jms.etxWebSendStatusJMSQueue>
<jms.etxWebErrorQueue>java:/queue/EtxWebErrorQueue</jms.etxWebErrorQueue>
<server.name>jboss</server.name>
```

**Step 2** – maven build:

```
mvn clean install -P webpack,wildfly
```

This will generate an EAR using "webpack" and "wildfly" profiles.

The generated EAR can be found in:

`etrustex-assemblers/etrustex-assembler-webapp/target/etx-wacc-modules-ear-wildfly.ear`

### 3. CONFIGURE E-TRUSTEX WEB (IF NOT USING DOCKER)

#### 3.1. Set up MySQL DB

Assuming that MySQL 5.7 DB is already installed with an appropriate schema setup.

There is no need to run DB initialization scripts. Liquibase will run all the changesets on first deployment. The liquibase changelog file is `'liquibase/wildfly/db.changelog.xml'`.

The last changeset at the end of that file will run the `'liquibase/wildfly/scripts/reference_data.sql'` scripts to populate the DB with reference and sample data.

eTrustEx Web application exposes endpoints for the following services;

- DocumentWrapper-2.0
- DocumentBundle-2.0
- RetrieveInterchangeAgreementsRequest-2.0
- RetrieveRequest-2.0
- ApplicationResponse-2.0

these are configured in `ETX_WEB_CONFIG` table. Those can be changed either by editing `'reference_data.sql'` before deploying, or updating them in DB once the application has been deployed and running. E.g.:

```
UPDATE `etx_web_config` SET `CFG_PROP_VALUE`='<HOST>:<PORT>/etrustex/services/DocumentWrapper-2.0' WHERE ...;
```

#### 3.2. Set up Wildfly

Follow the steps from the document:

`docs/open_source_version/e-TrustEx - Wildfly installation and configuration.docx`

### 4. RUN WITH DOCKER COMPOSE

**Pre-requisites:** [docker-compose](#) must be installed

Open a terminal and from `'<project's root>/Docker/open-source/docker-compose.yml'` run:

```
$ docker-compose up
```

The above command will build, configure and deploy with sample data the following containers:

- eTrustEx Node MySQL database,
- eTrustEx Node Wildfly instance,
- eTrustEx Web MySQL database,
- eTrustEx Web Wildfly instance.

The artefact that will be deployed by default is the one located under '*Docker/open-source/files/deployments*'

The deployments location can be set by editing the value of AUTODEPLOY\_DIR environment variable configured in 'Docker/open-source/.env' file.

When using the AUTODEPLOY\_DIR variable, please note that values present in the environment at runtime always override those defined inside the .env file. Similarly, values passed via command-line arguments take precedence as well. For more, see "[Declare default environment variables in file](#)"