e-PRIOR Pre-Award – e-Submission module - Open Source

Installation Guide

Date:	03/08/2016
Version:	0.1

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Document History

Version	Date	Comment	Modified Pages
0.001	18/09/2013	First draft	All
0.002	23/09/2013	Implement comments	All
0.003	03/08/2016	Details for installing and deploying two instances of JBoss	All

1. INTRODUCTION

1.1. Purpose

This document provides a comprehensive installation guide of the open source version of ePRIOR pre-award e-Submission module.

1.2. References

	Document	Contents outline
[REF1]	ePRIOR Pre-Award – e-Submission module – Open Source Software Architecture Document	

1.3. Overview

An introduction to e-PRIOR pre-award e-Submission module can be found in [REF1].

After summarizing the architecture, we provide a step by step installation procedure.

2. SYSTEM ARCHITECTURE

The following diagram, taken from [REF1] shows the main deployable system artefacts.
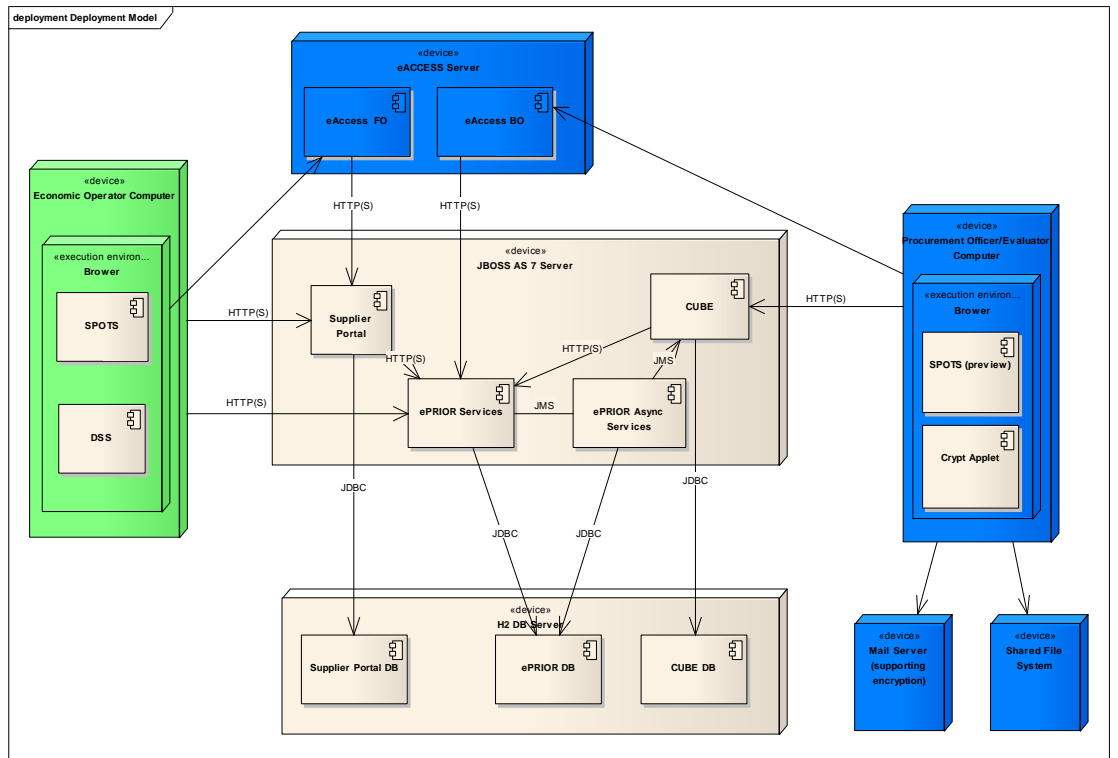
Figure 1 Deployment diagram

Most of these artifacts are deployed on a JBoss AS 7 server and H2 database. The environments of Economic Operators and Contracting Authorities must also be taken into account in the installation of the solution.

3. INSTALLATION STEPS

3.1. Economic Operator and Contracting Authority environment

These environments must have an Internet browser compatible with Java.

Java 1.7 (32 or 64 bits) must be installed.

Please visit the following web site:

http://www.java.com/fr/download/

An important note: Java installer is generally a small executable that downloads from the Internet several files. This "online" installer is not compatible with Internet proxies that are generally installed in enterprises for security reasons. An "offline" installer, larger in size, is available via the link

http://www.java.com/fr/download/manual.jsp

3.2. System servers

1. **Install JAVA 7**

See § 3.1.

The following environment variable should be adapted according to the installation (the following example is provided for Windows configuration, small adaptations are necessary on other operating systems):

Set JAVA_HOME=path to the java folder (e.g. C:\Program Files (x86)\Java\jre7)

Set PATH=% JAVA_HOME %/bin;%PATH%

Download from the following SVN URL

https://joinup.ec.europa.eu/svn/openeprior/branches/V_1_4_0_PRE_AWARD/Implementation/CUBE/Sources/CubeEAR/EarContent/lib/

The files:

- bcmail-jdk16-1.46.jar

- bcprov-jdk16-1.46.jar

- bctsp-jdk16-1.46.jar

Copy them into JAVA_HOME/jre/lib/ext/ folder

Edit the java.security file in the JAVA_HOME/jre\lib\security folder and add the following line:

security.provider.n=org.bouncycastle.jce.provider.BouncyCastleProvider

Where n is the order of preference to be used by the server when evaluating security providers (e.g. the latest existing value for the providers plus one).

2. **Install H2 database**

Please visit the web site http://www.h2database.com/html/main.html

We recommend downloading the version 1.3.172. We also recommend downloading the platform independent zip file.

Unzip the file to a specific folder (that we'll call H2_FOLDER in the following description)

Download the jar and bat files from the SVN URL https://joinup.ec.europa.eu/svn/openeprior/branches/V_1_4_0_PRE_AWARD/Implementation/Environment/H2_DB

Copy these files into H2_FOLDER\bin (only configured for Windows, update h2.sh file if necessary for Unix).

Adapt the bat file to use the right h2 jar file name (a difference can exist depending on the version downloaded).

3. **Create databases**

We recommend downloading from SVN pre-configured databases. The URL to use is:

https://joinup.ec.europa.eu/svn/openeprior/branches/V_1_4_0_PRE_AWARD/Implementation/Environment/H2_DB

These "db" files should be copied into a given folder that we'll call PREAWARD_DB_FOLDER in the following description.

It is also possible to create the databases from scratch.

The H2 DB console must be launched (see H2 DB documentation) and the following DB scripts should be executed:

From SVN URL:
https://joinup.ec.europa.eu/svn/openeprior/branches/V_1_4_0_PRE_AWARD/Implementation/EPRIOR/Configuration/DB_H2_SCRIPTS

- eprior_schema.sql to create the database structure

- eprior_inserts.sql to populate the database with basic configuration

From SVN URL:

https://joinup.ec.europa.eu/svn/openeprior/branches/V_1_4_0_PRE_AWARD/Implementation/CUBE/Configuration/DB_H2_SCRIPTS

- cube_schema.sql to create the database structure

- cube_inserts.sql to populate the database with basic configuration

From SVN URL:

https://joinup.ec.europa.eu/svn/openeprior/branches/V_1_4_0_PRE_AWARD/Implementation/SUPPLIER_PORTAL/Configuration/DB_H2_SCRIPTS

Copy the file cert.pem in a folder.

Execute the different SQL files in the H2 console in the order defined in the file "create_open_ep_database_h2_oder.txt" after having edited the file EP_KEYSTORE.sql to specify the correct path to the cert.pem file.

4. **Install back-office JBoss server**

   Please visit the web site https://www.jboss.org/jbossas/downloads

   We recommend downloading version 7.1.1 final. It is a zip file.

   Unzip the file to a specific folder (that we'll call JBOSS_FOLDER_BACKOFFICE in the following description)

5. **Configure back-office JBoss server**

   Download the standalone-full.xml file from the SVN URL

   https://joinup.ec.europa.eu/svn/openeprior/branches/V_1_4_0_PRE_AWARD/Implementation/Environment/JBOSS_AS7/backoffice/

   Copy this file into

   JBOSS_FOLDER_BACKOFFICE\standalone\configuration

   Edit the file, go to the data sources section and adapt the configuration to point to your PREAWARD_DB_FOLDER folder. The java:/cubeDs, java:/eTrustExDs and java:/epcsJndi datasources should be adapted to use a correct connection-url pointing to the PREAWARD_DB_FOLDER folder.

   E.g.

   <connection-url>jdbc:h2:tcp://localhost/C:/PREAWARD_DB_FOLDER/cubeopen</connection-url>

   Download the standalone.conf.bat file from the same SVN URL.

   Copy that file into JBOSS_FOLDER_BACKOFFICE\bin

6. **Deploy back-office application components**

Download the files from:

Copy all these files into

> JBOSS_FOLDER_BACKOFFICE\standalone\deployment

7. Install front-office JBoss server

Please visit the web site https://www.jboss.org/jbossas/downloads

We recommend downloading version 7.1.1 final. It is a zip file.

Unzip the file to a specific folder (that we'll call JBOSS_FOLDER_FRONTOFFICE in the following description)

8. Configure front-office JBoss server

Download the standalone-full.xml file from the SVN URL

Copy this file into

JBOSS_FOLDER_FRONTOFFICE\standalone\configuration

Edit the file, go to the data sources section and adapt the configuration to point to your PREAWARD_DB_FOLDER folder. The java:/cubeDs, java:/eTrustExDs and java:/epcsJndi datasources should be adapted to use a correct connection-url pointing to the PREAWARD_DB_FOLDER folder.

E.g.

 <connection-url>jdbc:h2:tcp://localhost/C:/PREAWARD_DB_FOLDER/cubeopen</connection-url>

Download the standalone.conf.bat file from the same SVN URL.

Copy that file into JBOSS_FOLDER_FRONTOFFICE\bin

9. Deploy front-office application components

Download the files from:

Copy all these files into

      JBOSS_FOLDER_FRONTOFFICE\standalone\deployment

10. Start database

Before starting JBoss server, the H2 database must always be started.

Execute the file H2_FOLDER\bin\h2.bat

11. Start back-office JBoss server

Execute the following command (for Windows environment, please adapt for other operating systems) into JBOSS_FOLDER_BACKOFFICE\bin

standalone.bat --server-config standalone-full.xml

12. Check deployment status on back-office JBoss server

Connect to the JBoss Management console at http://localhost:9990/console/App.html#deployments. Unless already done, please follow the on-screen instructions to create an admin user (and password) for the JBoss Management console of this server instance.

After successful login, in the "Manage Deployments" tab, you should see the 4 applications in status "Enabled", as in the screenshot below:

13. Start front-office JBoss server

This step needs the previous step executed successfully, so the back-office JBoss instance should be up and running with all deployments Enabled.
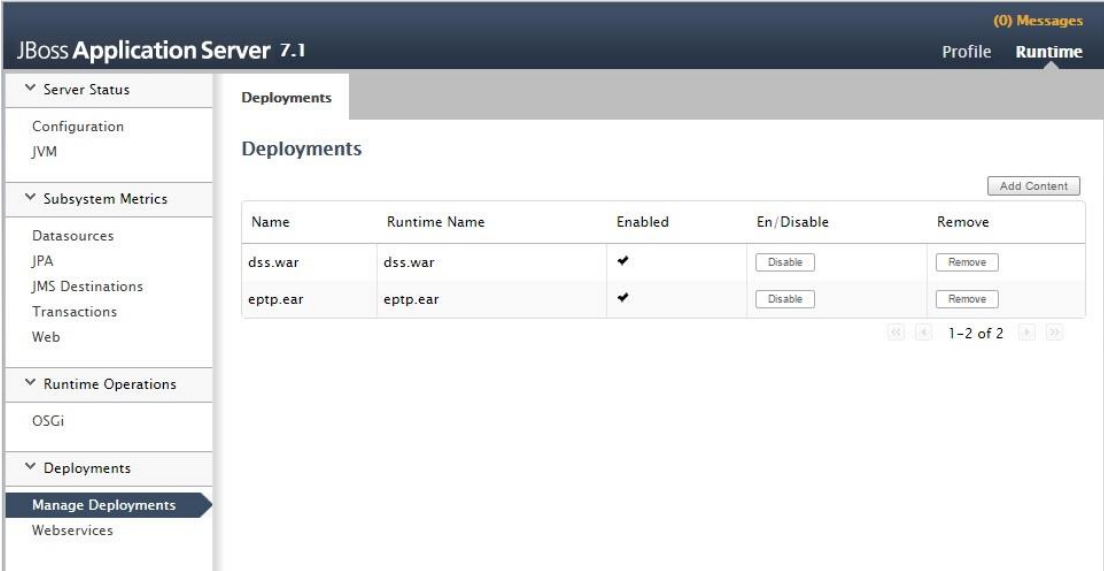
Execute the following command (for Windows environment, please adapt for other operating systems) into JBOSS_FOLDER_FRONTOFFICE\bin

standalone.bat --server-config standalone-full.xml

14. Check deployment status on front-office JBoss server

Connect to the JBoss Management console at http://localhost:19990/console/App.html#deployments. Unless already done, please follow the on-screen instructions to create an admin user (and password) for the JBoss Management console of this server instance.

After successful login, in the "Manage Deployments" tab, you should see the 2 applications in status "Enabled", as in the screenshot below: