

1 INTRODUCTION

The current document is a building and deployment developer guide for the IDABC procurement demonstrators' application.

Since the building and deployment plan of a J2EE application depends on the various tools/environment each development team uses, the descriptions below aim to depict the building/deployment process' steps in a high level description only, instead of providing specific details or build scripts. Its aim is to provide a starting point only and not a full building script.

2 PRE-REQUISITES

The application is a J2EE web application thus knowledge of J2EE technologies and environments (web descriptors, EJB descriptors etc) is mandatory.

Additional frameworks/technologies that are required can be seen in the indicative (but not exhaustive) list below:

- JBoss server (starting/stopping/configuration)
- Ant build scripts
- XDoclet (web doclet, hibernate doclet, ejb doclet)
- EJBs (interfaces/session beans)
- Struts (actions/forms)

This document also assumes the following:

- The user has downloaded the application's source code (`src.tar.gz`) and extracted to a directory (referred to as `<SRC_CODE>`)
- The user has downloaded the IDABC demonstrators installer (`eprocurement-install.jar`) and installed it in a folder (referred to as `<IDABC_EPROC_DEMO_HOME>`)

3 COMPONENTS OF THE BUILD SCRIPT

To build the IDABC demonstrators' application a build process (i.e. an Ant build file) needs to be created.

The purpose of the build process is to create a folder structure that conforms to a valid EAR structure identical with the folder structure that resides in the installation folder of the application `<IDABC_EPROC_DEMO_HOME>idabceproc\jboss\server\default\deploy\eprocurement.ear`.

The sources required to create the necessary build script are the ones below:

- The files under `<SRC_CODE>` folder. This folder contains two sets of files: The business layer Java classes (Session EJBs) and the Struts actions and forms (the web layer classes). The source is divided to sub-folders according to the modules of the application (e.g. `authorization`, `call4tenders` etc). Each module folder is further divided to two sub-folders: the "business" folder containing the session EJBs source code and the "presentation" sub-folder containing the web layer classes.
- The web related files of the application under the folder `<IDABC_EPROC_DEMO_HOME>\idabceproc\jboss\server\default\deploy\eprocurement.ear\eprocurementWeb.war`. This folder contains JSPs, web.xml descriptor, Struts configuration file etc.

Besides the source code above there are also automatically generated classes that need to be produced with XDoclet. The automatically generated classes are:

- Hibernate mapping files and pojos.
- EJB remote interfaces
- Web descriptor, EJB descriptor, Struts configuration files

The actions that should be performed by a successful building script are depicted below:

- Generate the hibernate related classes by using XDoclet (hibernatedoclet)
- Generate the EJB interfaces by using XDoclet (ejbdoclet)
- Generate descriptors for the web application, EJB descriptors and struts config files
- Compile the classes.
- The EJB related classes including the generated interfaces should be copied to the `eprocurementEJB.jar` folder under `<IDABC_EPROC_DEMO_HOME>\idabceproc\jboss\server\default\deploy\eprocurement.ear\`
- The EJB interfaces and all struts related classes should be copied to the `eprocurementWeb.war/WEB-INF/classes` folder under the corresponding war folder.
- The JSP files and the other web related files should also be copied to the war folder.

The target ear directory that is created by the build script should be identical to the one that resides at `<IDABC_EPROC_DEMO_HOME>\idabceproc\jboss\server\default\deploy\eprocurement.ear` folder.