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| **JEE Software Development Environment Standard** |

# Purpose

This document describes the Florida Department of Environmental Protection’s (DEP) Java Enterprise Edition (JEE) Software Development Environment Standard. This document also references additional guidance and supporting standards necessary to comply with this standard.

# Scope

This standard applies to all JEE software development projects at DEP.

# Standard

1. All source code shall be maintained at DEP.
2. All Java applications shall be named according to the ***Java Naming Standard*** (FL Dept. of Environmental Protection, 2010)
3. All projects shall be set up to be built in DEP’s Maven environment. Refer to the ***Build Environment Standard*** (FL Dept. of Environmental Protection, 2010) for details.
4. All projects shall submit an ***Application Setup Request*** form for access to the DEP Subversion repository and Middle Tier Integration server.
5. All JEE applications shall be deployed and tested on DEP’s server suite, which includes integration, beta, and production servers. Refer to the ***Application Server Schematic*** (FL Dept. of Environmental Protection, 2010) for diagrams.
6. All applications shall be developed to operate in the ***IT Infrastructure Environment Specification*** (FL Dept. of Environmental Protection, 2010)
7. All projects shall operate under DEP’s JSR core component compliance levels. Refer to the ***Core Component Compliance Level Specification*** (FL Dept. of Environmental Protection, 2010) for details.
8. All Java code shall comply with the ***Java Coding Standard*** (FL Dept. of Environmental Protection, 2009).
9. All Java developers shall follow the ***JEE User Interface Guidelines*** (FL Dept. of Environmental Protection, 2009).
10. All DEP reports shall be developed according to the ***Reports Development Standard*** (FL Department of Environmental Protection, 2009).
11. All workflows shall be implemented using Oracle SOA (BPEL). Refer to the ***BPEL Cookbook*** (Zirn & Gaur, July 2006) and ***Business Process Execution Language for Web Services*** (Juric, Sarang, & Matthew, January 2006).
12. All projects shall use Oracle Identity Management for authentication via DEP’s Oracle Portal. Refer to the ***JEE Security Framework Standard***  (FL Dept. of Environmental Protection, 2010) and the ***Portal Standard*** (FL Dept. of Environmental Protection, 2010) for details.
13. Any projects that have been approved for a deviation from item 11 shall comply with the have a completed and approved ***Application Security Standard*** (FL Dept. of Environmental Protection, 2009)***.***
14. All Java projects shall follow the ***Java Application Deployment Standard*** (FL Dept. of Environmental Protection, 2010) to deploy a JEE application in the DEP environment.
15. All projects shall follow the ***Physical Data Modeling Standard*** (FL Dept. of Environmental Protection, 2009).
16. All projects containing location data shall comply with the ***Location Data Standard*** (FL Dept. of Environmental Protection, 2009).
17. All GIS components must comply with the ***GIS Development Standard*** (FL Dept of Environmental Protection, 2009).
18. All projects shall complete and submit an ***Impact Assessment Summary*** (FL Department of Environmental Protection, 2009).
19. All projects shall complete and submit a ***Middle Tier Migration Package*** (FL Department of Environmental Protection, 2010) for Beta and Production moves.
20. All projects shall adhere to the ***JEE Testing Standard*** (FL Dept. of Environmental Protection, 2009).

# Deviation from Use

Any deviation from this standard shall be documented in associated project and contract documentation. For contracts, deviation from standard shall be documented and approved by the DEP contract manager. For non-contract work, deviation from use shall be documented in the project plan/scope of work and approved by the project manager.

# Definitions

* **Business Process Execution Language (BPEL)**: an executable language for specifying interactions with web services.
* **Maven**: an open-source build tool for Java projects.
* **Java Specification Request (JSR)**: the formal documents that describe proposed specifications and technologies for adding to the Java platform.
* **Java Enterprise Edition (JEE)**: a widely used platform for server programming in the Java programming language.
* **Oracle Identity Management**: a product within the Oracle Fusion Middleware Suites. It is used to manage user identities.
* **Oracle Portal**: a product within the Oracle Fusion Middleware Suite. Oracle Portal provides an integrated framework for building, deploying, and managing enterprise portals.

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 **Approval Date**