

# Administrative/Installation Manual

<Project Name>

<Department Name>

<Version Number>



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# Document history

Date	Version	Author	Reviewed by	Approved by	Description
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# 1. Introduction

## 1.1. Project Background

## 1.2. Project Objectives

## 1.3. Purpose of this Document

## 1.4. Structure of this Document

# 2. Installation Manual

In order to facilitate the integrators' tasks, it is vital to provide the delivery with accurate, exhaustive, complete and clear installation instructions.

Please note that integrators are not specialist for all the applications running at the Publications Office, and if errors arise during the install, they are not always aware of the actions that should be taken to correct the problem and continue the installation.

Please fill the Contact Information list at the end of this document with the names of relevant people to contact if necessary.

The main components that should be completely and correctly described are the following:

- Prerequisites
- Install procedure
- Rollback or Un-install procedure
- Tests

## 2.1. Pre-requisites

In this section a list of install prerequisites (if any) are mentioned that must be fulfilled before the install can begin.

Prerequisites are of the order of

- Operating System
- Software Components used by the application (e.g. DataBase, Application Software, ...)
- System Environment Variables
- Configuration Files
- System Requirements (Software and/or Hardware)
- ...

If the application needs that some Environment Variables to be set, please specify all the variables to be checked and the value to which they should correspond. In case of discrepancy please detail what actions should be undertaken by integrators, in order to prevent errors, failures during install.

**Example:**

`$JAVA_HOME` folder is set to "`/<folder/to/java>`"

`$APPLICATION_CONF` folder is set to "`/<folder/to/application/configuration>`"

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Some applications may require that some tools/applications are installed (i.e. Oracle, JAVA, Apache, ...) and a minimum version/release is required to allow the application to run without any errors.

If this is the case, carefully list and detail the entire needed tools and their respective minimum version/releases.

**Example:**

**JBoss version 4.2.3 GA** server is installed

**Tomcat version 6.0.18** server is installed

**JAVA version 1.6.0\_23**

Configuration files are also a key element for the correct functioning of an application, and can be useful to mention the key conf files that must be present and mandatory information that must be checked, and their respective location.

The contractor is explicitly requested to mention the minimum criteria the system should have for a particular application.

## ***2.2. Pre-installation Tasks***

Please list here any tasks that should be completed before the installation of the software delivery is started, for example tests that should be carried out to verify that the software defect that the delivery is supposed to correct is present.

## ***2.3. Installation Procedure***

Once all prerequisite checks and controls are positively finished, the install process can start. This section must be as clear and explicit as possible listing all the steps, in chronological order, the integrator must follow to complete the task.

Additionally clearly indicate the actor/role who has to perform the tasks: group tasks for one group of people as much as possible (i.e. database team, systems team, ...).

Distinction must be made for the following groups: this implies that these operations should be grouped as much as possible, so the installation takes place in a linear process, to avoid wasting time when the installation process has to jump between different groups of people.

### ***2.3.1. Database***

Although the database tasks are part of the installation, these tasks are performed by a different team of people.

Most database installation tasks include, but are not limited to, the following:

- configuration modifications;
- users, groups, roles and their privileges;
- database creation / update;
- tables creation / update;
- data import / export;

These tasks should be clearly explained to avoid any possible confusion (the database team at the Publication Office, handles a huge number of databases), in sequential order, mentioning all the necessary information to execute the task (i.e. database name, login info: admin, special user, user, ...)

### 2.3.2. Systems

The delivery may include tasks to be operated by the systems team (UNIX, Windows, ...). Provide all necessary information to perform these operations (if any) prior and/or during installation.

Most systems installation tasks include, but are not limited to, the following:

- file system setup;
- disk space, memory upgrade;
- installation done by an administrator (i.e. using root user under UNIX);
- users creation/modification;

### 2.3.3. Configuration

Indicate all the configuration parameter used by the application that is being installed so it works correctly into the OP systems and environment. Please double check that this values correspond (in terms of server names, IP addresses, folder architecture and files locations, ...) to what is existing at OP, and not to your tests environment and/or server.

Most configuration tasks include, but are not limited to, the following:

- properties / configuration files;
- environment variables;
- one-shot scripts;
- ...

### 2.3.4. Application Server:

BEA / TOMCAT must be compliant to the standard procedures at OP.

A special mention must be set on the backup of all elements that are being handled for the current delivery, in order to proceed to a uninstall if necessary

## 2.4. Tasks Description

A good method is to describe these steps in a table in order to have a visual view of the procedure, instead than a textual explanation of the different tasks.

Step	User	Command to execute
1.	user1	pfexec ./user1 /application/<appname>/user/system/init.d/appName stop
2.	user1	cd /applications/<appname>/users/<appuser>/setup cp conf confYYYYMMDD or cp /applications/<appname>/users/<appuser>/setup/conf /applications/<appname>/users/<appuser>/setup/confYYYYMMDD
3.	User2	rm -rf /applications/<appname>/users/<appuser>/setup/bin rm -rf /applications/<appname>/users/<appuser>/setup/etc rm -rf /applications/<appname>/users/<appuser>/setup/lib
4.	User1	mkdir -p rf /applications/<appname>/users/appName/INSTALL/setup

5.	user1	cp /origin/folder/delivery/delivery_file.zip /applications/<appname>/users/appName/INSTALL/setup
6.	user1	cd /applications/<appname>/users/<appuser>/INSTALL/setup unzip delivery_file.zip
7.	DBA	Connect to Database1
8.	DBA	Execute script: modify_database.sql import_data.sql
9.	DBA	...
10.	user1	
11.	user2	

- Step: ordinal numbering of the steps, in chronological order
- User: specify the user (e.g. UNIX login) which should execute the installation, or execute the command.
- Commands to execute: unambiguous command the integrator has to execute. It should contain precise information upon its use (i.e. parameters)
- Remarks (optional): any additional useful information that will clarify and/or explain the objective of the step, expected results, additional checks, etc....

## 2.5. Post-installation

The installation instructions should contain a check list that details

- the list of all files modified during the installation
- the location of the configuration files; a list of useful parameters; if necessary, global configuration files will be used in order to avoid multiple definitions of the same parameters/variables
- the list of periodic jobs to schedule
- a procedure to check the correct installation/working of the application: basic checks to be performed by the person in charge of the installation should allow to check if the application is behaving correctly without requiring a full functional validation.

## 2.6. Technical Tests

Adequate testing prior release to production is necessary to check not only functional aspects of the delivery but also not-functional ones.

Contractors should include in the delivery a separate folder with all the necessary test files, tools, scripts, ..., and a complete well formed test plan procedure, that can be handled by the test team.

The test plan should be linked to the delivery package it belongs to, describe the purpose of the tests, and should mention in an unambiguous way the correct environment prerequisites and information, the location of the data source needed as input (if any), the actions to perform and the expected results, the output files location (if any).

Some tests might need to be performed before delivery install: mention of this particular situation should be included in the test plan, in order to inform the people concerned.

Remark:

Test must be executed at the Publications Office: contractors must keep in mind that tests performed at their premises may differ because of a system environment, tools version, ..., differences.

A comparative check between the two systems should be done before delivery in order to avoid errors.

As an example the test plan could be formatted the following way:

<b>[Test Case]</b>	<b>[Test Case Title]</b>
Description	[brief description of the test case]
Actors	[list of actors and user roles required to run the test case]
Preconditions	[constraints on the system that have to be satisfied before the test case can be executed] for example, input or location of data source
Start Date and Time	
End Date and Time	
Steps	
Step 1	[action to be taken, task to be executed] for example: Connect to server2 as “user1”
Step 2	From the main installation package, extract the following to an empty temporary directory on the server2 server: - Install/user1/_this_release_bin.opoc.tar
Step 3	From the test folder, execute the script as follow: ./testrelease.sh input/new_files/TEST_THIS_FILE
Step 4	verify results
...	
Expected Results	[the expected outcome of the test case]
Actual Results	[test case successful yes/no? expected result met?]

## 2.7. Uninstall or Roll-back

A detailed procedure how to uninstall the application should be provided that follows the same general remarks as the installation procedure.

The rollback procedure must be as clear and explicit as the install procedure, as it must allow undoing all changes to the situation before the installation has been performed.

The same rules apply concerning the steps to execute to re-establish the old application delivery.

As an example the same format and method used for the install procedure can be followed to describe the rollback.

# 3. Additional Information

## 3.1. Acronyms, Abbreviations

Value	Definition
{\$VARIABLE}	Variable used in this document.
<appname>	name of the application
<appuser>	user identification of the user running the application

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### ***3.2. Reference Documents***

<b>Title</b>	<b>Description</b>
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### ***3.3. Contact Information***

<b>Title</b>	<b>Description</b>
	Integrator team who performs the installation at the Publication Office
	Contractor Technical contact
	Contractor Project Manager
	Additional contacts may be added here