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# Document History

The following table provides an overview of the most important document changes.

**Note**

For an up-to-date list of web application servers supported by this release, see the *Product Availability Matrix* (Supported Platforms/PAR), available on the SAP BusinessObjects section of the SAP Support Portal at: [https://service.sap.com/bosap-support](https://service.sap.com/bosap-support).

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP BusinessObjects Business Intelligence platform 4.0</td>
<td>November, 2011</td>
<td>First release of this document.</td>
</tr>
<tr>
<td>SAP BusinessObjects Business Intelligence platform 4.0 Support Package 1 Patch 1</td>
<td>June, 2011</td>
<td>Added instructions for manually deploying web applications to SAP NetWeaver 7.3. For the WDeploy tool, see [The WDeploy tool does not support deployment to or undeployment from SAP NetWeaver 7.3x or 7.4](page 93).</td>
</tr>
</tbody>
</table>
| SAP BusinessObjects Business Intelligence platform 4.0 Feature Pack 3 | March, 2012 | The following web application servers have been introduced as of 4.0 Feature Pack 3:  
  - Tomcat 7  
    - For details on Tomcat 7 configuration when using the WDeploy tool, see [Tomcat 6 or 7 configuration file](#).  
    - For instructions on manually deploying applications to Tomcat 7, see [Tomcat 6 and 7 administrative console manual deployment](#).  
  - WebLogic 10.3.3 (11gR1)  
    - For details on WebLogic 10.3.3 (11gR1) configuration when using the WDeploy tool, see [WebLogic 10.3.3 and 10.3.3 (11gR1) configuration file](#).  
    - For instructions on manually deploying applications to WebLogic 10.3.3 (11gR1), see [WebLogic 10.3.3 and 10.3.3 (11gR1) administrative console manual deployment](#).  
  
  The following considerations and known issues have been added:  
  - JBoss: *Servlet exception after logging onto AdminTools on JBoss 5.0*  
  - SAP NetWeaver:  
    - *Prerequisites for deployment on SAP NetWeaver* |
## SAP BusinessObjects Business Intelligence platform 4.0 Support Package 4

**Version:** SAP BusinessObjects Business Intelligence platform 4.0 Support Package 4  
**Date:** June, 2012  
**Description:** The following web application servers have been introduced as of 4.0 Support Package 4:  
- **WebLogic 10.3.5 (11gR1)**  
  - For details on WebLogic 10.3.5 (11gR1) configuration when using the WDeploy tool, see *WebLogic 10, 10.3, or 10.3.3 (11gR1) configuration file*.  
  - For instructions on manually deploying applications to WebLogic 10.3.5 (11gR1), see *WebLogic 10, 10.3, and 10.3.3 (11gR1) administrative console manual deployment*.  

## SAP BusinessObjects Business Intelligence platform 4.0 Support Package 5

**Version:** SAP BusinessObjects Business Intelligence platform 4.0 Support Package 5  
**Date:** November, 2012  
**Description:** The following web application server has been introduced as of 4.0 Support Package 5:  
- **WebLogic 10.3.6 (11gR1)**  
  - For details on WebLogic 10.3.6 (11gR1) configuration when using the WDeploy tool, see *WebLogic 10, 10.3, or 10.3.3 (11gR1) configuration file*.  
  - For instructions on manually deploying applications to WebLogic 10.3.6 (11gR1), see *WebLogic 10, 10.3, and 10.3.3 (11gR1) administrative console manual deployment*.  
- **WebSphere 8.5**  
  - For details on WebSphere 8.5 configuration when using the WDeploy tool, see *WebSphere 6, 7, or 8.5 configuration file*.  
  - For instructions on manually deploying applications to WebSphere 8.5, see *WebSphere 8.5 administrative console manual deployment*.  

Deployment options for SAP NetWeaver AS Java 7.3 using SAP NetWeaver Java Support Package Manager (JSPM) have changed. Select either **New software components** or **Single Support Package and Patches (advanced user only)** depending on your deployment.
<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| SAP BusinessObjects Business Intelligence platform 4.0 Support Package 6 | April, 2013 | The following web application servers have been introduced as of 4.0 Support Package 6:  
  - SAP NetWeaver 7.31  
  - SAP NetWeaver 7.4  
  Deployment procedures are the same as for SAP NetWeaver 7.3. |
| SAP BusinessObjects Business Intelligence platform 4.0 Support Package 8 | November, 2013 |  
  - Added support for predeploy command on Linux platforms that use JRockit JVM  
  - Added support for WebSphere 8.5.5  
  - Updated Changes to installed languages  
  - Added reference to SAP note in SAP NetWeaver AS Java 7.3 and 7.4 JSPM deployment  
  - SAP Java Support Package Manager (JSPM) has been deprecated and replaced with SAP Software Update Manager (SUM). All information about using JSPM has been updated with information about using SUM. |
| SAP BusinessObjects Business Intelligence platform 4.0 Support Package 9 | February, 2014 |  
  - Added a note about removing existing web applications to the section Prerequisites for deployment on SAP NetWeaver.  
  - Added the section Adding the password to the WDeploy GUI file. |
2   Getting Started

2.1   What is SAP BusinessObjects Business Intelligence platform?

SAP BusinessObjects Business Intelligence platform is a flexible, scalable, and reliable business intelligence reporting system that can be tightly integrated into your information technology infrastructure. Support for many industry-standard database systems makes it easier to access your organization’s data for analysis. The use of common industry standards for security allow you to use your existing authentication systems to control access to SAP BusinessObjects Business Intelligence platform. And broad platform support allows you to implement the operating systems and hardware architecture that you prefer.

As a system administrator, you will be faced with many choices when installing SAP BusinessObjects Business Intelligence platform. This documentation helps you to make the right decisions and create a reliable and powerful business intelligence reporting system for your organization.

2.2   About this document

This document provides information on how to configure and deploy SAP BusinessObjects Business Intelligence platform web applications to a supported Java web application server. In particular, this guide contains detailed information for users of the WDeploy web application deployment tool that ships with SAP BusinessObjects Business Intelligence platform.

For information related to the installation of SAP BusinessObjects Business Intelligence platform, see the SAP BusinessObjects Business Intelligence Platform Installation Guide.

For information related to the administration of an SAP BusinessObjects Business Intelligence platform server, see the SAP BusinessObjects Business Intelligence Platform Administrator Guide.

2.3   What's new in the Web Application Deployment Guide?

Web application server support

For a list of platforms, databases, web application servers, web servers, and other systems supported by this release, see the Product Availability Matrix (Supported Platforms/PAR), available on the SAP BusinessObjects section of the SAP Support Portal at: https://service.sap.com/bosap-support. The Product Availability Matrix takes precedence over any discrepancies in the Web Application Deployment Guide.
SAP BusinessObjects Business Intelligence platform 4.0 features

The following features have been introduced as of SAP BusinessObjects Business Intelligence platform 4.0:

Table 1: What’s new with the WDeploy deployment tool

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUI interface</td>
<td>New GUI interface for <code>deployall</code> and <code>undeployall</code> actions.</td>
</tr>
<tr>
<td>Two levels of log files</td>
<td>One log summary to help administrators understand the deployment status; one detailed log to help developers troubleshoot deployment issues.</td>
</tr>
<tr>
<td>Easier configuration</td>
<td>Centralized configuration file for WDeploy global parameters; access server and WDeploy parameters from WDeploy GUI.</td>
</tr>
<tr>
<td>Localization support</td>
<td>WDeploy GUI localization support.</td>
</tr>
<tr>
<td>No intermediate WAR files</td>
<td>Intermediate WAR files are no longer created as a part of the deployment process. If you need to create a WAR file that is not tailored to a specific web application server, use the <code>wdeploy buildwarall</code> command.</td>
</tr>
<tr>
<td>Simplified deployment</td>
<td>The number of WAR files used for SAP BusinessObjects Business Intelligence platform web applications has been reduced. This helps reduce duplicate resource consumption and number of queries made from the web application server to the CMS.</td>
</tr>
</tbody>
</table>

Table 2: What’s new in this document

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content reorganization</td>
<td>Rather than list each WDeploy command for every web application server, now a WDeploy command is now shown only once, with examples for each supported web application server.</td>
</tr>
<tr>
<td>New features documented</td>
<td>New WDeploy features have been documented.</td>
</tr>
</tbody>
</table>

SAP BusinessObjects Business Intelligence platform 4.0 product documentation is available from the SAP Help portal, and is refreshed with up-to-date content as it becomes available. For the most recent product documentation, visit [http://help.sap.com/bobip40](http://help.sap.com/bobip40).

2.4 Who should read this documentation

This documentation is intended for the system administrator or IT professional working to support an installation of SAP BusinessObjects Business Intelligence platform. Familiarity with your overall network environment, port usage conventions, database environment, and web server software is essential.
3 Overview of web application deployment

The SAP BusinessObjects Business Intelligence platform installation program can deploy web applications only to the bundled Tomcat 6.0 web application server. All other supported web application servers require that web applications be deployed after the installation is complete. It is recommended that you use the WDeploy web application deployment tool. For information and instructions on how to deploy using the WDeploy tool, see the “To deploy web applications with the WDeploy tool” section of this guide.

You can also deploy web applications with your application server’s administrative console if you prefer. Web applications deployed with the web application server’s administrative console must first be modified to be deployable WAR or EAR files. The `wdeploy predeploy` and `wdeploy predeployall` commands automate this process. After using these predeployment commands, jump to the “To deploy web applications with the administrative console” section of the guide for instructions. However, if you have extensive knowledge of your web application server and know how to customize web applications for deployment, this process can be done by hand. The manual tailoring of web applications for deployment to a web application server is not covered in this guide.

3.1 Overview of OSGi WAR files

The OSGi framework for Java web applications simplifies the deployment of the web applications bundled with SAP BusinessObjects Business Intelligence platform. It allows web applications, language packs, SDKs, plugins, and other resources to exist in a single bundle that can be deployed to a web application server in one step.

Deploying a single WAR file also means fewer web sessions are needed when a user accesses multiple web applications, which reduces the memory, disk, and processing load placed on a web application server.

3.2 Fail-over and load balancing

SAP BusinessObjects Business Intelligence platform supports clustered web application servers with load balancing. Hardware or software load balancers can be used as the entry-point for the web application servers to ensure that the processing is evenly distributed among the web application servers.

The following hardware load balancers are currently supported:

- Cisco Application Control Engine (ACE) module.
- The F5 BIG-IP family of load balancers.

The following persistence types are currently supported:

- Source IP address persistence.
- Cookie persistence Insert mode (ArrowPoint Cookie).

Load balancing a cluster of SAP BusinessObjects Business Intelligence platform servers is not required, as the Central Management Server (CMS) already distributes work between cluster nodes.
3.2.1 Web application clustering support

The Central Management Console (CMC) and BI launch pad web applications can be used in environments with a variety of different clustered, load balanced, or fault tolerant configurations. The table below lists configuration support for CMC and BI launch pad web applications.

<table>
<thead>
<tr>
<th>Web application</th>
<th>Clustered web application servers</th>
<th>Load balancers with session affinity</th>
<th>Load balances without session affinity</th>
<th>Fault tolerant</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI launch pad (stateless)</td>
<td>Supported</td>
<td>Supported</td>
<td>Unsupported</td>
<td>Yes</td>
</tr>
<tr>
<td>CMC (stateful)</td>
<td>Supported</td>
<td>Supported</td>
<td>Unsupported</td>
<td>No</td>
</tr>
</tbody>
</table>

i Note

The WDeploy tool is not supported for deployment to a cluster or cluster software such as Websphere Application Server Network Deployment.

3.3 SAP BusinessObjects Business Intelligence platform
WAR and EAR files

The functionality that makes up SAP BusinessObjects Business Intelligence platform is divided between several web applications to make it easy to deploy only the components required by your organization. In SAP BusinessObjects Business Intelligence platform 4.0, many of the core web applications included with previous releases have been bundled into a single OSGi archive. This saves web application server memory and reduces the number of web sessions needed for web applications that previously had multiple archives.

For example, SAP BusinessObjects Enterprise XI 3.x included the Central Management Console (CMC) and InfoView (now BI launch pad) web applications archived as CMC.war and InfoView.war. SAP BusinessObjects Business Intelligence platform 4.0 has consolidated the CMC and InfoView (now BI launch pad) web applications, along with others, into a single archive named BOE.war or BOE.ear.

The WDeploy tool is used to automate the process of tailoring web applications to be deployable on a supported web application server. While it is possible for an experienced administrator to manually tailor a web application for a specific web application server, it is recommended that the WDeploy tool be used to automate the process.

The following table lists the web application archives, the web applications that require them. Web applications not automatically deployed by the installation program must be deployed post-install.

i Note

The Central Management Console (CMC) web application does not support session fail-over. However, BI launch pad is fault-tolerant, and does support session fail-over, so users will not notice if a cluster node fails.
<table>
<thead>
<tr>
<th>Web application archive (may be WAR or EAR)</th>
<th>Deployed automatically?</th>
<th>Description</th>
</tr>
</thead>
</table>
| BOE                                        | Yes                     | OSGi archive of core web applications, including:  
  ● Analytical Reporting  
  ● CMC  
  ● SAP Crystal Reports  
  ● BI launch pad (formerly InfoView)  
  ● Eclipse IDE support  
  ● Lifecycle Manager  
  ● Monitoring  
  ● OpenDocument  
  ● BI workspace (formerly Dashboard Builder)  
  ● Platform search  
  ● Platform services  
  ● Visual difference  
  ● SAP BusinessObjects Dashboards (formerly Xcelsius) |
| BusinessProcessBI (deprecated)             | Yes                     | This web application is deprecated. It provides support for legacy Crystal Reports web services and SDK components, including:  
  ● Crystal Enterprise  
  ● Crystal Reports Report Application Server (RAS)  
  ● SAP BusinessObjects Dashboards (formerly Xcelsius)  
  ● SAP BusinessObjects Analysis, OLAP edition (formerly Voyager) |
| clientapi                                  | Yes                     | SAP Crystal Reports JavaScript API support. |
| dswsbobje                                  | Yes                     | Web Services components, including:  
  ● Session  
  ● BI platform  
  ● BI catalog  
  ● Federation Administration tool  
  ● Live Office  
  ● Web service query tool (formerly Query as a Web Service)  
  ● Publishing  
  ● Report Engine  
  ● SAP BusinessObjects Web Intelligence (formerly Web Intelligence)  
  ● SAP BusinessObjects Dashboards web services (formerly Xcelsius) |
### Web application archive (may be WAR or EAR) | Deployed automatically? | Description
--- | --- | ---
jsfplatform | No | Java Server Faces support and examples.
MobileOTA14 | No | Web application for mobile client support.
OpenSearch | No | OpenSearch support.
AdminTools | Yes | Query Builder support.

The following table compares the WAR files shipped in previous versions, and where to find the functionality in SAP BusinessObjects Business Intelligence platform 4.0.

<table>
<thead>
<tr>
<th>Previous web application archive (may be WAR or EAR)</th>
<th>New web application archive (may be WAR or EAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AdminTools</td>
<td>AdminTools</td>
</tr>
<tr>
<td>AnalyticalReporting</td>
<td>BOE</td>
</tr>
<tr>
<td>BusinessProcessBI</td>
<td>BusinessProcessBI (deprecated)</td>
</tr>
<tr>
<td>CmcApp</td>
<td>BOE</td>
</tr>
<tr>
<td>CmcAppActions</td>
<td>BOE</td>
</tr>
<tr>
<td>CrystalReports</td>
<td>BOE</td>
</tr>
<tr>
<td>Xcelsius</td>
<td>BOE</td>
</tr>
<tr>
<td>dswsbobje</td>
<td>dswsbobje</td>
</tr>
<tr>
<td>InfoViewApp</td>
<td>BOE</td>
</tr>
<tr>
<td>InfoViewAppActions</td>
<td>BOE</td>
</tr>
<tr>
<td>LCM</td>
<td>BOE</td>
</tr>
<tr>
<td>OpenDocument</td>
<td>BOE</td>
</tr>
<tr>
<td>PerformanceManagement</td>
<td>BOE</td>
</tr>
<tr>
<td>PlatformServices</td>
<td>BOE</td>
</tr>
<tr>
<td>PMC_Help</td>
<td>BOE</td>
</tr>
<tr>
<td>VoyagerClient</td>
<td>BOE</td>
</tr>
<tr>
<td>XCTemplateUploader</td>
<td>BOE</td>
</tr>
</tbody>
</table>

### 3.3.1 To deploy MobileOTA14.war for mobile application support

The SAP BusinessObjects Business Intelligence platform installation program does not deploy the MobileOTA14 web application that provides support for mobile applications.

To use mobile applications, you must deploy the MobileOTA14 archive (MobileOTA14.war or MobileOTA14.ear) manually once the installation process is complete.
### 3.3.2 To deploy OpenSearch.war for OpenSearch support

The installation program does not deploy the OpenSearch web application that provides support for OpenSearch applications.

To use OpenSearch applications, you must deploy the `OpenSearch.war` archive manually once the installation process is complete.

**Note**

The WDeploy GUI tool cannot be used to deploy individual web applications. To deploy an individual web application, such as OpenSearch, use the WDeploy command-line tool.

1. Ensure that web application server’s connection details have been set in the WDeploy web application server configuration file. The file is located in:

   
   `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\config.<WEB_APP_SERVER>`
For more information on the WDeploy web application server configuration file, see “Configuration files” in the SAP BusinessObjects Business Intelligence Platform Web Application Deployment Guide.

2. Update the OpenSearch configuration in the OpenSearch web application’s config.properties file. The file is located in:

\<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\warfiles\OpenSearch\WEB-INF

Ensure that the following parameters are configured for your server:

- **cms**: the CMS hostname and CMS port number. For example, use the format: `<CMS_HOSTNAME>:<PORT>`.  
- **proxy.rpurl**: reverse proxy URL, if your organization uses a reverse proxy server.  
- **proxy.opendoc.rpurl**: the OpenDoc reverse proxy server URL, if your organization uses an OpenDoc reverse proxy server.

3. Deploy the OpenSearch web application.

To deploy the OpenSearch web application, use the following WDeploy command:

```
wdeploy.bat WEBAPPLICATIONSERVER  
-Dapp_source_dir=LOCATION_OF_OPENSEARCH_WEB_APP_SOURCE_TREE  
-DAPP=OpenSearch  
deploy
```

For example, the following command deploys the OpenSearch web application to a WebSphere 7 web application server:

```
wdeploy.bat websphere7  
-Dapp_source_dir="C:\Program Files (x86)\SAP BusinessObjects\SAP BusinessObjects Enterprise XI 4.0\warfiles\OpenSearch"  
-DAPP=OpenSearch  
deploy
```

For more information on OpenSearch related products, refer to “OpenSearch” section of the SAP BusinessObjects Business Intelligence Platform Administrator Guide.

### 3.4 Default context roots

All web applications can be deployed to a custom context root on your web application server. The following table lists the context roots for each web application.

<table>
<thead>
<tr>
<th>Web application</th>
<th>Context path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Management Console (CMC)</td>
<td>/BOE/CMC</td>
</tr>
<tr>
<td>BI launch pad</td>
<td>/BOE/BI</td>
</tr>
<tr>
<td>Open Document</td>
<td>/BOE/OpenDocument</td>
</tr>
<tr>
<td>SAP Crystal Reports JavaScript API</td>
<td>/clientapi</td>
</tr>
<tr>
<td>Web Services provider</td>
<td>/dswsbobje</td>
</tr>
</tbody>
</table>
3.5 Custom root contexts and context paths

SAP BusinessObjects Business Intelligence platform web applications can be deployed to a custom location on a web application server. This location is reflected in the URL used to access the web application from a web browser, and is often known as the context.

A root context is the top-level folder on a web application server in which web applications are located. The default root context for SAP BusinessObjects Business Intelligence platform web applications is /BOE. For example, on a web application server named www.mycompany.com, the URL prefix used to access web applications on the server would be http://www.mycompany.com/BOE/.

A context path (sometimes referred to as a virtual directory) is a folder within a root context, in which a web application is located. For example, the default context path for the BI launch pad application is /BI. The URL used to access the BI launch pad web application on a web application server named www.mycompany.com would be http://www.mycompany.com/BOE/BI.

Both the root context and the context path can be changed to suit the needs of your organization. The following table lists examples of deploying a web application named MyApp to different root and web application context paths. The following topics describe how to customize root and web application context paths.

### 3.5.1 To change the root context

You can change the root context used by SAP BusinessObjects Business Intelligence platform web applications (excluding the AdminTools web application. AdminTools must use the default root context to function correctly). The default setting is to have an empty root context, so the web application context path is shown directly after the server address in a URL.

For example, an empty root context results in a URL such as http://localhost:8080/BOE/CMC, where http://localhost:8080/ is the server and port number, there is no root context, and BOE/CMC is the web application context path. Setting the root context to /MY_COMPANY would change the URL example shown above to http://localhost:8080/MY_COMPANY/BOE/CMC.

When using the WDeploy tool, the root context can be set in the Options screen. When using the WDeploy command-line tools, the root context for SAP BusinessObjects Business Intelligence platform web applications is set in the following configuration file:

```
<BOE_INSTALL_DIR>/SAP BusinessObjects Enterprise XI 4.0/wdeploy/conf/wdeploy.conf
```

Use a text editor to update the value for root_context_path given in wdeploy.conf.

For example, wdeploy.conf configuration file contains the following parameters by default:

```
as_lang=en
work_dir=
```
3.5.2 To change a web application's context path

You can change the default context path (sometimes referred to as the virtual directory) of SAP BusinessObjects Business Intelligence platform web applications.

For example, the BOE web application’s default context path is BOE, which can be seen in the sample URL http://localhost:8080/BOE/CMC. In this example, http://localhost:8080/ is the server and port number, BOE is the web application, and /CMC is a component included within the BOE web application.

The context path for SAP BusinessObjects Business Intelligence platform web applications is set in the following configuration file:

```<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\apps\<WEB_APP>.properties```

Use a text editor to update the value of the appvdir parameter found in configuration file `<WEB_APP>.properties`.

For example, the BOE.properties configuration file contains the following parameters by default:

```warfile=BOE.war
appvdir=BOE
buildfile=BOE.xml
osgisupported=true```
4 To deploy web applications with the WDeploy tool

4.1 Overview of WDeploy

The WDeploy tool is included with SAP BusinessObjects Business Intelligence platform to ease deployment of web applications to Java-based web application servers.

There are two different interfaces to WDeploy:

- A traditional, text-based interface that processes commands and parameters given on the command-line.
- A new Windows-based guided assistant similar to the SAP BusinessObjects Business Intelligence platform installation program, which prompts the user to enter deployment parameters.

While each supported web application server requires different commands and web application package updates, WDeploy provides a consistent interface for administrators, and automates the adjustments needed for deployment to a specific web application server.

For example, to deploy a web application to an IBM WebSphere web application server, a single WDeploy command performs the following tasks:

1. Creates settings specific to IBM WebSphere in the web application's `web.xml` file.
2. Bundles the web application content into a web archive.
3. Creates an EAR file containing the web application.
4. Calls IBM WebSphere deployment tools to deploy the web application.

4.2 WDeploy prerequisites

This section details prerequisites for the deployment of SAP BusinessObjects Business Intelligence platform web applications to supported web application servers.

**Note**

Before deploying web applications to WebSphere, see WASX7017E: Exception deploying in WebSphere [page 96].

4.2.1 Before you deploy web applications

Your web application server must be installed and working before you attempt to install SAP BusinessObjects Business Intelligence platform. Consult your web application server documentation for installation instructions.

Your web application server should have at least 5 GB of free disk space, in addition to any other requirements given by other software installed on the machine.
It is recommended that you change the heap size and maximum perm size settings of your JVM to `-Xms128m -Xmx2048m -XX:MaxPermSize=512m`. If using Tomcat for example, your modified settings would look like this:

```
JAVA_OPTS="-Xms128m -Xmx2048m -XX:MaxPermSize=512m"
```

**Note**

For SAP NetWeaver AS Java 7.3x and 7.4, ensure that the maximum heap size is at least 4096 megabytes. For example:

```
JAVA_OPTS="-Xms128m -Xmx4096m -XX:MaxPermSize=512m"
```

Consult your JVM documentation for information on changing your Java memory settings.

Before you begin the deployment process, ensure that the web application server is installed and verify that the application server is running correctly by launching its administrative console.

### 4.2.2 Hardware requirements

The deployment of web applications to a web application server with the WDeploy tool requires at least 4 GB of RAM (8 GB for SAP NetWeaver AS Java 7.3x and 7.4), and 15 GB of free disk space, plus a minimum 5 GB of free space on the drive that hosts the temporary folder defined with the `%TEMP%` environment variable, for the deployment of web applications. This is in addition to any other requirements of the web application server or any other servers or services installed on the host.

### 4.2.3 64-bit support

SAP BusinessObjects Business Intelligence platform is only supported on 64-bit operating systems and only supports 64-bit web application servers with a 64-bit JDK.

### 4.2.4 Enable 8-dot-3 filename support

Windows 8-dot-3 filename support refers to the way in which Windows file systems maintain two filenames for each file: one filename up to eight characters with a three-character extension, and the full name that can be hundreds of characters long.

This feature is enabled by default on Windows operating systems, and ensures backwards compatibility with legacy Microsoft operating and file systems.

SAP BusinessObjects Business Intelligence platform requires 8-dot-3 support to be enabled. Verify that your Windows server has 8-dot-3 filenames enabled:

1. From the Windows **Start** menu, select **Run**.
   - The **Run** dialog window is displayed.
2. Type `regedit` into the **Open** field.
   - The Registry Editor program runs.
3. Browse the registry tree to HKEY_LOCAL_MACHINE \ SYSTEM \ CurrentControlSet \ Control \ FileSystem.

4. Double-click `<NtfsDisable8dot3NameCreation>` and ensure that its value is set to 0.
   When set to 0, Windows 8-dot-3 filename support is enabled.

Windows now supports both long and short filenames.

Reboot the system for the change to take effect.

## 4.2.5 To set up the Java environment

WDeploy requires a Java Virtual Machine to be available on the host system. Java Development Kit (JDK) 1.6 is installed automatically by the SAP BusinessObjects Business Intelligence platform installation program, but must be set up or copied from the SAP BusinessObjects Business Intelligence platform server when manually installed on a dedicated machine.

The JDK installed by the SAP BusinessObjects Business Intelligence platform installation program is used by default. If you are using a dedicated web application server, you must set up the JDK by performing either a Web Tier installation, or manually installing an appropriate JDK (1.5 or 1.6, as supported by the web application server). When setting up a JDK manually, ensure that the following environment settings have been configured:

- WDeploy attempts to use the JVM installed with the SAP BusinessObjects Business Intelligence platform first. If this JVM cannot be found, then WDeploy attempts to use the `<JAVA_HOME>` environment variable setting that is set to a valid Java directory. If no valid or suitable JVM is found, WDeploy exits.

- The user account PATH environment variable includes:
  `<JAVA_HOME>`\bin

- To allow WDeploy to run from any directory, update the PATH environment variable to include:
  `<BOE_INSTALL_DIR>`\SAP BusinessObjects Enterprise XI 4.0\wdeploy

## 4.2.6 Web application server parameter configuration files

Before using the WDeploy command-line interface to deploy a web application, ensure that the correct parameters are set in the WDeploy web application deployment server parameter configuration file. Set parameters are used as default settings, and no longer need to be given on the command-line.

**Note**

You do not need to set parameters in these deployment configuration files if you are using the GUI interface, or if you are only predeploying using the `wdeploy predeploy` or `wdeploy predeployall` commands.

The configuration file appropriate for your web application server is located in the following folder:

`<BOE_INSTALL_DIR>`\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf. For example, if you are using Tomcat 7, select C:\Program Files (x86)\SAP BusinessObjects\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\config.tomcat7.

Use a text editor to update values specific to your organization’s web application server. For more information on how to configure WDeploy configuration files, see WDeploy configuration files.
Parameters set in the WDeploy web application server parameter configuration file can be overridden when calling WDeploy from the command-line, using switches and parameters to change the default behavior. However, it is highly recommended that you configure the parameters in the `config.<WEB_APP_SERVER>` configuration file appropriate for your deployment.

### 4.2.7 To install WDeploy on remote web application server

To deploy web applications to a dedicated web application server, perform a **Web Tier** or **Custom / Expand** installation with the SAP BusinessObjects Business Intelligence platform installation program. If you prefer to copy the WDeploy tool manually, copy the following folder to the web application server:

```
<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy
```

**Note**

When copying the WDeploy tool manually, ensure that the environment variable `JAVA_HOME` is configured appropriately on the web application server.

### 4.3 SAP System Landscape Directory (SLD) registration

Your organization may use the SAP System Landscape Directory (SLD) Data Supplier (DS) to maintain a central repository of information about your organization’s SAP software. It provides administrators with detailed information about the system’s topology and software components. For more information on setting up the BI platform for SLD, see “Registration of BI platform in the System Landscape” in the *SAP BusinessObjects Business Intelligence Platform Administrator Guide* and SAP Note 1653689.

The SLD registration notifies the SLD when web applications are deployed or undeployed, keeping the SLD database current with the latest information about your organization’s web application deployments.

Web application components can be registered with SLD on the following web application servers:

- SAP NetWeaver 7.3
- Apache Tomcat 6.0
- IBM WebSphere 6.1 and 7

### 4.3.1 To enable SLD registration for SAP NetWeaver

SAP System Landscape Directory Data Supplier (SLD-DS) integration is available for SAP NetWeaver. For information on SLD-DS integration and NetWeaver, see the System Landscape Directory SCN document at:

4.3.2 To enable SLD registration for Tomcat

To use SAP System Landscape Directory Data Supplier (SLD-DS) with Apache Tomcat 6.0, the SLDREG registration tool must be installed on each Apache Tomcat web application server.

**Note**
SLDREG is not installed as a part of SAP BusinessObjects Business Intelligence platform. For information on installing SLDREG, refer to SAP Note 1018839.

To configure SLDREG so that the SLD is updated whenever web applications are deployed or undeployed from an Apache Tomcat web application server, refer to SAP Note 1508421.

**Note**
The required `sap.com-TomcatSLDataSupplierWEB.war` file attached to SAP Note 1508421 can also be found in the `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps` folder after the Java Web Applications feature is installed during a Web Tier installation.

4.3.3 To enable SLD registration for WebSphere

To use SAP System Landscape Directory Data Supplier (SLD-DS) with WebSphere 6.1 or 7.0, the SLDREG registration tool must be installed on each WebSphere web application server.

**Note**
SLDREG is not installed as a part of SAP BusinessObjects Business Intelligence platform. For information on installing SLDREG, refer to SAP Note 1018839.

To configure SLDREG so that the SLD is updated whenever web applications are deployed or undeployed from a WebSphere web application server, refer to SAP Note 1482727.

4.4 Deployment modes

WDDeploy supports two different deployment modes:

1. **Standalone mode (a web application server)**
   The web application server serves both static content (HTML pages, images, documents, JavaScript, Cascading Style Sheets) and dynamic content (Java Server Pages, JAR files, XML files).

2. **Split web tier mode (a web application server plus a dedicated web server)**
   A dedicated web server receives requests from web browsers and serves all static content (HTML pages, images, documents, JavaScript, Cascading Style Sheets). Requests for dynamic content (Java Server Pages, JAR files, XML files) are forwarded to the dedicated application server and returned to the web browser when the content has been formed.
This mode is suited to larger production deployments where scalability and performance are key.

It is also possible to use WDeploy to deploy web applications to a web application server installed on the same system as SAP BusinessObjects Business Intelligence platform. This configuration can be used for small development or test systems, and is not recommended for production systems.

4.4.1 Standalone deployments

Standalone mode refers to a web application server serving both static and dynamic content to web clients. The web application server could run on the same machine as SAP BusinessObjects Business Intelligence platform, or on a separate machine connected by network.

In the following diagram, web clients connect through a firewall to a web application server [1] that serves both static and dynamic content. Processing requests from the web application server are sent to the SAP BusinessObjects Business Intelligence platform Central Management Server (CMS) [2].

In the diagram above, the WDeploy is installed as a component of the CMS [2], and web applications are separated out into directories for static and dynamic content. The dynamic content can now be copied to the web application server [1].

The WDeploy tool can also be installed or copied to a dedicated web application server [1], making it easy to deploy separated content received from a CMS [2].

This mode is best suited for small deployments with a limited number of users. The advantage of a standalone deployment is that it is easy to deploy and maintain, but it may not scale to a large number of users because the web application server delivers both static and dynamic content.

4.4.2 Split web tier deployments

A web tier deployment separates static and dynamic web application content so that static content is served by a web server, and dynamic content is served by a web application server. The web and web application servers could run on the same machine, or separate machines connected to a network.

Note

The following web applications are not supported in split web tier mode deployments

- Web Services
- MobileOTA14
- OpenSearch
In the following diagram, web clients connect through a firewall to a web server [1] that serves only static content (HTML pages, images, documents, JavaScript, Cascading Style Sheets). When dynamic content is required, the web server sends a request to the web application server [2]. Any requests that require further processing by SAP BusinessObjects Business Intelligence platform are sent to Central Management Server (CMS) for processing [3].

In the diagram above, the WDeploy is installed as a component of the CMS [3], and web applications are separated out into directories for static and dynamic content. The dynamic content can now be copied to the web application server [2], and the static content copied to the web server [1].

The WDeploy command can also be installed on dedicated web [1] and web application [2] servers, making it easy to deploy separated content received from a CMS [3].

If an organization implements security measures that restrict access to server machines, the separated static and dynamic content can be sent separately to those with the authority to deploy content.

Split deployments are best suited to mid or large-sized deployments with a large or increasing number of users. The advantage of a split deployment is that it is scalable and provides good performance.

**i Note**

Web, web application, and SAP BusinessObjects Business Intelligence platform servers can be clustered to provide an even greater degree of scalability, availability, and performance.

### 4.4.2.1 Supported dedicated web and web application server combinations

WDeploy supports the following web and web application server configurations for split deployments:

- Apache 2.2 web server with Tomcat 6 or 7
- Apache 2.2 web server with WebLogic 10.x
- IBM IHS web server 6 with WebSphere 6.1
- IBM IHS web server 7 with WebSphere 7.0
- IBM IHS web server 8.5 with WebSphere 8.5 or 8.5.5

**i Note**

Apache and IBM IHS web servers are all given as `apache` in WDeploy configuration files.
4.4.2.2 To deploy web applications on a remote machine

Use the procedure below to deploy web applications to a remote machine. In this procedure, Box 1 refers to the machine hosting an SAP BusinessObjects Business Intelligence platform installation, and Box 2 is the remote machine on which the web application server is installed.

1. Create on Box 2 the following directories.
   - `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy`
   - `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps`
   - `<BOE_INSTALL_DIR>\InstallData`

   These directories reflect the default directory structure installed on Box 1.

   **Tip**

   Although you can customize the folder structure to meet your specific requirements, it is recommended that you maintain files within the same folder structure or hierarchy in Box 2 as in Box 1.

2. Copy the following files from Box 1 to Box 2.
   - Folder `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy`.
     **Tip** Remove the contents under `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir` before the file copy, if that folder is not empty.
   - Folder `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps`.
   - Folder `<BOE_INSTALL_DIR>\InstallData\setup.engine`.

3. Set the `JAVA_HOME` environment variable to the JDK 1.5 or 1.6 directory.

4. Modify the WDeploy configuration file for your web application server. Provide all the required information to enable WDeploy to deploy the web application.

   For example, to modify the configuration file for WebLogic 10, you would modify the file to:

   ```
   as_domain_dir=C:\bea10\user_projects\domains\base_domain
   as_instance=AdminServer
   as_admin_port=7001
   as_admin_username=weblogic
   as_admin_password=weblogic
   ```

   The configuration file is located in the following directory:

   ```
   <BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\<WEB_APP_SERVER>\config.
   ```

5. Run the WDeploy script from its location in Box 2 by opening command line console and entering the following command:

   ```
   <BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\wdeploy.bat
   -Dapp_source_tree="<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps"
   deployall
   ```
You can set WDeploy parameter defaults values in the WDeploy configuration file `\BOE_INSTALL_DIR\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\wdeploy.conf`, instead of giving parameters on the command-line. For example, set the parameters:

- `app_source_tree`
- `war_dir`
- `work_dir`
- `root_context_path`

For more information, see WDeploy configuration file.

You pass the argument `-Dwar_dir` to specify the location of generic WAR files as input for deployment. For example, to deploy a generic BOE.war file:

```
<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\wdeploy.bat <WEB_APP_SERVER>
-Dwar_dir="C:\myGenericWarFiles\BOE.war"
-DAPP=BOE
deploy
```

To create generic WAR files for all BI platform applications, run the following command:

```
<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\wdeploy.bat
buildwarall
-Dapp_source_tree="<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps"
-Dwar_dir="C:\myGenericWarFiles"
```

Pass the parameter `-Dwar_dir=<TARGET_LOCATION_OF_GENERIC_WAR_FILE>` to specify the location to output the generic WAR files to.

## 4.5 WDeploy configuration files

The WDeploy configuration files contain settings saved in a key-value pair text format. Read by WDeploy when it starts, the options and parameters saved in the configuration files are used as default settings and no longer need to be given on the command-line. However, all options and parameters can still be given on the command-line, which overrides the configuration file. Options and parameters given on the command-line do not change the options stored in configuration files.

### Note

It is recommended that web application server administrator account passwords are not stored in the WDeploy configuration file, but rather passed to WDeploy from the command-line with the parameter `-Das_admin_password=<PASSWORD>`.

There are three configuration files used by WDeploy:
• **WDeploy configuration file**: 
  `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\wdeploy.conf`: stores general WDeploy settings that apply to all web application servers.

• **Web application server configuration files**: 
  `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\config.<WEB_APP_SERVER>`: stores settings for a specific web application server.

• **Web application configuration file**: 
  `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\apps\<WEB_APP>.properties`: stores individual deployment settings for each web application.

### 4.5.1 WDeploy configuration file

The `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\wdeploy.conf` configuration file stores settings likely to be shared among any web application servers in your deployment.

Properties stored in the WDeploy configuration file can be overridden from the command-line using the `-D<PROPERTY>` switch parameter. However, it is highly recommended that you configure the parameters in the `config.<WEB_APP_SERVER>` configuration file appropriate for your deployment.

For a complete list of WDeploy properties, see *WDeploy property parameters*.

### 4.5.2 Web application server configuration files

As each web server and web application server requires different WDeploy settings, the WDeploy tool references a configuration file for each supported server. The configuration files are stored in the WDeploy `conf` folder as follows:

`<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\config.<WEB_APP_SERVER>`

Substitute `<WEB_APP_SERVER>` for the name of the web application server to which the WDeploy tool deploys.

The following list shows all configuration files for currently supported web application servers:

- `config.jboss5`
- `config.sapappsvr72` (SAP NetWeaver AS Java 7.2)
- `config.sapappsvr73` (SAP NetWeaver AS Java 7.3x and 7.4)
- `config.tomcat6` (Tomcat 6.0)
- `config.tomcat7` (Tomcat 7.0)
- `config.weblogic10` (WebLogic 10 and 10.3)
- `config.weblogic11` (WebLogic 10.3.x (11gR1))
- `config.websphere6` (WebSphere 6.1)
- `config.websphere7` (WebSphere 7.0)
- `config.websphere8` (WebSphere 8.5)

The following sections list the configuration options available for each supported web and web application server.
4.5.2.1 JBoss 5.0 configuration file

Set default values for the following parameters in `config.jboss5` (JBoss 5.0) to avoid having to give them on the command-line every time.

Table 3: Mandatory WDeploy parameters for JBoss 5.0

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>as_dir</td>
<td>Installed location of the JBoss web application server (&lt;\text{JBoss_HOME}&gt;).</td>
<td>C:\Program Files\JBoss 5</td>
</tr>
<tr>
<td>as_instance</td>
<td>Name of the JBoss application server instance.</td>
<td>default</td>
</tr>
</tbody>
</table>

4.5.2.2 SAP NetWeaver AS Java 7.2, 7.3x, or 7.4 configuration file

i Note

Currently the WDeploy tool does not support deployment to SAP NetWeaver 7.3x or 7.4. You must use the `wdeploy predeploy` or `wdeploy predeploy all` commands of the WDeploy tool to create SCA files and deploy manually using SAP Software Update Manager (SUM). You do not need to set parameters in `config.sapappsvr73` to use these predeployment commands.

Set default values for the following parameters in `config.sapappsvr72` (SAP NetWeaver 7.2) and `config.sapappsvr73` (SAP NetWeaver 7.3x and 7.4) to avoid having to give them on the command-line every time.

Table 4: Mandatory WDeploy parameters for SAP NetWeaver AS Java 7.2, 7.3x, or 7.4

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>as_dir</td>
<td>Installed location of SAP NetWeaver AS Java.</td>
<td>C:\usr\sap</td>
</tr>
<tr>
<td>as_sid</td>
<td>System ID of the target instance.</td>
<td>AS1</td>
</tr>
<tr>
<td>as_instance</td>
<td>Application server instance name.</td>
<td>JC01</td>
</tr>
<tr>
<td>as_admin_port</td>
<td>SAP NetWeaver AS Java administration request port.</td>
<td>50004</td>
</tr>
<tr>
<td>as_admin_username</td>
<td>SAP NetWeaver AS Java administrative account username.</td>
<td>administrator</td>
</tr>
<tr>
<td>as_admin_password</td>
<td>SAP NetWeaver AS Java administrative account password.</td>
<td>password</td>
</tr>
<tr>
<td>clear.temp.dirs</td>
<td>Passed to SAP NetWeaver AS Java during deployment: toggles the au-</td>
<td>true</td>
</tr>
</tbody>
</table>
### 4.5.2.3 Tomcat 6 or 7 configuration file

Set default values for the following parameters in `config.tomcat6` or `config.tomcat7` to avoid having to give them on the command-line every time.

When deploying to a split environment, where a Tomcat web application server is paired with a dedicated Apache web server, see *To deploy to separate Apache web and Tomcat web application servers*.

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>as_instance</td>
<td>Application server instance name.</td>
<td>localhost</td>
</tr>
<tr>
<td>as_service_name</td>
<td>Name of the Tomcat service when the application server is installed as a Windows service (only applicable for installations on Microsoft Windows).</td>
<td>Tomcat6 or Tomcat7</td>
</tr>
<tr>
<td>as_dir</td>
<td>Installed location of Tomcat 6 or 7.</td>
<td>C:\Program Files\Apache Software Foundation\Tomcat 7.0</td>
</tr>
<tr>
<td>as_service_key</td>
<td>Registry key used by Tomcat to give Java parameters (only applicable for installations on Microsoft Windows).</td>
<td>HKLM\SOFTWARE\Wow6432Node \Apache Software Foundation \Procrun 2.0$&lt;as_service_name&gt;\Parameters \Java</td>
</tr>
<tr>
<td>as_service_key_value</td>
<td>Tomcat’s Java parameters: the value of the registry key as_server_key.</td>
<td>Options.</td>
</tr>
</tbody>
</table>
4.5.2.4  WebLogic 10, 10.3, or 10.3.x (11gR1) configuration file

Set default values for the following parameters in `config.weblogic10` or `config.weblogic11` to avoid having to give them on the command-line every time.

Table 6: Mandatory WDeploy parameters for WebLogic 10, 10.3, or 10.3.x (11gR1)

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>as_admin_port</td>
<td>WebLogic administration request port.</td>
<td>7001</td>
</tr>
<tr>
<td>as_admin_username</td>
<td>WebLogic administrative account username.</td>
<td>weblogic</td>
</tr>
<tr>
<td>as_admin_password</td>
<td>WebLogic administrative account password.</td>
<td>password</td>
</tr>
<tr>
<td>as_instance</td>
<td>Name of the WebLogic application server instance.</td>
<td>AdminServer</td>
</tr>
<tr>
<td>as_domain_dir</td>
<td>WebLogic domain directory.</td>
<td>C:\bea\weblogic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>\user_projects\domains\base_domain</td>
</tr>
</tbody>
</table>

4.5.2.5  WebSphere 6, 7, 8.5, or 8.5.5 configuration file

Set default values for the following parameters in `config.websphere6`, `config.websphere7`, or `config.websphere8` to avoid having to give them on the command-line every time.

Table 7: Mandatory WDeploy parameters for WebSphere 6, 7, 8.5, or 8.5.5

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Description</th>
<th>Example value</th>
</tr>
</thead>
<tbody>
<tr>
<td>as_soap_port</td>
<td>Port number for SOAP application server administration. If not set, the default SOAP port number will be used.</td>
<td>8880</td>
</tr>
<tr>
<td>as_instance</td>
<td>The name of the WebSphere application server instance.</td>
<td>server1</td>
</tr>
<tr>
<td>as_admin_password</td>
<td>WebSphere administrative account password.</td>
<td>password</td>
</tr>
<tr>
<td>as_admin_username</td>
<td>WebSphere administrative account username.</td>
<td>administrator</td>
</tr>
<tr>
<td>as_profile_name</td>
<td>Name of the profile created for Websphere Application Server. Give this parameter when a non-default profile is used for the deployment.</td>
<td>AppSrv01</td>
</tr>
</tbody>
</table>
### Parameter name | Description | Example value
--- | --- | ---
**as_virtual_host** | Virtual host to which the application must be bound. | **default_host**
**as_admin_is_secure** | Instructs WDeploy that WebSphere security is enabled. | **false**

**Note**
Values for **as_admin_username** and **as_admin_password** must be set when **as_admin_is_secure** is **true**.

**as_dir** | Installed location of WebSphere. | **C:\Program Files\IBM\WebSphere\AppServer**

**ws_instance** | Web server instance when deployed to a split environment (dedicated web server). | **webserver1**

**enforce_file_limit** | Indicates to WDeploy whether or not the web application server may encounter issues loading applications that contain more than 65,535 files (**false** by default). | **false**

**as_plugin_cfg_dir** | Location of the WebSphere plugin-cfg.xml file. This parameter is only required for split web tier deployments. | **C:\AppServers\IBM\WebSphere7\profiles\AppSrv01\config\cells\<cell_name>\nodes\<webserver_node>\servers\<webserver_name>**

### 4.5.2.6 Dedicated web servers in split deployments

When deploying web applications to a dedicated web server in split deployments, use the name of the supported web server:

- **config.apache** (Apache Web Server or IBM IHS)

**Note**
It is recommended that web application server administrator account passwords are not stored in the WDeploy configuration file, but rather passed to WDeploy from the command-line with the parameter – **Das_admin_password=<PASSWORD>**.

Split deployments employ a dedicated web application server to serve dynamic content, and a dedicated web server to serve static content. The following table lists the web application servers that can be configured for a split deployment of the SAP BusinessObjects Business Intelligence platform.
### 4.5.2.6.1 Apache or IBM IHS (split deployment) configuration file

Set default values for the following parameters in `config.apache` to avoid having to give them on the command-line every time.

> **Note**
> The same configuration file (`config.apache`) is used for Apache 2.2 or IBM IHS.

#### Table 8: Mandatory WDeploy parameters for Apache 2.2 or IBM IHS (split deployment)

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>connector_type</td>
<td>The Apache connector type used to configure split mode</td>
<td><code>tomcat6</code></td>
</tr>
<tr>
<td>deployment_dir</td>
<td>Directory under which WDeploy creates a subdirectory for static content served by the web server. WDeploy creates a virtual directory on the web server, mapping the subdirectory to the URL.</td>
<td><code>C:\apache2\htdocs</code></td>
</tr>
<tr>
<td>plugin_install_dir</td>
<td>The root plugin installation directory for WebSphere application servers.</td>
<td><code>$\{ws_dir\}\Plugins</code></td>
</tr>
<tr>
<td>ws_dir</td>
<td>The Apache web server installation directory.</td>
<td><code>C:\apache2</code></td>
</tr>
</tbody>
</table>

> **Note**
> When using IBM IHS with a WebSphere 6, 7, 8.5, or 8.5.5 web application server, ensure that `as_plugin_cfg_dir` is correctly configured in `config.websphere6`, `config.websphere7`, or `config.websphere8`. 

<table>
<thead>
<tr>
<th>Application Server</th>
<th>Apache web server</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP NetWeaver 7.2, 7.3x, and 7.4</td>
<td>N/A</td>
</tr>
<tr>
<td>Tomcat 6.0</td>
<td>Yes</td>
</tr>
<tr>
<td>Tomcat 7.0</td>
<td>Yes</td>
</tr>
<tr>
<td>WebLogic 10</td>
<td>Yes</td>
</tr>
<tr>
<td>WebLogic 10.3</td>
<td>Yes</td>
</tr>
<tr>
<td>WebLogic 10.3.x (11gR1)</td>
<td>Yes</td>
</tr>
<tr>
<td>WebSphere 6.1</td>
<td>Yes (IHS 6)</td>
</tr>
<tr>
<td>WebSphere 7</td>
<td>Yes (IHS 7)</td>
</tr>
<tr>
<td>WebSphere 8.5 and 8.5.5</td>
<td>Yes (IHS 8.5)</td>
</tr>
<tr>
<td>JBoss 5.0</td>
<td>No</td>
</tr>
</tbody>
</table>
4.5.3 Web application configuration property file

Each web application can be deployed to a different location on the web application server, and can be configured with different packaging options.

Each deployable web application is configured in the configuration file <BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\app\<WEB_APP>.properties.

The following settings are available in a <WEB_APP>.properties configuration file:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>warfile</td>
<td>Name of the WAR file to create for this web application.</td>
<td>dswsbobje.war</td>
</tr>
<tr>
<td>appvdir</td>
<td>Name of the context path (also known as a virtual directory) to which the web application is deployed.</td>
<td>dswsbobje</td>
</tr>
<tr>
<td>buildfile</td>
<td>Ant build file used to build the web application.</td>
<td>dswsbobje.xml</td>
</tr>
<tr>
<td>deploy_as_a_filetree</td>
<td>Toggle to enable the deployment of an exploded WAR file when true.</td>
<td>true</td>
</tr>
<tr>
<td>classloading_mode</td>
<td>Setting to determine the Classloader order.</td>
<td>PARENT_LAST</td>
</tr>
</tbody>
</table>

When deploying a web application to a specific location on a web application server, use the appvdir variable to set the location of the web application within the server’s root context. For example, if a web application server’s root context was http://www.mycompany.com/BOE, setting appvdir to mywebapp/ would result in the web application being accessible from http://www.mycompany.com/BOE/mywebapp/.

4.6 Using the WDeploy command-line tool

Before using the WDeploy command-line tool, ensure that the WDeploy configuration files have been configured appropriately for your web application server. See WDeploy configuration files.

For information on WDeploy prerequisites, see WDeploy prerequisites [page 18]

The WDeploy command-line tool is installed as a part of SAP BusinessObjects Business Intelligence platform: <BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\wdeploy.bat

There are two types of commands:
- General commands
Used to provide high-level information about the tool itself and the available web application server deployment. They are not used together with server names, properties, or actions. For example:

- wdeploy.bat help
- wdeploy.bat listappservers

**Deployment commands**

Used to deploy specific web applications to a specific web application server. These commands always follow the format: server, properties, action. For example:

```
wdeploy.bat <WEB_APP_SERVER> [-D<PROPERTY>=<value>] <ACTION>
```

Where:

- `<WEB_APP_SERVER>` is the name of the web or web application server and must match the name of the WDeploy configuration file `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\config.<WEB_APP_SERVER>`. For example, for SAP NetWeaver AS Java 7.3, the configuration file is named `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\config.sapappsvr73`, so the name given for the `<WEB_APP_SERVER>` parameter given to WDeploy on the command-line is `sapappsvr73`.
- `-D<PROPERTY>=<value>` is at least one key-value pair. Parameters given on the command-line override those in the configuration file. For example, to deploy the BOE web application, use `-DAPP=BOE`. This overrides any value for `-DAPP=` stored in the web application server configuration file `config.<WEB_APP_SERVER>`.
- `<ACTION>` is the name of the operation to perform. For example, the deployall action will deploy all web applications to the web application server given as `<WEB_APP_SERVER>` in the first parameter.

### 4.6.1 Syntax

#### 4.6.1.1 WDeploy server names

WDeploy uses a server name on the command-line and as part of the filename for server configuration files. The server name is the first parameter given on the command-line when running the WDeploy tool:

```
wdeploy.bat <WEB_APP_SERVER> [-D<PROPERTY>=<value>] <ACTION>
```

`<WEB_APP_SERVER>` is the name of the web or web application server. The name given must match the name of the configuration file in `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\config`. For a complete list of valid names for `<WEB_APP_SERVER>`, see Values for WEB_APP_SERVER.

#### 4.6.1.2 WDeploy property parameters

WDeploy properties can be set on the command-line with the `-D<PROPERTY>` switch parameter. Repeat the `-D<PROPERTY>` switch parameter for each property to be set.
For example, in the following command, multiple invocations of the `-D <PROPERTY>` switch parameter are used to set multiple properties for a Tomcat 6 web application server (`as_dir, as_instance, as_service_name, and APP`):

```bash
wdeploy.bat Tomcat6 -Das_dir=C:\Tomcat6 -Das_instance=localhost -Das_service_name=Tomcat6 -DAPP=BOE deployonly
```

Properties can also be configured in the `wdeploy.config` configuration file. This allows properties to be set by default, and over-ridden from the command-line when required. For more information on the `wdeploy.conf` configuration file, see *WDeploy configuration file*.

The following table lists all properties for WDeploy.

**Table 9: Properties for WDeploy**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Example value</th>
</tr>
</thead>
</table>
| APP               | Name of the web application to deploy, as found in the WAR or EAR file name and the web application properties file:  

\[<BOE_INSTALL_DIR>\]SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\apps  
\[<WEB_APP>\].properties

This property is used when working with individual web applications, as with the `wdeploy predeploy`, `wdeploy deploy`, or `wdeploy deployonly` commands. | BOE |
| app_source_dir    | Location of an individual web application’s source files. This property is used when working with individual web applications, as with the `wdeploy predeploy`, `wdeploy deploy`, or `wdeploy deployonly` commands. | \[<BOE_INSTALL_DIR>\]SAP BusinessObjects Enterprise XI 4.0\wdeploy\warfiles \webapps\<WEB_APP> |
| app_source_tree   | Location of the source files for all available web applications (the parent folder of `app_source_dir`). This property is used when working with all available web applications simultaneously, as with the `wdeploy predeployall, wdeploy deployall or wdeploy deployonlyall` commands. | \[<BOE_INSTALL_DIR>\]SAP BusinessObjects Enterprise XI 4.0\wdeploy\warfiles \webapps |
| as_admin_is_secure | For web application servers that use SSL encryption during web application deployment, such as WebSphere. | false (default) true |
### Property Description Example value

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Example value</th>
</tr>
</thead>
<tbody>
<tr>
<td>as_admin_password</td>
<td>Mandatory for NetWeaver. Web application server administrative account password.</td>
<td>password</td>
</tr>
<tr>
<td>as_admin_port</td>
<td>Mandatory for NetWeaver. Port number for web application server administrative access.</td>
<td>8080</td>
</tr>
<tr>
<td>as_admin_username</td>
<td>Mandatory for NetWeaver. Web application server administrative account username.</td>
<td>administrator</td>
</tr>
<tr>
<td>as_dir</td>
<td>Installation directory of the web application server.</td>
<td>C:\tomcat6</td>
</tr>
<tr>
<td>as_domain_dir</td>
<td>Installation directory of the web application server. For WebLogic application servers, <code>as_domain_dir</code> is the domain root.</td>
<td>C:\BEA\Weblogic</td>
</tr>
<tr>
<td>as_instance</td>
<td>Mandatory for all the application servers. Name of the web application server instance.</td>
<td>localhost</td>
</tr>
<tr>
<td>as_lang</td>
<td>Preferred language for the WDeploy user interface.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Czech: CS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Danish: DA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Dutch: NL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- English: EN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Finnish: FI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- French: FR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- German: DE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Hungarian: HU</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Italian: IT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Japanese: JA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Korean: KO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Norwegian Bokmal: NB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Polish: PL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Portuguese: PT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Romanian: RO</td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Example value</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>as_mode</td>
<td>Type of web application deployment. A standalone is a web application server that serves both static and dynamic web content. A split deployment uses a dedicated web server to serve static content, and a web application server to serve dynamic content.</td>
<td>standalone split</td>
</tr>
<tr>
<td>as_service_key</td>
<td>For Tomcat running on Windows. When installed as a service, the name of the Windows registry key where the JVM startup parameters are stored.</td>
<td>HKLM\SOFTWARE\Apache Software Foundation \Procrun 2.0&lt;AS_SERVICE_NAME &gt;\Parameters\Java</td>
</tr>
<tr>
<td>as_service_key_value</td>
<td>For Tomcat running on Windows. When installed as a service, the value of Windows registry key where the JVM startup parameters are stored.</td>
<td></td>
</tr>
<tr>
<td>as_service_name</td>
<td>For Tomcat running on Windows. The name of the Tomcat service.</td>
<td>Tomcat6</td>
</tr>
<tr>
<td>as_sid</td>
<td>Mandatory for NetWeaver. The system ID of the target instance.</td>
<td>AS1</td>
</tr>
<tr>
<td>as_soap_port</td>
<td>Mandatory for WebSphere. Port number for SOAP application server administration. If not set, the default SOAP port number is used.</td>
<td>8880</td>
</tr>
<tr>
<td>as_virtual_host</td>
<td>For WebSphere only. Virtual host to which the application must be bound.</td>
<td>default_host</td>
</tr>
<tr>
<td>classloader_package_</td>
<td>For WebLogic 10. When the property is set, the application is turned into an EAR, and a filtering ClassLoader is setup with the package list. This parameter is a comma-separated list of packages to filter from the classloader.</td>
<td></td>
</tr>
<tr>
<td>filtering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>connector_type</td>
<td>For web servers running in split mode, such as Apache.</td>
<td>tomcat6</td>
</tr>
</tbody>
</table>

- Russian: RU
- Simplified Chinese: zh_CN
- Slovak: SK
- Spanish: ES
- Swedish: SV
- Thai: TH
- Traditional Chinese: zh_TW
- Turkish: TR
<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Example value</th>
</tr>
</thead>
<tbody>
<tr>
<td>connector_type</td>
<td>Set <code>connector_type</code> to the name of the dedicated web application server used by the web server.</td>
<td></td>
</tr>
<tr>
<td>deploy_as_a_filetree</td>
<td>For WebLogic web application servers. Indicates whether the application must be deployed as a file tree (expanded format) or as a packaged WAR or EAR file.</td>
<td>false (default)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>true</td>
</tr>
<tr>
<td>deployment_dir</td>
<td>Directory under which WDeploy creates a subdirectory for static content served by a dedicated web server. WDeploy creates a virtual directory on the web server, mapping the subdirectory to the URL.</td>
<td>C:\apache2\htdocs</td>
</tr>
<tr>
<td>disable_CmcApp</td>
<td>Disables the CMC web application when set to true.</td>
<td>false</td>
</tr>
<tr>
<td></td>
<td></td>
<td>true</td>
</tr>
<tr>
<td>disable_InfoView</td>
<td>Disables the BI launch pad web application when set to true.</td>
<td>false</td>
</tr>
<tr>
<td></td>
<td></td>
<td>true</td>
</tr>
<tr>
<td>enforce_file_limit</td>
<td>Tells WDeploy whether or not the web application contains more than 65,535 files. Set to false by default, except for WebSphere 6.</td>
<td>false (default)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>true</td>
</tr>
<tr>
<td>JCoStandalone</td>
<td>Use when the BI platform is integrated with an SAP BW system. Set to false when deploying to an SAP NetWeaver web application server. Set to true when deploying to any other application server.</td>
<td>false</td>
</tr>
<tr>
<td></td>
<td></td>
<td>true</td>
</tr>
<tr>
<td>recent_app_svr</td>
<td>The most recent web application server to which web applications were deployed.</td>
<td>Tomcat6</td>
</tr>
<tr>
<td>root_context_path</td>
<td>Web application root context path to which all web applications are deployed. To deploy a web application to a folder within the root context, see the <code>appvdir</code> setting in the web application <code>.properties</code> configuration file.</td>
<td>/BOE</td>
</tr>
<tr>
<td>work_dir</td>
<td>Folder in which WDeploy manipulates the web applications WAR or EAR archives (for example, to split static and dynamic content in a web application). This folder stores the results of the <code>wdeploy predeploy</code> action and stores data required to undeploy web applications.</td>
<td><code>&lt;BOE_INSTALL_DIR&gt;\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir</code></td>
</tr>
<tr>
<td>ws_dir</td>
<td>For web servers running in split mode, such as Apache.</td>
<td>C:\apache2</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Example value</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>ws_instance</td>
<td>The name of the web server where the application is installed, in split mode.</td>
<td>webserver1</td>
</tr>
<tr>
<td>ws_type</td>
<td>For web servers running in split mode, such as Apache.</td>
<td>apache</td>
</tr>
<tr>
<td>war_dir</td>
<td>Location of WAR or EAR archives to deploy or the target output location to create generic WAR files in.</td>
<td>C:\myGenericWarFiles</td>
</tr>
</tbody>
</table>

### 4.6.1.2.1 Mandatory property parameters for split web tier deployments

Some properties are required for split web tier deployments (separate web and web application servers). When deploying to a split web tier deployment, ensure that the following property parameters are either given on the command-line, or are configured in the web or web application server configuration file (`config.<WEB_APP_SERVER>`).

- Set the `-Das_mode=split` property to separate static content for the web server and dynamic content for the web application server.
- Set the `-Dconnector_type=<CONNECTOR_TYPE>` property to the appropriate connector type. Set `connector_type` to the name of the dedicated web application server used by the web server. For example, when using an Apache web server and a Tomcat 6 web application server, `connector_type` should be set to `tomcat6`.
- On deployments where the web server runs on the same host as the web application server, you must give the `-Dws_type=<WEB_SERVER_TYPE>` and `-Dws_dir=<WEB_SERVER_DIR>` properties.

### 4.6.1.3 WDeploy actions

The last parameter of a WDeploy command is the action to be performed. The following section defines each valid action, and what each does.
Table 10: WDeploy Actions

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>predeploy</td>
<td>The wdeploy predeploy command prepares a web application for deployment to the target web application server.</td>
</tr>
<tr>
<td></td>
<td>The web application’s web.xml configuration file is updated, along with any other changes required to make the web application deployable to the target web application server.</td>
</tr>
<tr>
<td></td>
<td>Once configured, the web application is packaged into a WAR or EAR file and saved to <code>&lt;BOE_INSTALL_DIR&gt;\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\&lt;WEB_APP_SERVER&gt;</code>.</td>
</tr>
<tr>
<td></td>
<td>This file can be deployed manually through the web application server’s administrative console, or with the wdeploy deploy command.</td>
</tr>
<tr>
<td></td>
<td>Use wdeploy predeploy to prepare the BOE web application so that it is ready for deployment to a specific web application server. For example:</td>
</tr>
<tr>
<td></td>
<td>wdeploy.bat <code>&lt;WEB_APP_SERVER&gt;</code> -DAPP=BOE predeploy</td>
</tr>
<tr>
<td>predeployall</td>
<td>The wdeploy predeployall command performs the wdeploy predeploy command for all web applications located in the SAP BusinessObjects Business Intelligence platform web application source directory:</td>
</tr>
<tr>
<td></td>
<td><code>&lt;BOE_INSTALL_DIR&gt;SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps</code></td>
</tr>
<tr>
<td></td>
<td>Use wdeploy predeployall to apply the wdeploy predeploy command to all web applications. For example:</td>
</tr>
<tr>
<td></td>
<td>wdeploy.bat <code>&lt;WEB_APP_SERVER&gt;</code> predeployall</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>Predeployment does not require access to the web application server, with the exception of WebSphere. When deploying to WebSphere, the default_virtual_host parameter is mandatory.</td>
</tr>
<tr>
<td>deploy</td>
<td>The wdeploy deploy command is a concatenation of the wdeploy predeploy and wdeploy deployonly commands, which prepares and deploys a web application to the target web application server with just one command.</td>
</tr>
<tr>
<td></td>
<td>Use wdeploy deploy to prepare and deploy the BOE web application to the target web application server.</td>
</tr>
<tr>
<td></td>
<td>wdeploy.bat <code>&lt;WEB_APP_SERVER&gt;</code> -DAPP=BOE deploy</td>
</tr>
<tr>
<td>Action</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>deployall</td>
<td>The <code>wdeploy deployall</code> command performs the <code>wdeploy deploy</code> command for all web applications located in the SAP BusinessObjects Business Intelligence platform web application source directory:</td>
</tr>
<tr>
<td></td>
<td><code>&lt;BOE_INSTALL_DIR&gt;</code>SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps</td>
</tr>
<tr>
<td></td>
<td>Use <code>wdeploy deployall</code> to apply the <code>wdeploy deploy</code> command to all web applications. For example:</td>
</tr>
<tr>
<td></td>
<td><code>wdeploy.bat &lt;WEB_APP_SERVER&gt; deployall</code></td>
</tr>
<tr>
<td>deployonly</td>
<td>The <code>wdeploy deployonly</code> command deploys a prepared web application to the target web application server.</td>
</tr>
<tr>
<td></td>
<td>Deployable WAR or EAR files located in <code>&lt;BOE_INSTALL_DIR&gt;</code>SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir&lt;WEB_APP_SERVER&gt; are deployed to the web application server by the <code>wdeploy deployonly</code> command invoking the web application server's command-line interface.</td>
</tr>
<tr>
<td></td>
<td>If a web application has not already been prepared for deployment, the <code>wdeploy predeploy</code> command is called automatically.</td>
</tr>
<tr>
<td></td>
<td>Use <code>wdeploy deployonly</code> to deploy a prepared BOE web application to a web application server. For example:</td>
</tr>
<tr>
<td></td>
<td><code>wdeploy.bat &lt;WEB_APP_SERVER&gt; deployonly</code></td>
</tr>
<tr>
<td>deployonlyall</td>
<td>The <code>wdeploy deployonlyall</code> command performs the <code>wdeploy deployonly</code> command for all prepared web applications.</td>
</tr>
<tr>
<td></td>
<td>Use <code>wdeploy deployonlyall</code> to apply the <code>wdeploy deployonly</code> command to all prepared web applications. For example:</td>
</tr>
<tr>
<td></td>
<td><code>wdeploy.bat &lt;WEB_APP_SERVER&gt; deployonlyall</code></td>
</tr>
<tr>
<td>buildwarall</td>
<td>Builds a generic WAR file from the web application source tree. For example:</td>
</tr>
<tr>
<td></td>
<td><code>wdeploy.bat buildwarall</code></td>
</tr>
<tr>
<td></td>
<td><code>-Dapp_source_tree=LOCATION_OF_APP_SOURCE_TREE</code></td>
</tr>
<tr>
<td></td>
<td><code>-Dwar_dir=TARGET_LOCATION_OF_GENERIC_WAR_FILE</code></td>
</tr>
<tr>
<td>listapps</td>
<td>Lists the web applications available for deployment to a web application server. For example:</td>
</tr>
<tr>
<td></td>
<td><code>wdeploy.bat &lt;WEB_APP_SERVER&gt; listapps</code></td>
</tr>
<tr>
<td>Action</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| listdeployedapps | Lists all web applications currently deployed to a web application server. This action can only be run on a web server or web application server system. For example:  
  ```bash
  wdeploy.bat <WEB_APP_SERVER> listdeployedapps
  ``` |
| undeploy        | The `wdeploy undeploy` command invokes the target web application server’s command-line interface to remove a deployed SAP BusinessObjects Business Intelligence platform web application from the server.  
  Use the `wdeploy undeploy` command to undeploy the BOE web application from the target web application server.  
  ```bash
  wdeploy.bat <WEB_APP_SERVER> -DAPP=BOE undeploy
  ``` |
| undeployall     | The `wdeploy undeployall` command performs the `wdeploy undeploy` command for all SAP BusinessObjects Business Intelligence platform web applications deployed to the target web application server. For example:  
  ```bash
  wdeploy.bat <WEB_APP_SERVER> undeployall
  ``` |
| validateconfig  | Validates the WDeploy configuration for the supported web application servers to ensure that the deployment can be successful. For example:  
  ```bash
  wdeploy.bat <WEB_APP_SERVER> validateconfig
  ``` |

Substitute `<WEB_APP_SERVER>` for the name of the web application server.

### 4.6.1.4 WDeploy general commands

WDeploy general commands are used to provide high-level information about the tool itself and the available web application server deployment. They are not used together with server names, properties, or actions. The following general commands are available:

- `wdeploy help`: displays a summary of available WDeploy command-line usage.
- `wdeploy listappservers`: lists all Java web application servers supported by this version of WDeploy.
- `wdeploy version`: displays the version number of the WDeploy tool itself.
- `wdeploy buildwarall`: generates a generic WAR file by using the web application source tree.

**Usage:**

```bash
wdeploy.bat
buildwarall
-Dapp_source_tree=<LOCATION_OF_WEB_APP_SOURCE>
-Dwar_dir=<TARGET_LOCATION_OF GENERIC_WAR_FILES>
```

For example:
4.6.2 Examples of using WDeploy

This section contains examples of using WDeploy commands for supported web application servers.

👍 Remember

Before using WDeploy, ensure that the WDeploy configuration files have been configured appropriately for your web application server. See WDeploy configuration files. Read Special considerations for particular web application servers for a list of important information specific to your web application server.

4.6.2.1 Values for WEB_APP_SERVER

In the following examples, substitute the variable `<WEB_APP_SERVER>` for the name of your web application server, as shown in the table below.

<table>
<thead>
<tr>
<th>Web application server</th>
<th><code>&lt;WEB_APP_SERVER&gt;</code> name</th>
</tr>
</thead>
<tbody>
<tr>
<td>JBoss 5.0</td>
<td>jboss5</td>
</tr>
<tr>
<td>SAP NetWeaver AS Java 7.2</td>
<td>sapappsvr72</td>
</tr>
<tr>
<td>SAP NetWeaver AS Java 7.3x and 7.4</td>
<td>sapappsvr73</td>
</tr>
<tr>
<td>Tomcat 6.0</td>
<td>tomcat6</td>
</tr>
<tr>
<td>Tomcat 7.0</td>
<td>tomcat7</td>
</tr>
<tr>
<td>WebLogic 10 or 10.3</td>
<td>weblogic10</td>
</tr>
<tr>
<td>WebLogic 10.3.x (11gR1)</td>
<td>weblogic11</td>
</tr>
<tr>
<td>WebSphere 6.1</td>
<td>websphere6</td>
</tr>
<tr>
<td>WebSphere 7.0</td>
<td>websphere7</td>
</tr>
<tr>
<td>WebSphere 8.5 or 8.5.5</td>
<td>websphere8</td>
</tr>
</tbody>
</table>

4.6.2.2 wdeploy predeploy

The `wdeploy predeploy` command prepares a web application for deployment to the target web application server.
The web application's internal `web.xml` configuration file is set by WDeploy, along with any other changes required to make the web application deployable to the target web application server.

Once configured, the web application is packaged into a WAR or EAR file and saved to `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\<WEB_APP_SERVER>`. The resulting WAR or EAR file can be deployed manually through the web application server's administrative console, or with the `wdeploy deploy` command.

### Example

For example, use `wdeploy predeploy` to prepare the BOE web application so that it is ready for deployment to a specific web application server.

```bash
wdeploy.bat <WEB_APP_SERVER>
-DAPP=BOE
predeploy
```

Substitute `<WEB_APP_SERVER>` for the name of the web application server, as shown in the following table.

The table below lists example parameters for predeploying the BOE web application for specific web application servers. All parameters are required, unless they are marked as optional in the configuration files. Parameters given on the command-line over-ride those stored in configuration files. However, it is recommended that you configure the parameters in the `config.<WEB_APP_SERVER>` configuration file appropriate for your deployment.

<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>JBoss 5 (<code>jboss5</code>)</td>
<td><code>wdeploy.bat jboss5</code>&lt;br&gt;-DAPP=BOE&lt;br&gt;predeploy</td>
</tr>
<tr>
<td>SAP NetWeaver AS Java 7.2 (<code>sapappsvr72</code>)</td>
<td><code>wdeploy.bat sapappsvr72</code>&lt;br&gt;-DAPP=BOE&lt;br&gt;predeploy</td>
</tr>
<tr>
<td>SAP NetWeaver AS Java 7.3x and 7.4 (<code>sapappsvr73</code>)</td>
<td><code>wdeploy.bat sapappsvr73</code>&lt;br&gt;-DAPP=BOE&lt;br&gt;predeploy</td>
</tr>
<tr>
<td>Tomcat 6.0 (<code>tomcat6</code>)</td>
<td><code>wdeploy.bat Tomcat6</code>&lt;br&gt;-DAPP=BOE&lt;br&gt;predeploy</td>
</tr>
<tr>
<td>Tomcat 7.0 (<code>tomcat7</code>)</td>
<td><code>wdeploy.bat Tomcat7</code>&lt;br&gt;-DAPP=BOE&lt;br&gt;predeploy</td>
</tr>
<tr>
<td>WebLogic 10 and 10.3 (<code>weblogic10</code>)</td>
<td><code>wdeploy.bat weblogic10</code>&lt;br&gt;-DAPP=BOE&lt;br&gt;predeploy</td>
</tr>
</tbody>
</table>
### 4.6.2.3 wdeploy predeployall

The `wdeploy predeployall` command performs the `wdeploy predeploy` command for all web applications located in the SAP BusinessObjects Business Intelligence platform web application source directory:

```
<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps
```

**Example**

For example, use `wdeploy predeployall` to apply the `wdeploy predeploy` command to all web applications.

```
wdeploy.bat <WEB_APP_SERVER> predeployall
```

Substitute `<WEB_APP_SERVER>` for the name of the web application server, as shown in the following table.

The table below lists example parameters for predeploying all web applications for specific web application servers. All parameters are required, unless they are marked as optional in the configuration files. Parameters given on the command-line over-ride those stored in configuration files. However, it is recommended that you configure the parameters in the `config.<WEB_APP_SERVER>` configuration file appropriate for your deployment.

<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebLogic 10.3.x (11gR1) (weblogic11)</td>
<td><code>wdeploy.bat weblogic11 -DAPP=BOE predeploy</code></td>
</tr>
<tr>
<td>WebSphere 6.1 (websphere6)</td>
<td><code>wdeploy.bat websphere6 -Das_virtual_host=default_host -DAPP=BOE predeploy</code></td>
</tr>
<tr>
<td>WebSphere 7.0 (websphere7)</td>
<td><code>wdeploy.bat websphere7 -Das_virtual_host=default_host -DAPP=BOE predeploy</code></td>
</tr>
<tr>
<td>WebSphere 8.5 or 8.5.5 (websphere8)</td>
<td><code>wdeploy.bat websphere8 -Das_virtual_host=default_host -DAPP=BOE predeploy</code></td>
</tr>
</tbody>
</table>

---

4.6.2.3 wdeploy predeployall

The **wdeploy predeployall** command performs the **wdeploy predeploy** command for all web applications located in the SAP BusinessObjects Business Intelligence platform web application source directory:

```
<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps
```

**Example**

For example, use **wdeploy predeployall** to apply the **wdeploy predeploy** command to all web applications.

```
wdeploy.bat <WEB_APP_SERVER> predeployall
```

Substitute `<WEB_APP_SERVER>` for the name of the web application server, as shown in the following table.

The table below lists example parameters for predeploying all web applications for specific web application servers. All parameters are required, unless they are marked as optional in the configuration files. Parameters given on the command-line over-ride those stored in configuration files. However, it is recommended that you configure the parameters in the `config.<WEB_APP_SERVER>` configuration file appropriate for your deployment.

<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>JBoss 4.2.3 (jboss4)</td>
<td><code>wdeploy.bat jboss4 predeployall</code></td>
</tr>
<tr>
<td>Server</td>
<td>Parameters</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>JBoss 5 (jboss5)</td>
<td>wdeploy.bat jboss5 predeployall</td>
</tr>
<tr>
<td>Oracle Application Server 10g R3 (oas1013)</td>
<td>wdeploy.bat oas1013 predeployall</td>
</tr>
<tr>
<td>SAP NetWeaver AS Java 7.2 (sapappsvr72)</td>
<td>wdeploy.bat sapappsvr72 predeployall</td>
</tr>
<tr>
<td>SAP NetWeaver AS Java 7.3 (sapappsvr73)</td>
<td>wdeploy.bat sapappsvr73 predeployall</td>
</tr>
<tr>
<td>Tomcat 5.5 (tomcat55)</td>
<td>wdeploy.bat tomcat55 predeployall</td>
</tr>
<tr>
<td>Tomcat 6.0 (tomcat6)</td>
<td>wdeploy.bat Tomcat6 predeployall</td>
</tr>
<tr>
<td>WebLogic 9.2 MP2 (weblogic9)</td>
<td>wdeploy.bat weblogic9 predeployall</td>
</tr>
<tr>
<td>WebLogic 10 and 10.3 (weblogic10)</td>
<td>wdeploy.bat weblogic10 predeployall</td>
</tr>
<tr>
<td>WebLogic 10.3.x (11gR1) (weblogic11)</td>
<td>wdeploy.bat weblogic11 predeployall</td>
</tr>
<tr>
<td>WebSphere 6.1 (websphere6)</td>
<td>wdeploy.bat websphere6 -Das_virtual_host=default_host predeployall</td>
</tr>
<tr>
<td>WebSphere 7.0 (websphere7)</td>
<td>wdeploy.bat websphere7 -Das_virtual_host=default_host predeployall</td>
</tr>
</tbody>
</table>

### 4.6.2.4 wdeploy deployonly

The `wdeploy deployonly` command deploys a prepared web application to the target web application server.
Deployable WAR or EAR files located in `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\<WEB_APP_SERVER>` are deployed to the web application server by the `wdeploy deployonly` command invoking the web application server’s command-line interface.

If a web application has not already been prepared for deployment, the `wdeploy predeploy` command is called automatically.

**Example**

For example, use `wdeploy deployonly` to deploy a prepared BOE web application to a web application server.

```
wdeploy.bat <WEB_APP_SERVER>
-DAPP=BOE
deployonly
```

Substitute `<WEB_APP_SERVER>` for the name of the web application server, as shown in the following table.

The table below lists example parameters for deploying the BOE web application to specific web application servers. All parameters are required, unless they are marked as optional in the configuration files. Parameters given on the command-line over-ride those stored in configuration files. However, it is recommended that you configure the parameters in the `config.<WEB_APP_SERVER>` configuration file appropriate for your deployment.

<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
</table>
| JBoss 5 (jboss5)            | wdeploy.bat jboss5
- Das_dir=C:\jboss-5
- Das_instance=default
- DAPP=BOE
  deployonly                                                             |
| SAP NetWeaver AS Java 7.2  | wdeploy.bat sapappsvr72
- Das_dir=C:\usr\sap
- Das_instance=JC01
- Das_sid=AS2
- Das_admin_username=Administrator
- Das_admin_password=password1
- Das_admin_port=50004
- DAPP=BOE
  deployonly                                                             |
| SAP NetWeaver AS Java 7.3x and 7.4 (sapappsvr73) | The `wdeploy deployonly` command does not support SAP NetWeaver AS Java 7.3x or 7.4. You must use the `wdeploy predeploy` or `wdeploy predeployall` commands of the WDeploy tool to create SCA files and deploy manually using SAP Software Update Manager (SUM). |
| Tomcat 6.0 (tomcat6)        | wdeploy.bat Tomcat6
- Das_dir=C:\Tomcat6
- Das_instance=localhost
- Das_service_name=Tomcat6
- DAPP=BOE
  deployonly                                                             |
<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
</table>
| Tomcat 7.0 (tomcat7)          | wdeploy.bat Tomcat7  
|                               | -Das_dir=C:\Tomcat7  
|                               | -Das_instance=localhost  
|                               | -Das_service_name=Tomcat7  
|                               | -DAPP=BOE  
|                               | deployonly                                                                 |
| WebLogic 10 and 10.3 (weblogic10) | wdeploy.bat weblogic10  
|                               | -Das_domain_dir=C:\bea\user_projects\domains  
|                               | -base_domain  
|                               | -Das_admin_port=7001  
|                               | -Das_instance=admin  
|                               | -Das_admin_username=admin  
|                               | -Das_admin_password=admin  
|                               | -DAPP=BOE  
|                               | deployonly                                                                 |
| WebLogic 10.3.x (11gR1) (weblogic11) | wdeploy.bat weblogic11  
|                               | -Das_domain_dir=C:\bea\user_projects\domains  
|                               | -base_domain  
|                               | -Das_admin_port=7001  
|                               | -Das_instance=admin  
|                               | -Das_admin_username=admin  
|                               | -Das_admin_password=admin  
|                               | -DAPP=BOE  
|                               | deployonly                                                                 |
| WebSphere 6.1 (websphere6)    | wdeploy.bat websphere6  
|                               | -Das_dir=C:\IBM\WebSphere\AppServer  
|                               | -Das_instance=server1  
|                               | -Das_virtual_host=default_host  
|                               | -Das_profile_name=AppSrv01  
|                               | -Das_soap_port=8880  
|                               | -DAPP=BOE  
|                               | deployonly                                                                 |
| WebSphere 7.0 (websphere7)    | wdeploy.bat websphere7  
|                               | -Das_dir=C:\IBM\WebSphere\AppServer  
|                               | -Das_instance=server1  
|                               | -Das_virtual_host=default_host  
|                               | -Das_profile_name=AppSrv01  
|                               | -Das_soap_port=8880  
|                               | -DAPP=BOE  
|                               | deployonly                                                                 |
| WebSphere 8.5 and 8.5.5 (websphere8) | wdeploy.bat websphere8  
|                               | -Das_dir=C:\IBM\WebSphere\AppServer  
|                               | -Das_instance=server1  
|                               | -Das_virtual_host=default_host  
|                               | -Das_profile_name=AppSrv01  
|                               | -Das_soap_port=8880  
|                               | -DAPP=BOE  
|                               | deployonly                                                                 |
4.6.2.5  wdeploy deployonlyall

The `wdeploy deployonlyall` command performs the `wdeploy deployonly` command for all prepared web applications.

**Example**

For example, use `wdeploy deployonlyall` to apply the `wdeploy deployonly` command to all prepared web applications.

```
wdeploy.bat <WEB_APP_SERVER> deployonlyall
```

Substitute `<WEB_APP_SERVER>` for the name of the web application server, as shown in the following table.

The table below lists example parameters for deploying all web applications to specific web application servers. All parameters are required, unless they are marked as optional in the configuration files. Parameters given on the command-line over-ride those stored in configuration files. However, it is recommended that you configure the parameters in the `config.<WEB_APP_SERVER>` configuration file appropriate for your deployment.

<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>JBoss 5 (jboss5)</td>
<td><code>wdeploy.bat jboss5 -Das_dir=C:\jboss-5 -Das_instance=default deployonlyall</code></td>
</tr>
<tr>
<td>SAP NetWeaver AS Java 7.2</td>
<td><code>wdeploy.bat sapappsvr72 -Das_dir=C:\usr\sap -Das_instance=JC01 -Das_sid=AS2 -Das_admin_username=Administrator -Das_admin_password=password1 -Das_admin_port=50004 deployonlyall</code></td>
</tr>
<tr>
<td>SAP NetWeaver AS Java 7.3x</td>
<td>The <code>wdeploy deployonlyall</code> command does not support SAP NetWeaver AS Java 7.3x or 7.4. You must use the <code>wdeploy predeploy</code> or <code>wdeploy predeployall</code> commands of the WDeploy tool to create SCA files and deploy manually using SAP Software Update Manager (SUM).</td>
</tr>
<tr>
<td>7.4 (sapappsvr73)</td>
<td></td>
</tr>
<tr>
<td>Tomcat 6.0 (tomcat6)</td>
<td><code>wdeploy.bat Tomcat6 -Das_dir=C:\Tomcat6 -Das_instance=localhost -Das_service_name=Tomcat6 deployonlyall</code></td>
</tr>
<tr>
<td>Tomcat 7.0 (tomcat7)</td>
<td><code>wdeploy.bat Tomcat7 -Das_dir=C:\Tomcat7 -Das_instance=localhost -Das_service_name=Tomcat7 deployonlyall</code></td>
</tr>
</tbody>
</table>
## 4.6.2.6  wdeploy deploy

The `wdeploy deploy` command is a concatenation of the `wdeploy predeploy` and `wdeploy deployonly` commands, which prepares and deploys a web application to the target web application server with just one command.
Example

For example, use `wdeploy deploy` to prepare and deploy the BOE web application to the target web application server.

```
wdeploy.bat <WEB_APP_SERVER>  
-DAPP=BOE
deploy
```

Substitute `<WEB_APP_SERVER>` for the name of the web application server, as shown in the following table.

The table below lists example parameters for deploying the BOE web application to specific web application servers. All parameters are required, unless they are marked as optional in the configuration files. Parameters given on the command-line over-ride those stored in configuration files. However, it is recommended that you configure the parameters in the `config.<WEB_APP_SERVER>` configuration file appropriate for your deployment.

<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
</table>
| JBoss 5 (jboss5) | `wdeploy.bat jboss5  
-Das_dir=C:\jboss-5  
-Das_instance=default  
-DAPP=BOE
deploy` |
| SAP NetWeaver AS Java 7.2 (sapappsvr72) | `wdeploy.bat sapappsvr72  
-Das_dir=C:\usr\sap  
-Das_instance=JC01  
-Das_sid=AS2  
-Das_admin_username=Administrator  
-Das_admin_password=password1  
-Das_admin_port=50004  
-DAPP=BOE
deploy` |
| SAP NetWeaver AS Java 7.3x and 7.4 (sapappsvr73) | The `wdeploy deploy` command does not support SAP NetWeaver AS Java 7.3x or 7.4. You must use the `wdeploy predeploy` or `wdeploy predeployall` commands of the WDeploy tool to create SCA files and deploy manually using SAP Software Update Manager (SUM). |
| Tomcat 6.0 (tomcat6) | `wdeploy.bat Tomcat6  
-Das_dir=C:\Tomcat6  
-Das_instance=localhost  
-Das_service_name=Tomcat6  
-DAPP=BOE
deploy` |
| Tomcat 7.0 (tomcat7) | `wdeploy.bat Tomcat7  
-Das_dir=C:\Tomcat7  
-Das_instance=localhost  
-Das_service_name=Tomcat7  
-DAPP=BOE
deploy` |
### Server Parameters

<table>
<thead>
<tr>
<th>Server version</th>
<th>Parameters</th>
</tr>
</thead>
</table>
| WebLogic 10 and 10.3 (weblogic10) | `wdeploy.bat weblogic10`  
- `-Das_domain_dir=C:\bea\user_projects\domains`  
- `-Das_admin_port=7001`  
- `-Das_instance=AdminServer`  
- `-Das_admin_username=weblogic`  
- `-Das_admin_password=weblogic`  
- `-DAPP=BOE`  
- `deploy` |
| WebLogic 10.3.x (11gR1) (weblogic11) | `wdeploy.bat weblogic11`  
- `-Das_domain_dir=C:\bea\user_projects\domains`  
- `-Das_admin_port=7001`  
- `-Das_instance=AdminServer`  
- `-Das_admin_username=weblogic`  
- `-Das_admin_password=weblogic`  
- `-DAPP=BOE`  
- `deploy` |
| WebSphere 6.1 (websphere6)    | `wdeploy.bat websphere6`  
- `-Das_dir=C:\IBM\WebSphere\AppServer`  
- `-Das_instance=server1`  
- `-Das_virtual_host=default_host`  
- `-Das_profile_name=AppSrv01`  
- `-Das_soap_port=8880`  
- `-DAPP=BOE`  
- `deploy` |
| WebSphere 7.0 (websphere7)    | `wdeploy.bat websphere7`  
- `-Das_dir=C:\IBM\WebSphere\AppServer`  
- `-Das_instance=server1`  
- `-Das_virtual_host=default_host`  
- `-Das_profile_name=AppSrv01`  
- `-Das_soap_port=8880`  
- `-DAPP=BOE`  
- `deploy` |
| WebSphere 8.5 or 8.5.5 (websphere8) | `wdeploy.bat websphere8`  
- `-Das_dir=C:\IBM\WebSphere\AppServer`  
- `-Das_instance=server1`  
- `-Das_virtual_host=default_host`  
- `-Das_profile_name=AppSrv01`  
- `-Das_soap_port=8880`  
- `-DAPP=BOE`  
- `deploy` |

### 4.6.2.7 wdeploy deployall

The `wdeploy deployall` command performs the `wdeploy deploy` command for all web applications located in the SAP BusinessObjects Business Intelligence platform web application source directory:
Example

For example, use `wdeploy deployall` to apply the `wdeploy deploy` command to all web applications.

```
wdeploy.bat <<WEB_APP_SERVER>> deployall
```

Substitute `<<WEB_APP_SERVER>>` for the name of the web application server, as shown in the following table.

The table below lists example parameters for deploying the all web applications to specific web application servers. All parameters are required, unless they are marked as optional in the configuration files. Parameters given on the command-line over-ride those stored in configuration files. However, it is recommended that you configure the parameters in the `config.<<WEB_APP_SERVER>>` configuration file appropriate for your deployment.

<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>JBoss 5 (jboss5)</td>
<td><code>wdeploy.bat jboss5</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_dir=C:\jboss-5</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_instance=default</code></td>
</tr>
<tr>
<td></td>
<td>deployall</td>
</tr>
<tr>
<td>SAP NetWeaver AS Java 7.2</td>
<td><code>wdeploy.bat sapappsvr72</code></td>
</tr>
<tr>
<td>(sapappsvr72)</td>
<td><code>-Das_dir=C:\usr\sap</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_instance=JC01</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_sid=AS2</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_admin_username=Administrator</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_admin_password=password1</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_admin_port=50004</code></td>
</tr>
<tr>
<td></td>
<td>deployall</td>
</tr>
<tr>
<td>SAP NetWeaver AS Java 7.3x</td>
<td>The <code>wdeploy deployall</code> command does not support SAP NetWeaver AS</td>
</tr>
<tr>
<td>and 7.4 (sapappsvr73)</td>
<td>7.3x or 7.4. You must use the <code>wdeploy predeploy</code> or <code>wdeploy</code></td>
</tr>
<tr>
<td></td>
<td><code>predeployall</code> commands of the WDeploy tool to create SCA files and deploy</td>
</tr>
<tr>
<td></td>
<td>manually using SAP Software Update Manager (SUM).</td>
</tr>
<tr>
<td>Tomcat 6.0 (tomcat6)</td>
<td><code>wdeploy.bat Tomcat6</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_dir=C:\Tomcat6</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_instance=localhost</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_service_name=Tomcat6</code></td>
</tr>
<tr>
<td></td>
<td>deployall</td>
</tr>
<tr>
<td>Tomcat 7.0 (tomcat7)</td>
<td><code>wdeploy.bat Tomcat7</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_dir=C:\Tomcat7</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_instance=localhost</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_service_name=Tomcat7</code></td>
</tr>
<tr>
<td></td>
<td>deployall</td>
</tr>
<tr>
<td>WebLogic 10 and 10.3</td>
<td><code>wdeploy.bat weblogic10</code></td>
</tr>
<tr>
<td>(weblogic10)</td>
<td><code>-Das_domain_dir=C:\bea\user_projects\domains \base_domain</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_admin_port=7001</code></td>
</tr>
<tr>
<td></td>
<td><code>-Das_instance=AdminServer</code></td>
</tr>
</tbody>
</table>
### Server Parameters

<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebLogic 10.3.x (11gR1)</td>
<td>-Das_admin_username=weblogic -Das_admin_password=weblogic deployall</td>
</tr>
<tr>
<td>(weblogic11)</td>
<td>wdeploy.bat weblogic11</td>
</tr>
<tr>
<td></td>
<td>-Das_domain_dir=C:\bea\user_projects\domains base_domain</td>
</tr>
<tr>
<td></td>
<td>-Das_admin_port=7001</td>
</tr>
<tr>
<td></td>
<td>-Das_instance=AdminServer</td>
</tr>
<tr>
<td></td>
<td>-Das_admin_username=weblogic -Das_admin_password=weblogic deployall</td>
</tr>
<tr>
<td>WebSphere 6.1</td>
<td>wdeploy.bat websphere6</td>
</tr>
<tr>
<td>(websphere6)</td>
<td>-Das_dir=C:\IBM\WebSphere\AppServer</td>
</tr>
<tr>
<td></td>
<td>-Das_instance=server1</td>
</tr>
<tr>
<td></td>
<td>-Das_virtual_host=default_host</td>
</tr>
<tr>
<td></td>
<td>-Das_profile_name=AppSrv01</td>
</tr>
<tr>
<td></td>
<td>-Das_soap_port=8880</td>
</tr>
<tr>
<td></td>
<td>deployall</td>
</tr>
<tr>
<td>WebSphere 7.0</td>
<td>wdeploy.bat websphere7</td>
</tr>
<tr>
<td>(websphere7)</td>
<td>-Das_dir=C:\IBM\WebSphere\AppServer</td>
</tr>
<tr>
<td></td>
<td>-Das_instance=server1</td>
</tr>
<tr>
<td></td>
<td>-Das_virtual_host=default_host</td>
</tr>
<tr>
<td></td>
<td>-Das_profile_name=AppSrv01</td>
</tr>
<tr>
<td></td>
<td>-Das_soap_port=8880</td>
</tr>
<tr>
<td></td>
<td>deployall</td>
</tr>
<tr>
<td>WebSphere 8.5 and 8.5.5</td>
<td>wdeploy.bat websphere8</td>
</tr>
<tr>
<td>(websphere8)</td>
<td>-Das_dir=C:\IBM\WebSphere\AppServer</td>
</tr>
<tr>
<td></td>
<td>-Das_instance=server1</td>
</tr>
<tr>
<td></td>
<td>-Das_virtual_host=default_host</td>
</tr>
<tr>
<td></td>
<td>-Das_profile_name=AppSrv01</td>
</tr>
<tr>
<td></td>
<td>-Das_soap_port=8880</td>
</tr>
<tr>
<td></td>
<td>deployall</td>
</tr>
</tbody>
</table>

### 4.6.2.8 wdeploy undeploy

The `wdeploy undeploy` command invokes the target web application server's command-line interface to remove a deployed SAP BusinessObjects Business Intelligence platform web application from the server.

#### Example

For example, use the `wdeploy undeploy` command to undeploy the BOE web application from the target web application server.

```
wdeploy.bat <WEB_APP_SERVER>
-DAPP=BOE
undeploy
```
Substitute `<WEB_APP_SERVER>` for the name of the web application server, as shown in the following table.

The table below lists example parameters for undeploying the BOE web application from specific web application servers. All parameters are required, unless they are marked as optional in the configuration files. Parameters given on the command-line over-ride those stored in configuration files. However, it is recommended that you configure the parameters in the `config.<WEB_APP_SERVER>` configuration file appropriate for your deployment.

<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
</table>
| JBoss 5 (`jboss5`) | `wdeploy.bat jboss5`  
- `-Das_dir=C:\jboss-5`  
- `-Das_instance=default`  
- `-DAPP=BOE`  
- `undeploy` |
| SAP NetWeaver AS Java 7.2 (`sapappsvr72`) | `wdeploy.bat sapappsvr72`  
- `-Das_dir=C:\usr\sap`  
- `-Das_instance=JC01`  
- `-Das_sid=AS2`  
- `-Das_admin_username=Administrator`  
- `-Das_admin_password=password1`  
- `-Das_admin_port=50004`  
- `-DAPP=BOE`  
- `undeploy` |
| SAP NetWeaver AS Java 7.3x and 7.4 (`sapappsvr73`) | The `wdeploy` `undeploy` command does not support SAP NetWeaver AS Java 7.3x or 7.4. |
| Tomcat 6.0 (`tomcat6`) | `wdeploy.bat Tomcat6`  
- `-Das_dir=C:\Tomcat6`  
- `-Das_instance=localhost`  
- `-DAPP=BOE`  
- `-Das_service_name=Tomcat6`  
- `undeploy` |
| Tomcat 7.0 (`tomcat7`) | `wdeploy.bat Tomcat7`  
- `-Das_dir=C:\Tomcat7`  
- `-Das_instance=localhost`  
- `-DAPP=BOE`  
- `-Das_service_name=Tomcat7`  
- `undeploy` |
| WebLogic 10 and 10.3 (`weblogic10`) | `wdeploy.bat weblogic10`  
- `-Das_domain_dir=C:\bea\user_projects\domains\base_domain`  
- `-Das_admin_port=7001`  
- `-Das_instance=AdminServer`  
- `-Das_admin_username=weblogic`  
- `-Das_admin_password=weblogic`  
- `-DAPP=BOE`  
- `undeploy` |
| WebLogic 10.3.x (11gR1) (`weblogic11`) | `wdeploy.bat weblogic11`  
- `-Das_domain_dir=C:\bea\user_projects\domains` |
4.6.2.9  wdeploy undeployall

The wdeploy undeployall command performs the wdeploy undeploy command for all SAP BusinessObjects Business Intelligence platform web applications deployed to the target web application server.

Example

wdeploy.bat <WEB_APP_SERVER> undeployall

Substitute <WEB_APP_SERVER> for the name of the web application server, as shown in the following table.

The table below lists example parameters for undeploying all web applications from specific web application servers. All parameters are required, unless they are marked as optional in the configuration files. Parameters given on the command-line over-ride those stored in configuration files. However, it is recommended that you configure the parameters in the config.<WEB_APP_SERVER> configuration file appropriate for your deployment.
<table>
<thead>
<tr>
<th>Server</th>
<th>Parameters</th>
</tr>
</thead>
</table>
| JBoss 5 (jboss5)        | wdeploy.bat jboss5  
-Das_dir=C:\jboss5  
-Das_instance=default  
undeployall                                                                 |
| SAP NetWeaver AS Java 7.2 (sapappsvr72) | wdeploy.bat sapappsvr72  
-Das_dir=C:\usr\sap  
-Das_instance=JC01  
-Das_sid=AS2  
-Das_admin_username=Administrator  
-Das_admin_password=password1  
-Das_admin_port=50004  
undeployall                                                                 |
| SAP NetWeaver AS Java 7.3x and 7.4 (sapappsvr73) | The wdeploy undeployall command does not support SAP NetWeaver AS Java 7.3x or 7.4.                                                       |
| Tomcat 6.0 (tomcat6)    | wdeploy.bat Tomcat6  
-Das_dir=C:\Tomcat6  
-Das_instance=localhost  
-Das_service_name=Tomcat6  
undeployall                                                                 |
| Tomcat 7.0 (tomcat7)    | wdeploy.bat Tomcat7  
-Das_dir=C:\Tomcat7  
-Das_instance=localhost  
-Das_service_name=Tomcat7  
undeployall                                                                 |
| WebLogic 10 and 10.3 (weblogic10) | wdeploy.bat weblogic10  
-Das_domain_dir=C:\bea\user_projects\domains \base_domain  
-Das_admin_port=7001  
-Das_instance=AdminServer  
-Das_admin_username=weblogic  
-Das_admin_password=weblogic  
undeployall                                                                 |
| WebLogic 10.3.x (11gR1) (weblogic11) | wdeploy.bat weblogic11  
-Das_domain_dir=C:\bea\user_projects\domains \base_domain  
-Das_admin_port=7001  
-Das_instance=AdminServer  
-Das_admin_username=weblogic  
-Das_admin_password=weblogic  
undeployall                                                                 |
| WebSphere 6.1 (websphere6) | wdeploy.bat websphere6  
-Das_dir=C:\IBM\WebSphere\AppServer  
-Das_instance=server1  
-Das_virtual_host=default_host  
-Das_profile_name=AppSrv01  
undeployall                                                                 |
### 4.6.3 Special considerations

The following section contains important information related to the deployment of web applications on your web application server.

#### 4.6.3.1 SAP NetWeaver

##### 4.6.3.1.1 Prerequisites for deployment on SAP NetWeaver

**Note**

If you have any existing SAP BusinessObjects Business Intelligence platform web applications running on the server, they must be undeployed before continuing.

Before deploying BI platform web applications to an SAP NetWeaver Application Server (any version), you must ensure that .html and .htm files are never compressed. For example, in SAP NetWeaver AS 7.3:

1. Logon to your SAP NetWeaver Administrator portal.
   
   For example: `http://<servername>:50200/nwa`

2. Navigate to: `Configuration ➤ Infrastructure ➤ Java System Properties`.

3. On the `Services` tab, select `HTTP provider`.

4. Under `Extended Details`, modify the `AlwaysCompressed` and `NeverCompressed` properties as follows:
AlwaysCompressed: Remove *.htm, *.html, text/html from this property. This field cannot be blank - enter a space if blank.

NeverCompressed: Add *.htm, *.html, text/html to this property.

Table 11: Example

<table>
<thead>
<tr>
<th>Name</th>
<th>Default Calculated Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlwaysCompressed</td>
<td>(set to empty space if blank)</td>
</tr>
<tr>
<td>NeverCompressed</td>
<td>*.htm, *.html, text/html</td>
</tr>
</tbody>
</table>

5. Save your changes before exiting.

4.6.3.2 Tomcat

4.6.3.2.1 To deploy to separate Apache web and Tomcat web application servers

To reduce the load on a web application server, you can set up a separate, dedicated, web server to serve static content. All static content will be served by the web server, while dynamic content will be served by the web application server. The following instructions show you how to use the WDeploy tool to split web application resources into static and dynamic content and deploy this content appropriately.

1. Set up the Apache web server and ensure that it is working correctly. Load a web page, such as Apache’s default test page, to verify that the web server is serving content correctly.

   Open a web browser and enter the web server URL. For example: http://apache.mycompany.com.

2. Ensure that your Tomcat web application server is working correctly.

   Open a web browser and enter the IP address or hostname of the web application server, and a port number. For example: http://tomcat.mycompany.com:8080.

   **Note**
   
   If you have any existing SAP BusinessObjects Business Intelligence platform web applications running on the server, they must be undeployed before continuing.

3. Download the Apache Tomcat connector from the Tomcat web site. The Apache Tomcat connector allows you to connect an Apache web server with a Tomcat web application server, so Apache can forward requests for dynamic resources to Tomcat.

4. Follow the plug-in configuration instructions on the Apache web site for configuring the bridge between Apache web server and Tomcat web application server.

   Requests for dynamic resources are now forwarded to Tomcat when received by Apache.

5. Ensure that the bridge between the web server and web application server is working by pointing a browser to the web server and verifying that dynamic content from the web application server is served correctly.

   For example, visit the URL: http://apache.mycompany.com/jsp-examples/.

   **Note**
   
   This example URL will only work if you have manually deployed the jsp-examples web application.
6. If the web application server is installed on the same machine as SAP BusinessObjects Business Intelligence platform, run WDeploy locally on that machine. If the web application server runs on a different machine copy the WDeploy command and environment to the web application server. See To deploy web applications on a remote machine.

7. Configure WDeploy environment to separate content between the web server and the web application server. This is known as “split” mode.

The WDeploy configuration files for Apache and Tomcat are located in <BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf.

- Edit the WDeploy configuration file for Tomcat. For example, for Tomcat 6.0, the file config.tomcat6 will look similar to this:

  ```
  as_dir=C:\Appserver\Tomcat
  as_instance=localhost
  as_service_name=Tomcat6
  as_service_key=HKLM\SOFTWARE\Apache Software Foundation\Procrun 2.0\Tomcat6\Parameters\Java
  as_service_key_value=Options
  ```

- Edit config.apache. For example:

  ```
  ws_dir=C:\Webserver\Apache224
  connector_type=Tomcat6
  deployment_dir=C:\Webserver\Apache224\htdocs
  ```

8. Use wdeploy predeploy in split mode to separate source web applications into static and dynamic files. For example:

- Run the following command to extract static content for the Apache web server.

  ```
  wdeploy.bat Tomcat6 -Das_mode=split
  -Dws_type=apache predeployall
  ```

9. Run wdeploy deployonlyall command to deploy the dynamic content to Tomcat application server and static content to Apache. If Apache and Tomcat are on the same machine, static and dynamic content will be automatically deployed to servers by the following command:

  ```
  wdeploy.bat Tomcat6 -Das_mode=split
  -Dws_type=apache deployonlyall
  ```

   **Note**

   If your dynamic and static content are in a custom location, use the -Dwork_dir parameter.

   If Apache and Tomcat are on different machines, dynamic content will be automatically deployed to Tomcat by the following command. Static content must be manually deployed to the remote Apache machine afterwards.

   ```
   wdeploy.bat Tomcat6 -Das_mode=split
   deployonlyall
   ```

   **Note**

   If your dynamic and static content are in a custom location, use the -Dwork_dir parameter.
Copy static content to the htdocs directory on the web server:

- Extract the zip files on the web application server under `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\Tomcat6\resources`.
- Copy these folders from the Tomcat web application server to the Apache `<WS_DIR>\htdocs` folder on the Apache server.
- Copy the `bobj.<application>.conf` files from the Tomcat web application server to the Apache `<WS_DIR>\conf` folder on the Apache server.
- Update Apache `httpd.conf` under `<WS_DIR>\conf` with the application configuration files. For each web application include an entry in `httpd.conf`. For example, to include BOE, you would enter:

  ```bash
  Include conf\bobj.BOE.conf
  ```

Static content is now served by a dedicated web server, and dynamic content is served by a dedicated web application server.

### 4.6.3.2.2 Tomcat gzip compression

If you install a new installation of SAP BusinessObjects Business Intelligence platform and choose to use the bundled Tomcat web application server, Tomcat’s HTTP gzip compression is enabled automatically.

The gzip compression improves web application server response time and throughput. However, if you plan to deploy web applications to the Tomcat web application server, note that the deployment of web applications to a Tomcat server with gzip compression enabled may differ from the process used to deploy web applications to a version of Tomcat bundled with an earlier release of SAP BusinessObjects Business Intelligence platform.

### 4.6.3.3 WebSphere

#### 4.6.3.3.1 To deploy to separate IHS web and WebSphere web application servers

To reduce the load on a web application server, you can set up a separate, dedicated, web server to serve static content. All static content will be served by the web server, while dynamic content will be served by the web application server. The following instructions show you how to use the WDeploy tool to split web application resources into static and dynamic content and deploy this content appropriately.

1. Set up an IBM HTTP Server (IHS) web server and ensure that it is working correctly. Load a web page, such as the IHS default test page, to verify that the web server is serving content correctly.
   - Open a web browser and enter the IP address or hostname of the web server, and a port number if the server is not listening on port 80. For example: `http://ihs.mycompany.com`.

2. Ensure that your WebSphere web application server is working correctly.
   - Open a web browser and enter the IP address or hostname of the web application server, and a port number. For example: `http://websphere.mycompany.com:9080`.
3. Run the web server plug-in installation wizard to install the plug-in that bridges WebSphere with IHS, and follow the directions to enter information about your IHS web server.

4. Follow the plug-in configuration instructions on the WebSphere web site for configuring the bridge between IHS and WebSphere. Requests for dynamic resources are now forwarded to WebSphere when received by IHS.

5. Ensure that the bridge between the web server and web application server is working by pointing a browser to the web server and verifying that dynamic content from the web application server is served correctly. For example, visit the URL: http://ihs.mycompany.com/snoop/.

6. If the web application server is installed on the same machine as SAP BusinessObjects Business Intelligence platform, run WDeploy locally on that machine. If the web application server runs on a different machine copy the WDeploy command and environment to the web application server. See To deploy web applications on a remote machine.

7. Configure WDeploy environment to separate content between the web server and the web application server. This is known as "split" mode.

The WDeploy configuration files for Apache and WebSphere are located in `<BOE_INSTALL_DIR>`\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf.

- Edit `config.apache`. For example:

```
ws_dir=C:\Program Files\Apache Software Foundation\Apache 2.2
connector_type=websphere6
deployment_dir=C:\Program Files\Apache Software Foundation\Apache 2.2\htdocs
plugin_install_dir=${ws_dir}/Plugins
```

- Edit `config.websphere6`. For example:

```
as_soap_port=8880
#as_admin_username=admin
#as_admin_password=password
as_dir=C:\Program Files\IBM\WebSphere\AppServer
as_instance=server1
as_plugin_cfg_dir=C:\Program Files\IBM\WebSphere\AppServer\profiles\AppSrv01\config\cells\<CELLNAME>\nodes\<NODENAME>\servers\${ws_instance}
as_profile_name=AppSrv01
as_virtual_host=default_host
as_admin_is_secure=false
enforce_file_limit=true
ws_instance=webserver1
```

8. Use `wdeploy predeploy` in split mode to split source web applications into separate static and dynamic resources.

`i Note`

Before running `wdeploy predeploy`, ensure that parameter `as_plugin_cfg_dir` in `config.websphere<X>` has been set to the folder that contains the WebSphere file `plugin-cfg.xml`.

For example:
Run the following command to extract static content for the IHS web server.

```
wdeploy.bat websphere6
   -Das_mode=split
   -Dws_type=apache
predeployall
```

The dynamic content of web applications is located in: `<BOE_INSTALL_DIR>`\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\websphere6\application. The static content is located in: `<BOE_INSTALL_DIR>`\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\websphere6\resources.

9. Run `wdeploy deployonlyall` command to deploy the dynamic content to WebSphere application server and static content to IHS.

If IHS and WebSphere are on the same machine, static and dynamic content will be automatically deployed to servers by the following command:

```
wdeploy.bat websphere6 -Das_mode=split
   -Dws_type=apache deployonlyall
```

**Note**
If your dynamic and static content are in a custom location, use the `-Dwork_dir` parameter.

If IHS and WebSphere are on different machines, dynamic content will be automatically deployed to WebSphere by the following command. Static content must be manually deployed to the remote IHS machine afterwards.

```
wdeploy.bat websphere6 -Das_mode=split
   deployonlyall
```

**Note**
If your dynamic and static content are in a custom location, use the `-Dwork_dir` parameter.

Copy static content to the `htdocs` directory on the web server:

- Extract the zip files on the web application server under `<BOE_INSTALL_DIR>`\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\websphere6\resources.
- Copy these folders from the WebSphere web application server to the IHS `<WS_DIR>`\htdocs folder on the IHS server.
- Copy the `bobj.<application>.conf` files from the WebSphere web application server to the IHS `<WS_DIR>`\conf folder on the IHS server.
- Update IHS `httpd.conf` under `<WS_DIR>`\conf with the application configuration files. For each web application include an entry in `httpd.conf`. For example, to include BOE, you would enter:

```
Include conf\bobj.BOE.conf
```

10. Copy the `plugin-cfg.xml` file to the IHS and WebSphere work folders. If you are using the WebSphere administrative console to deploy, and IHS and WebSphere are installed on the same host system, skip to the next step. The WDeploy command will automatically copy `plugin-cfg.xml` when IHS and WebSphere are installed on the same host system.

For example, copy the following file:
11. Ensure that both static and dynamic content are correctly configured by trying to access a web application through the web server. For example, create a URL that includes the address of the web server with the root context of a web application deployed to the web application server: http://ihs.mycompany.com/BOE/CMC/. In this example, ihs.mycompany.com is the web server, and /BOE/CMC/ is a deployed web application.

Static content is now served by a dedicated web server, and dynamic content is served by a dedicated web application server.

4.6.3.3.2 To load classes with application class loader first

You should set the class-loading behavior of your installed web applications to Classes loaded with application class loader first (parent last) using the WebSphere Administrative console. This ensures that common classes bundled with the BI platform web applications, such as the JavaServer Faces (JSF) library, are used rather than any implementations supplied by WebSphere.

Log in to the WebSphere Integrated Solutions Console with the Administrator account. You can run the WebSphere Administrative console program, or use a web browser to open http://<WAS_HOSTNAME>:<PORT>/ibm/console where <WAS_HOSTNAME> is the name of your WebSphere server, and <PORT> is the port number on which the server listens for login requests. The default port number is 9060.

1. Select Applications ➔ Application Type ➔ WebSphere enterprise applications in the menu. The Enterprise Applications screen appears.
2. Choose the web application deployed by WDeploy from the list of administered resources. The Enterprise Applications configuration screen appears.
3. Click Manage Modules. The Manage Modules screen appears.
5. Select Classes loaded with application class loader first (parent last) from the Class loader order property. A confirmation message appears.
6. Click Save directly to the master configuration. The web application configuration is saved and you are returned to the Manage Modules screen.
7. Click OK. A master configuration change confirmation message appears.
8. Click Save directly to the master configuration. The web application configuration is saved and you are returned to the Enterprise Applications screen.
9. Select the web application checkbox and click Start.
A message appears to confirm that the web application started successfully.

When deploying more than one web application, repeat steps 2 to 9 for each web application.

### 4.6.3.4 WebLogic

#### 4.6.3.4.1 To deploy to separate Apache web and WebLogic web application servers

To reduce the load on a web application server, you can set up a separate, dedicated, web server to serve static content. All static content will be served by the web server, while dynamic content will be served by the web application server. The following instructions show you how to use the WDeploy tool to split web application resources into static and dynamic content and deploy this content appropriately.

1. **Set up the Apache web server and ensure that it is working correctly. Load a web page, such as Apache’s default test page, to verify that the web server is serving content correctly.**
   
   Open a web browser and enter the IP address or hostname of the web server, and a port number if the server is not listening on port 80. For example: \[http://apache.mycompany.com\].

2. **Ensure that your WebLogic web application server is working correctly.**
   
   Open a web browser and enter the IP address or hostname of the web application server, and a port number. For example: \[http://weblogic.mycompany.com:7001\].

   **Note**
   
   If you have any existing SAP BusinessObjects Business Intelligence platform web applications running on the server, they must be undeployed before continuing.

3. **Download the WebLogic Apache HTTP Server Plug-In from the BEA web site. The plug-in allows you to connect an Apache web server with a WebLogic web application server, so Apache can forward requests for dynamic resources to WebLogic.**

4. **Follow the plug-in configuration instructions on the BEA web site for configuring the bridge between Apache web server and WebLogic.**
   
   Requests for dynamic resources are now forwarded to WebLogic when received by Apache.

5. **Ensure that the bridge between the web server and web application server is working by pointing a browser to the web server and verifying that dynamic content from the web application server is served correctly.**
   
   For example, visit the URL: \[http://apache.mycompany.com/jsp-examples/\].

   **Note**
   
   This example URL will only work if you have manually deployed the jsp-examples web application.

6. **If the web application server is installed on the same machine as SAP BusinessObjects Business Intelligence platform, run WDeploy locally on that machine. If the web application server runs on a different machine copy the WDeploy command and environment to the web application server. See To deploy web applications on a remote machine.**

7. **Configure the WDeploy environment to separate content between the web server and the web application server. This is known as "split" mode.**
The WDeploy configuration files for Apache and WebLogic are located in \SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf.

- Edit config.weblogic10 or config.weblogic11. For example:
  ```
  as_admin_port=7001
  as_admin_username=weblogic
  as_admin_password=weblogic
  as_instance=AdminServer
  as_domain_dir=C:\bea\user_projects\domains\base_domain
  ```

- Edit config.apache. For example:
  ```
  ws_dir=C:\Webserver\Apache224
  connector_type=weblogic10
  deployment_dir=C:\Webserver\Apache224\htdocs
  ```

8. Use wdeploy predeploy in split mode to split source web applications into separate static and dynamic resources.

   For example:
   ```
   Run the following command to extract static content for the Apache web server and dynamic content for WebLogic application server.
   ```
   ```
   wdeploy.bat weblogic10 -Das_mode=split
   -Dws_type=apache predeployall
   ```
   ```
   Dynamic content is located in: <BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\weblogic10\application. Static content is located in: <BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\weblogic10\resources.
   ```

9. Run wdeploy deployonlyall to deploy the dynamic content to WebLogic application server and static content to Apache.

   If Apache and WebLogic are on the same machine, static and dynamic content will be automatically deployed to the servers with this command:
   ```
   wdeploy.bat weblogic10 -Das_mode=split
   -Dws_type=apache deployonlyall
   ```

   **i Note**
   
   If your dynamic and static content are in a custom location, use the -Dwork_dir parameter.

   If Apache and WebLogic are on different machines, dynamic content will be automatically deployed to WebLogic by the following command. Static content must then be manually copied over and deployed to the remote Apache machine.
   ```
   wdeploy.bat weblogic10 -Das_mode=split
   deployonlyall
   ```

   **i Note**
   
   If your dynamic and static content resides in a custom location, use the -Dwork_dir parameter.

   Copy static content to the htdocs directory on the web server:
- Extract the zip files on the web application server under `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\WebLogic10\resources`.
- Copy these folders from the WebLogic web application server to the Apache `<WS_DIR>\htdocs` folder on the Apache server.
- Copy the `bobj.<application>.conf` files from the WebLogic web application server to the Apache `<WS_DIR>\conf` folder on the Apache server.
- Update Apache `httpd.conf` under `<WS_DIR>\conf` with the application configuration files. For each web application include an entry in `httpd.conf`. For example, to include BOE, you would enter:

```
Include conf\bobj.BOE.conf
```

Static content is now served by a dedicated web server, and dynamic content is served by a dedicated web application server.

### 4.6.4 Split web tier pre-deployment without access to a web application server

The WDeploy command can separate static and dynamic content for deployment to a web server and web application server. Access to a web application server’s deployment folder is not required: the separated content can be copied from the server hosting WDeploy to the web and web application servers manually.

When WDeploy is installed on a dedicated web server, the `wdeploy predeploy` or `wdeploy predeployall` commands are used to create static content from web applications directly to the web server’s content directory. Some parameters are mandatory for particular web or web application servers:

<table>
<thead>
<tr>
<th>Web or web application server</th>
<th>Parameters required for predeployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebSphere Application Server</td>
<td><code>as_virtual_host</code></td>
</tr>
<tr>
<td>Apache and IBM IHS</td>
<td><code>ws_dir</code>, <code>deployment_dir</code>, <code>connector_type</code></td>
</tr>
</tbody>
</table>

### 4.6.5 To disable the CMC or BI launch pad web applications

The Central Management Console (CMC) and BI launch pad (previously InfoView) web applications are now included within the BOE archive (`BOE.war` or `BOE.ear`). To disable either the CMC or BI launch pad web application, so either or both cannot be accessed when the BOE archive is deployed to a web application server, use the WDeploy tool.

To disable the CMC web application, use the `-Ddisable_CmcApp=true` switch when deploying `BOE.war` to the web applications server. For example, the following command will deploy `BOE.war` to a Tomcat 6 web application server but disable the CMC:

```
wdeploy.bat tomcat6 -DAPP=BOE -Ddisable_CmcApp=true deploy
```
To disable the BI launch pad web application, included the `-Ddisable_InfoView=true` switch when deploying BOE.war to the web applications server. For example, the following command will deploy BOE.war to a Tomcat 6 web application server but disable BI launch pad:

```
wdeploy.bat tomcat6 -DAPP=BOE -Ddisable_InfoView=true deploy
```

### 4.6.6 Changes to installed languages

To add new language support for web applications, first run a modify installation of the BI platform and add the required language(s), then re-deploy the web applications to the web application server.

### 4.7 Using the WDeploy GUI tool

The WDeploy GUI tool is installed as a part of SAP BusinessObjects Business Intelligence platform and provides an alternative, graphical, method of running the `wdeploy deployall` or `wdeploy undeployall` commands.

**Note**

- We recommend using the WDeploy command-line tool rather than the WDeploy GUI tool. The command-line tool has more robust functionality.
- The WDeploy GUI tool cannot be used to predeploy web applications. Use the command-line tool to run the `wdeploy predeployall` command.

For information on WDeploy requirements, see *WDeploy prerequisites* [page 18].

To perform other deployment operations, use the command-line version of WDeploy.

The WDeploy GUI tool defaults to an English interface, but prompts the user to choose a language if any language packs are installed and the tool is run for the first time. The following language packs are supported by SAP BusinessObjects Business Intelligence platform:

- Czech
- Simplified Chinese
- Traditional Chinese
- Danish
- Dutch
- English
- Finnish
- French
- German
- Hungarian
- Italian
- Japanese
- Korean

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4.7.1 Starting WDeploy GUI tool

Run the WDeploy GUI tool by selecting Start > Programs > SAP BusinessObjects BI platform 4 > SAP BusinessObjects BI platform > WDeploy. It can also be started by running `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\wdeployGUI.bat`.

When the WDeploy GUI tool is run for the first time, it prompts for which language to use for displaying information in the user interface. Select a language and continue.

4.7.2 WDeploy GUI tool window

The WDeploy GUI tool allows users to deploy and undeploy web applications to a web application server. Any web applications not deployed by the SAP BusinessObjects Business Intelligence platform installation program or WDeploy tool will be unaffected.

Select a supported web application server from the Select Web Application Server Type drop-down. When a web application server is selected, review the information in the Web Application Server Information section and the Application Server Domain Root Directory section to ensure that it is correct for your web application server.

For more advanced options, select Options.

---

**Note**

Not all web applications are deployed automatically. Web applications that are not deployed automatically must be deployed with the WDeploy command-line tool or with the web application server administrative console.

<table>
<thead>
<tr>
<th>Web application archive (may be WAR or EAR)</th>
<th>Deployed automatically?</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOE</td>
<td>Yes</td>
</tr>
<tr>
<td>AdminTools</td>
<td>Yes</td>
</tr>
<tr>
<td>dswsobjxe</td>
<td>Yes</td>
</tr>
<tr>
<td>BusinessProcessBI (deprecated)</td>
<td>Yes</td>
</tr>
</tbody>
</table>
4.7.3 WDeploy GUI tool options

The Options screen of the WDeploy GUI tool allows you to select custom folders to use for the deployment of web applications. This is equivalent to setting properties when using the WDeploy command-line. For more information on WDeploy parameters, see WDeploy property parameters.

- **WDeploy work directory** (equivalent to the work_dir parameter).
- **Web application source tree location** (equivalent to the app_source_tree parameter) or **Generic WAR files location** (equivalent to the war_dir parameter).
- **Web applications root context** (equivalent to the root_context_path parameter).

### Note
Non-English characters in paths are currently not accepted as valid by the WDeploy GUI tool.

4.7.4 Adding the password to the WDeploy GUI file

The WDeploy GUI tool saves your input in a file and uses that information to deploy the web applications. You must manually add your password to this file even if you entered it when running the GUI, because passwords are not automatically recorded for security reasons.

To add your web application server password to the WDeploy GUI file:

1. Open the file containing WDeploy information:
   ```
   <BOE_INSTALL_DIR>\wdeploy\conf\config.<WEB_APP_SERVER>
   ```
2. Locate the line containing the password information:
   ```
   as_admin_password=
   ```
3. Replace the value for the password, if any, with your web application password.
4. Save the file and re-run the WDeploy GUI.

---

### Table: Web application archive (may be WAR or EAR) vs Deployed automatically?

<table>
<thead>
<tr>
<th>Web application archive</th>
<th>Deployed automatically?</th>
</tr>
</thead>
<tbody>
<tr>
<td>clientapi</td>
<td>No</td>
</tr>
<tr>
<td>MobileOTAl4</td>
<td>No</td>
</tr>
<tr>
<td>jsfplatform</td>
<td>No</td>
</tr>
<tr>
<td>OpenSearch</td>
<td>No</td>
</tr>
</tbody>
</table>
4.8 After deploying web applications

After deploying or undeploying web applications, restart the web application server.

To verify the web application server configuration, make sure that BI launch pad and the Central Management Console (CMC) can be launched in a web browser. For example:

- `http[s]://<WEB_APP_SERVER>[:<PORT>]/<BI_LAUNCHPAD_CONTEXT>`
- `http[s]://<WEB_APP_SERVER>[:<PORT>]/<CMC_CONTEXT>`

Replace `<WEB_APP_SERVER>` with the hostname or IP address of the web or web application server, and `<PORT>` with the port number used for either HTTP or HTTPS communication. The default root context used for BI launch pad is `/BOE/BI`; the default context used for the CMC is `/BOE/CMC`.

4.9 Log files

The WDeploy tool creates two log files with detailed information that may be useful for diagnosing problems or monitoring activity.

1. `<BOE_INSTALL_DIR>/SAP BusinessObjects Enterprise XI 4.0\wdeploy\logs\WDeploy_summary.log`: a high-level record of WDeploy activity that includes information on the version of WDeploy, the JDK being used, the command issued, configuration, WAR file location, actions or events and their outcomes, and any error messages or warnings displayed to the user at runtime.

2. `<BOE_INSTALL_DIR>/SAP BusinessObjects Enterprise XI 4.0\wdeploy\logs\WDeploy.log`: includes everything in `WDeploy_summary.log`, but also includes timestamps and any warning or error messages.

When a WDeploy command is issued, `WDeploy_summary.log.01` is overwritten with the current command, and `WDeploy.log` is appended.

As the `WDeploy.log` file grows to more than 512 KB, the file is renamed with a unique numbered suffix. For example, `WDeploy.log` will be renamed to `WDeploy.log.01`. If a file named `WDeploy.log.01` already exists, `WDeploy.log.02` will be created.

4.10 Web application updates made by WDeploy

Table 12: Changes made to web application configuration by WDeploy

<table>
<thead>
<tr>
<th>Server</th>
<th>Changes made</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apache web server</td>
<td>For each application, <code>${ws_dir}/conf/bobj.{APP}.conf</code> file is created, containing connector configuration, directory and servlet mapping information. File <code>${ws_dir}/conf/httpd.conf</code> is modified to include that file.</td>
</tr>
<tr>
<td>Tomcat</td>
<td>Files added to the <code>classpath</code> are dropped in <code>${as_dir}/shared/lib</code></td>
</tr>
<tr>
<td>Server</td>
<td>Changes made</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td>`${as_dir}/bin/bobjeEnv.${APP}.[sh</td>
</tr>
<tr>
<td></td>
<td>`${as_dir}/bin/catalina.[sh</td>
</tr>
<tr>
<td></td>
<td>On Windows, additional java properties are added to the Tomcat service startup parameters. Library path modifications must manually be made to the system-wide PATH environment variable.</td>
</tr>
<tr>
<td></td>
<td>Restart Tomcat to take changes into account.</td>
</tr>
<tr>
<td>JBoss</td>
<td>The JSF package shipped with JBoss is deleted if it is detected (directory `$ {as_dir}/server/${as_instance}/deploy/jbossweb-tomcat55.sar/jsf-libs is deleted).</td>
</tr>
<tr>
<td></td>
<td>Files added to the classpath are dropped in <code>${as_dir}/server/${as_instance}/lib</code>.</td>
</tr>
<tr>
<td></td>
<td>File `${as_dir}/bin/bobjeEnv.${APP}.[sh</td>
</tr>
<tr>
<td></td>
<td>Restart JBoss to take changes into account.</td>
</tr>
<tr>
<td>NetWeaver</td>
<td>Files to add to the classpath are bundled in the application (added to WEB-INF/lib). Additional library path and application properties modifications are not supported yet.</td>
</tr>
<tr>
<td></td>
<td>Such modifications must be done manually using NetWeaver's configuration interface.</td>
</tr>
<tr>
<td>WebLogic</td>
<td>Files to add to the classpath are bundled in the application (added to WEB-INF/lib).</td>
</tr>
<tr>
<td></td>
<td>`${as_domain_dir}/bin/bobjeEnv.${APP}.[sh</td>
</tr>
<tr>
<td></td>
<td>`${as_domain_dir}/bin/startWebLogic.[sh</td>
</tr>
<tr>
<td>WebSphere</td>
<td>Files to add to the classpath are bundled in the application (added to WEB-INF/lib).</td>
</tr>
<tr>
<td></td>
<td>Properties are added as JVM custom properties. Library path modifications are done modifying the environment of the JVM. Web Server plugin gets automatically regenerated.</td>
</tr>
</tbody>
</table>
5 To deploy web applications with the administrative console

5.1 To manually deploy web applications

The WDeploy tool must be used to generate deployable WAR or EAR files before they can be deployed to your web application server.

The following steps will deploy a web application using the application server’s administrative console.

1. Run the wdeploy predeploy command to prepare a single web application, or wdeploy predeployall to prepare all web applications.

   Example 1: using wdeploy predeploy to prepare the BOE.war web application WAR file for deployment to Tomcat.

   ```
   wdeploy.bat tomcat6 -DAPP=BOE predeploy
   ```

   Example 2: using wdeploy predeployall to prepare all web applications for deployment to Tomcat.

   ```
   wdeploy.bat tomcat6 predeployall
   ```

   **Note**

   The predeploy and predeployall commands can be used on machines that do not host a web application server, as long as the parameters required by the predeploy or predeployall commands are given.

   The WDeploy command will prepare web applications for deployment on a web application server, and creates WAR or EAR files in `<BOE_INSTALL_DIR>/SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\<APP_SERVER>\application` unless you provide the -Dwork_dir parameter.

2. Follow the manual deployment procedure specific to your web application server.

   Your web application can now be manually deployed on your web application server.

   Repeat these steps for any other web applications that need to be installed.

5.1.1 JBoss 5 manual deployment

Ensure that the web application server is installed, configured, and running. Use the wdeploy predeploy command to create WAR files that can be deployed.

The JMX administrative console does not deploy web applications to JBoss automatically. To deploy web applications to JBoss, you must manually copy the web application file into the deployment directory.
The JavaServer Faces (JSF) bundled with the JBoss web application servers must be disabled for the Central Management Console (CMC) and BI launch pad web clients to work correctly.

To disable JSF, the following directories must be removed and JBoss restarted:

- `<JBOS_HOME>/server/default/deploy/jbossweb-tomcat55.sar/jsf-libs`
- `<JBOS_HOME>/server/default/tmp`
- `<JBOS_HOME>/server/default/work`

**Note**

To use the Java log4j logging included with SAP BusinessObjects Business Intelligence platform, refer to section 10.3.7 Using your own log4j.properties file - class loader scoping in the JBoss Development Process Guide: [http://docs.jboss.org/process-guide/en/html/logging.html#d0e3341](http://docs.jboss.org/process-guide/en/html/logging.html#d0e3341).

The following deployment paths are based upon the different levels of service:

- `<JBOS_HOME>/server/all/deploy`
- `<JBOS_HOME>/server/default/deploy`
- `<JBOS_HOME>/server/minimal/deploy`

1. Copy your WAR files to the appropriate context root sub-directory under one of the above paths, based upon the level of service provided by JBoss for your deployment. The web application is automatically deployed by JBoss when the file is copied to the appropriate directory.

2. Check the JBoss server log, and you should see a message similar to the one shown below to confirm that the WAR deployment succeeded.

   
   09:54:28,703 INFO [TomcatDeployer] deploy, ctxPath=/BOE, warUrl=.../tmp/deploy/tmp43109BOE-exp.war/

### 5.1.1.1 To deploy the dswsbobje web application to JBoss 5

To deploy the dswsbobje web application to JBoss 5, follow the steps below.

1. Generate the dswsbobje web application with the `wdeploy predeploy` command.

2. Locate the dswsbobje web application in exploded form in the following folder:

   `<BOE_INSTALL_DIR>/SAP BusinessObjects Enterprise XI 4.0/wdeploy/workdir/jboss5/application`

3. Copy the dswsbobje folder to the JBoss deployment folder:

   `<JBOS_HOME>/server/default/deploy`

The web application server should automatically deploy `dswsbobje`. If not, restart JBoss.
5.1.1.2 To deploy the BusinessProcessBI web application to JBoss 5

To deploy the BusinessProcessBI web application to JBoss 5, follow the steps below.

1. Generate the BusinessProcessBI web application with the wdeploy predeploy command.
2. Locate the BusinessProcessBI web application in exploded form in the following folder:
   
   `<BOE_INSTALL_DIR>SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir \jboss5\application`

3. Copy the BusinessProcessBI folder to the JBoss deployment folder:
   
   `<JBOSS_HOME>\server\default\deploy`

The web application server should automatically deploy BusinessProcessBI. If not, restart JBoss.

5.1.2 SAP NetWeaver 7.2, 7.3x, and 7.4 manual deployment

5.1.2.1 Prerequisites for deployment on SAP NetWeaver

**Note**

If you have any existing SAP BusinessObjects Business Intelligence platform web applications running on the server, they must be undeployed before continuing.

Before deploying BI platform web applications to an SAP NetWeaver Application Server (any version), you must ensure that .html and .htm files are never compressed. For example, in SAP NetWeaver AS 7.3:

1. Logon to your SAP NetWeaver Administrator portal.
   For example: http://<servername>:50200/nwa

2. Navigate to: Configuration Infrastructure Java System Properties

3. On the Services tab, select HTTP provider.

4. Under Extended Details, modify the AlwaysCompressed and NeverCompressed properties as follows:

   ○ **AlwaysCompressed**: Remove *.htm, *.html, text/html from this property. This field cannot be blank - enter a space if blank.

   ○ **NeverCompressed**: Add *.htm, *.html, text/html to this property.

   **Table 13: Example**

<table>
<thead>
<tr>
<th>Name</th>
<th>Default Calculated Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlwaysCompressed</td>
<td>(set to empty space if blank)</td>
</tr>
<tr>
<td>NeverCompressed</td>
<td>*.htm, *.html, text/html</td>
</tr>
</tbody>
</table>

5. Save your changes before exiting.
### 5.1.2.2 SAP NetWeaver AS Java 7.2 administrative console manual deployment

Ensure that the web application server is installed, configured, and running. Use the `wdeploy predeploy` command to create SCA files that can be deployed.

SAP NetWeaver Developer Studio 7.1 is required to deploy web applications with the SAP NetWeaver AS Java 7.2 administrative consoles. SAP NetWeaver Developer Studio can be installed on the same system that hosts SAP BusinessObjects Business Intelligence platform, or on a separate system with network access to both the web application server, and the SCA files to be deployed.

1. Start the **SAP NetWeaver Developer Studio** application.
2. If this is your first time using SAP NetWeaver Developer Studio with this instance of SAP NetWeaver AS Java 7.2, register the web application server in the Developer Studio preferences.
   a) Select **Window > Preferences > SAP AS Java**.
   b) Enter the hostname or IP address of the SAP NetWeaver Java AS 7.2 server in the **Instance host** field.
   c) Enter the SAP NetWeaver AS Java 7.2 server instance number in the **Instance number** field.
      For example, if the server instance ID is J00, the instance number is 00.
   d) Click **Register SAP Instance**.
      The **SAP system** selection field is populated, and server instances are displayed in the **SAP System instances** list.
3. Open the **Deploy View** tab. Select **Window > Show View > Other... > Deploy View > Deploy View**.
   Preferences for the Deploy View tab can be set in **Window > Preferences > SAP AS Java > Deploy View**.
4. Select **External Deployable Archives** and review the available options.
5. Click **Import Java EE Archives** in the toolbar.
   Run the `predeploy` or `predeployall` command to generate the SCA files. For example:

   ```
   wdeploy.bat <<WEB_APP_SERVER>> predeployall
   ```

   Generated BI platform web applications from these commands are located by default in
   `<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\sapappsvr72`.
   The SCA file appears in the list of external deployable archives.
7. Click **Deploy** in the toolbar.
   If this is the first time you are deploying a web application to this server, you are prompted to log on to the SAP J2EE Engine. Enter a valid username and password (such as the SAP NetWeaver Administrator account). The web application is deployed to SAP NetWeaver AS Java 7.2, and a confirmation dialog appears. The web application’s icon in the **External Deployable Archives** tree displays a green checkmark.
8. Confirm that the web application has started by selecting the Repository View tab with **Window > Show View > Other... > Deploy View > Repository View**.
5.1.2.3 SAP NetWeaver AS 7.3 and 7.4 deployment with SAP Software Update Manager

Ensure that the SAP NetWeaver web application server is installed, configured, and running. Use the `wdeploy predeploy` command to create SCA packages such as `BOE.sca` and `AdminTools.sca` that can be deployed to SAP Netweaver using the SAP Software Update Manager (SUM).

```
wdeploy.bat sapappsvr73 -DAPP=BOE predeploy
```

You need Software Update Manager (SUM). SUM can be installed on the SAP Netweaver machine or the BI Platform machine. It is recommended to install it on the SAP Netweaver machine so that you can re-use it in future deployments. To see if SUM is already installed on the SAP Netweaver machine, see if the directory `<NW_Install_Dir>/usr/sap/J2E/SUM` exists.

If you need to install SUM, see todo.


1. Unpack the Software Update Manager package with the following command:

   SAPCAR - xvf <download directory>/<path>/<Archive>.SAR -R <SAPNW_INSTALL_DRIVE>:\usr\sap\<sapsid>

2. Run the `predeploy` or `predeployall` command to generate the SCA files. For example:

   `wdeploy.sh sapappsvr73 predeployall`

   The resulting BI platform web applications are located in:

   `<BIP_INSTALL_DIR>/sap_bobj/enterprise_xi40/wdeploy/workdir/sapappsvr73/application`

   For example:

   `wdeploy.bat sapappsvr73 predeployall`

   The resulting BI platform web applications are located in:

   `<BIP_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\sapappsvr73\application`

3. Copy all SCA files to the following folder:

   `<SAPNW_INSTALL_DRIVE>/usr/sap/Trans/eps/in`

4. Start the SAP NetWeaver application server.

5. Start the Software Update Manager server process with the following command, using a `<SID>ADM` user:

   `<SAPNW_INSTALL_DRIVE>:\<update directory>\STARTUP.BAT`

6. Start the GUI of SUM from a browser at `<http://<hostname>:4239>` or locally with the command:

   `<SAPNW_INSTALL_DRIVE>:\usr\sap\<sapsid>\SUM\adt\exe\DSUGui.bat`

7. When prompted, create a temporary Administrator user for the maintenance procedure. Refer to the SUM guide at Update of SAP Systems Using Software Update Manager 1.0 SPO8 on the SAP service marketplace.

8. When prompted at the Select Target roadmap step, use the SUM option `Manually Prepared Download Directory`.

9. Navigate to choose `<SAPNW_INSTALL_DRIVE>:\usr\sap\Trans\eps\in` and click `Next`. 
10. Follow the update procedure until the deployment is complete and a confirmation tab is displayed. For detailed information, refer to the latest ProcessOverview.html report, stored in <SAPNW_INSTALL_DRIVE>:
usr\sap\<sapsid>\SUM\sdt\htdoc.

For more information on the Software Update Manager, refer to the User guides and other documentation on http://help.sap.com.

i Note

If you encounter an HTTP or session error when accessing a successfully deployed application (such as the CMC), wait a few minutes and then try refreshing the page.

5.1.3 Tomcat 6 and 7 administrative console manual deployment

Ensure that the web application server is installed, configured, and running. Use the wdeploy predeploy command to create WAR files that can be deployed.

i Note

Tomcat 6 is supported only when using release 6.0.20 or newer. Tomcat 7 is supported only when using release 7.0.8 or newer.

Log on to the Tomcat Manager application.


1. Set the Context Path for the web application to be deployed.

   The context path must be the name of the WAR file, but without its extension and prefaced by a forward-slash. For example, to deploy a web application packaged as <YOUR_WEB_APPLICATION>.war, the context path must be /<YOUR_WEB_APPLICATION>.

2. Set the XML Configuration File setting the location of an XML file that contains the context path and document base.

   The document base is the predeployed WAR file you created with the wdeploy predeploy command. For example:

   ```xml
   <Context
docBase="<BOE_INSTALL_DIR>/SAP BusinessObjects Enterprise XI 4.0/wdeploy/workdir/tomcat7/application/<YOUR_WEB_APPLICATION>.war"
   path="<context_path>"
crossContext="false" debug="0" reloadable="false" trusted="false"
/>
```

3. Enter the full path to the WAR file and press Deploy.

   The WAR file is deployed.
5.1.3.1 To deploy to a Tomcat cluster

To manually deploy web applications to a Tomcat web application cluster distributed over multiple machines, deploy the web applications to each Tomcat web application server. Use the administrative console to deploy web applications to the `webapps` subfolder in the Tomcat home directory for each server instance.

Note

When using Tomcat, stop the web application server before issuing the `wdeploy undeployall` action command.

Tip

It is recommended that you install and configure a hardware or software load balancer if running SAP BusinessObjects Business Intelligence platform web applications on a Tomcat web application cluster. Consult the Tomcat documentation for information on setting up load balancing on a Tomcat cluster.

5.1.4 WebLogic 10, 10.3, and 10.3.x (11gR1) administrative console manual deployment

Before deploying, ensure that the web application server is installed, configured, and running. Create a WebLogic domain in which to run SAP BusinessObjects Business Intelligence platform web applications.

Use the `wdeploy predeploy` command to create WAR files such as `BOE.war` and `AdminTools.war` that can be deployed manually to WebLogic:

<table>
<thead>
<tr>
<th>WebLogic version</th>
<th>predeploy example</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 or 10.3</td>
<td><code>wdeploy.bat weblogic10 -DAPP=BOE predeploy</code></td>
</tr>
<tr>
<td>10.3.3, 10.3.4, 10.3.5, 10.3.6</td>
<td><code>wdeploy.bat weblogic11 -DAPP=BOE predeploy</code></td>
</tr>
</tbody>
</table>

Note

The `wdeploy predeploy` command creates an unpackaged folder structure for the Web Services web applications (`dswsbobje` and `BusinessProcessBI`) rather than a WAR file. For example:

```
weblogic11
  application
    dswsbobje
    dswsbobje
    axis2-web
    images
    META-INF
    WEB-INF
    lib
```

```
META-INF
  Resources
```
You must select the second, inner dswsbobje or BusinessProcessBI folder when deploying to WebLogic.

1. Logon to the WebLogic Server Administrative Console with a web browser at http://<WAS_HOSTNAME>:<PORT>/console, where <WAS_HOSTNAME> is the name of your WebLogic server and <PORT> is the port number on which the admin server listens. The WebLogic Server Administration Console web page is displayed.

2. (Optional) On the Change Center panel, click Lock & Edit. This step is only required if your domain configuration is locked, such as in a production environment, or on WebLogic 10.


4. On the Summary of Deployments page, click Install and on the Install Application Assistant page navigate to the WAR file or folder path:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAR file (such as BOE.war)</td>
<td>Select the path to the WAR file. For example: $BOE_INSTALL_DIR$/SAP BusinessObjects Enterprise XI 4.0/wdeploy/workdir/weblogic11/application/BOE.war</td>
</tr>
<tr>
<td>Folder structure (such as dswsbobje)</td>
<td>Select the path to the folder structure. For example: $BOE_INSTALL_DIR$/SAP BusinessObjects Enterprise XI 4.0/wdeploy/workdir/weblogic11/application/dswsbobje/dswsbobje</td>
</tr>
</tbody>
</table>

Note

You must select the second, inner dswsbobje or BusinessProcessBI folder when deploying to WebLogic.

Click Next.

5. Select Install this deployment as an application and click Next. After reviewing and providing any additional parameters in the wizard, click Finish.

6. (Optional) On the Change Center panel, click Activate Changes to apply the changes to the web application server. This step is only required if your domain configuration is locked, such as in a production environment, or on WebLogic 10.

7. (Optional) On WebLogic 10, select the application from the Summary of Deployments and click Start Servicing all requests.

Open the web application in a web browser to confirm that it now runs.

### 5.1.4.1 To deploy to a WebLogic cluster

When deploying web applications to a WebLogic cluster, deploy to the machine hosting the WebLogic administration server. The WebLogic administrative console can push web applications out to the other machines in the cluster.
A hardware or software load balancer is recommended for deployments running on a WebLogic cluster.

WebLogic cluster deployments use the following general workflow.

1. Use the WebLogic Administrative Console to create a WebLogic XML Registry for the instance serving SAP BusinessObjects Business Intelligence platform web applications. Use the values in the table below to create the XML Registry. For more information on the XML Registry, visit http://e-docs.bea.com/wls/docs92/ConsoleHelp/pagehelp/Corexmlregistryxmlregistrytitle.html.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>&lt;&lt;REGISTRY_NAME&gt;&gt; (Name the registry)</td>
</tr>
<tr>
<td>SAX Parser Factory</td>
<td>weblogic.apache.xerces.jaxp.SAXParserFactoryImpl</td>
</tr>
<tr>
<td>Transformer Factory</td>
<td>weblogic.apache.xalan.processor.TransformerFactoryImpl</td>
</tr>
</tbody>
</table>

2. If SAP BusinessObjects Business Intelligence platform is installed to the same machine hosting the WebLogic administration server, skip to step 6. If SAP BusinessObjects Business Intelligence platform and the WebLogic administration server run on different machines, copy the WDeploy tool and environment to the machine hosting the WebLogic administration server.

3. Modify the config.weblogic10 or the config.weblogic9 located in \<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf.

   For example:
   
   ```
   as_domain_dir=c:\bea\user_projects\domains\base_domain
   as_instance=AdminServer
   as_admin_port=7001
   as_admin_username=weblogic
   as_admin_password=password
   ```

4. Modify the PersistentStoreType setting in weblogic.xml, located in the following directory:
   
   \<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\templates\weblogic.xml. For example:
   
   ```
   <weblogic-web-app>
   <session-descriptor>
   <session-param>
   <param-name>PersistentStoreType</param-name>
   <param-value>replicated</param-value>
   </session-param>
   </session-descriptor>
   ```

5. Open a command-line console and run the following command:

   ```
   wdeploy.bat weblogic<X> predeployall
   ```

6. Use the WebLogic administration console to separately install each web application to deploy from the following directory:
In the Select deployment targets workflow select the cluster name and All servers in the cluster.

After the Select deployment targets is complete, select all the installed applications and go to Start Servicing all requests.

5.1.5 WebSphere 6.1, 7.0, and 8.5 administrative console manual deployment

5.1.5.1 WebSphere 6.1 administrative console manual deployment

Ensure that the web application server is installed, configured, and running. Use the wdeploy predeploy command to create EAR files that can be deployed. If you are deploying BOE.war or all web applications, increase the time-out setting to avoid a time-out message and deployment failure (see To change the WebSphere 6 deployment time-out setting).

Log in to the WebSphere Application Server Administration console using the following URL: http://<WAS_HOSTNAME>:<PORT>/ibm/console. The WebSphere administrative console’s default port number is 9060.

1. Under the Applications heading of the console navigation menu, click Enterprise Applications on the left.
2. Click Install and navigate to the location of the EAR file to deploy. If deploying from a remote file system, select the Remote File System option.
3. Enter a context root for the EAR file (e.g. /BOE for BOE.ear) and press the Next button.
4. On the Step 1 screen, give a unique name for your web application and proceed to the Step 2 screen.
5. Under Map Modules to Servers, highlight the server you created (or highlight server1 if you didn’t create your own) from the Clusters and Servers and enable the Select checkbox. Proceed to the Step 3 screen.
6. Select the virtual host you created (or default_host if you didn’t create your own) from the Virtual Host drop-down list. Proceed to the Step 4 screen.
7. Review the summary page, and press Finish when done.
8. Click Save to Master Configuration.
9. Click Save, then the Save button.
10. Under the Applications heading of the console navigation menu, click Enterprise Applications on the left.
11. Verify that the EAR file was deployed, select Start.
    Repeat steps 1 to 11 for each web application being deployed.
5.1.5.1.1 To change the WebSphere 6 deployment time-out setting

The deployment of SAP BusinessObjects Business Intelligence platform web applications to a WebSphere 6 web application server may take some time.

If you receive a time-out message while deploying web applications to a WebSphere 6, increase the deployment time-out setting.

1. Use a text editor to edit the configuration file deployment.xml. The location of deployment.xml will vary depending on how your server was installed and configured.

   The deployment.xml configuration file is typically located in `<WAS_HOME>/systemApps/adminconsole.ear/deployment.xml`.

2. Set the attribute `invalidationTimeout` to the desired value, in minutes, where the maximum value is -1 (do not time out).

3. Save deployment.xml.

4. Restart the WebSphere service.

The WebSphere time-out setting has been changed. For more information, see: https://publib.boulder.ibm.com/inforecenter/wasinfo/v6r1/index.jsp?topic=/com.ibm.websphere.express.doc/info/exp/isc/cons_sessionto.html.

5.1.5.2 WebSphere 7.0 administrative console manual deployment

Ensure that the web application server is installed, configured, and running. Use the `wdeploy predeploy` command to create EAR files that can be deployed. If you are deploying BOE.war or all web applications, increase the time-out setting to avoid a time-out message and deployment failure (see To change the WebSphere 7.0 deployment time-out setting).

Log in to the WebSphere Integrated Solutions Console with the Administrator account. You can run the WebSphere Administrative console program, or use a web browser to open `http://<WAS_HOSTNAME>:<PORT>/ibm/console` where `<WAS_HOSTNAME>` is the name of your WebSphere server, and `<PORT>` is the port number on which the server listens for login requests. The default port number is 9060.

1. Select Applications ➤ Application Types ➤ WebSphere enterprise applications in the menu. The Enterprise Applications screen appears.

2. Click Install.
   The Preparing for the application installation screen Path to the new application appears.

3. Click Browse and choose the web application’s EAR file.
   The fully-qualified path to the web application’s EAR file appears in the Full Path field.

4. Proceed to the next screen.
   The How do you want to install the application? screen appears.

5. Accept the default option of Fast Path and proceed to the next screen. The Install New Application screen Step 1: Select installation options appears.
6. Accept the default options and proceed to the next screen. The Step 2: Map modules to servers screen appears.

7. Accept the default options and proceed to the next screen. The Step 3: Summary screen appears.

8. Review the summary and click Finish. The web application is installed and a master configuration change confirmation message appears.

9. Click Save directly to the master configuration. The web application configuration is saved and you are returned to the Enterprise Applications screen. Notice that the web application is not yet running.

10. Choose the web application from the list of deployed applications (administered resources). The Configuration screen appears.

11. Click Manage Modules. The Manage Modules screen appears.


13. Select Classes loaded with local class loader first (parent last) from the Class loader order property. A confirmation message appears.

14. Click Save directly to the master configuration. The web application configuration is saved and you are returned to the Manage Modules screen.

15. Click OK. A master configuration change confirmation message appears.

16. Click Class loading and update detection. The Class loader configuration screen appears.

17. Enter a desired polling interval in the Polling interval for updated files box and click OK. A master configuration change confirmation message appears.

18. Click Save directly to the master configuration. The web application configuration is saved and you are returned to the Enterprise Applications screen.

19. Select the web application checkbox and click Start. A message appears to confirm that the web application started successfully.

The web application has been deployed, configured, and started. Test the web application by using the root context you provided above. Repeat these steps for each web application.

5.1.5.2.1 To change the WebSphere 7.0, 8.5, or 8.5.5 deployment time-out setting

The deployment of SAP BusinessObjects Business Intelligence platform web applications to a WebSphere 7, 8.5, or 8.5.5 web application server may take some time.

If you receive a time-out message while deploying web applications to a WebSphere 7, 8.5 or 8.5.5, increase the deployment time-out setting.

1. Use a text editor to edit the configuration file deployment.xml. The location of deployment.xml will vary depending on how your server was installed and configured.

   The deployment.xml configuration file is typically located in `<DEPLOYMENT_CELL>/applications \isclite.ear\deployments\isclite\deployment.xml`. 

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Substitute `<DEPLOYMENT_CELL>` with the name of the deployment server cell name.

For example, if the cell is named `NetworkDeploymentCell01`, the full path to `deployment.xml` could be `C:\Program Files\IBM\WebSphere\AppServer\profiles\Dmgr01\config\cells\NetworkDeploymentCell01\applications\isclite.ear\deployments\isclite\deployment.xml`.

2. Set the attribute `invalidationTimeout` to the desired value, in minutes, where the maximum value is -1 (do not time out).
3. Save `deployment.xml`.
4. Restart the WebSphere service.

The WebSphere time-out setting has been changed.

5.1.5.3   WebSphere 8.5 administrative console manual deployment

Ensure that the web application server is installed, configured, and running. Use the `wdeploy predeploy` command to create EAR files that can be deployed. If you are deploying `BOE.war` or all web applications, increase the time-out setting to avoid a time-out message and deployment failure (see To change the WebSphere 7.0 deployment time-out setting).

Log in to the WebSphere Integrated Solutions Console with the Administrator account. You can run the WebSphere Administrative console program, or use a web browser to open `http://<WAS_HOSTNAME>:<PORT>/ibm/console` where `<WAS_HOSTNAME>` is the name of your WebSphere server, and `<PORT>` is the port number on which the server listens for login requests. The default port number is 9060.

1. Select Applications ➤ Application Types ➤ WebSphere enterprise applications in the menu. The Enterprise Applications screen appears.
2. Click Install. The Preparing for the application installation screen Path to the new application appears.
3. Click Browse and choose the web application’s EAR file. The fully-qualified path to the web application’s EAR file appears in the Full Path field.
4. Proceed to the next screen. The How do you want to install the application? screen appears.
5. Accept the default option of Fast Path and proceed to the next screen. The Install New Application screen Step 1: Select installation options appears.
6. Accept the default options and proceed to the next screen. The Step 2: Map modules to servers screen appears.
7. Select the modules you want to deploy and proceed to the next screen. The Step 3: Summary screen appears.
8. Review the summary and click Finish. The web application is installed and a master configuration change confirmation message appears.
9. Click Save directly to the master configuration. The web application configuration is saved and you are returned to the Enterprise Applications screen. Notice that the web application is not yet running.
10. Choose the web application from the list of deployed applications (administered resources).
   The Configuration screen appears.

11. Click Manage Modules.
   The Manage Modules screen appears.

12. Select the web application module (in the Module column).
   The Manage Modules General Properties screen appears.

13. Select Classes loaded with local class loader first (parent last) from the Class loader order property.
   A confirmation message appears.

14. Click Save directly to the master configuration.
   The web application configuration is saved and you are returned to the Manage Modules screen.

15. Click OK.
   A master configuration change confirmation message appears.

16. Click Class loading and update detection.
   The Class loader configuration screen appears.

17. Enter a desired polling interval in the Polling interval for updated files box and click OK.
   A master configuration change confirmation message appears.

18. Click Save directly to the master configuration.
   The web application configuration is saved and you are returned to the Enterprise Applications screen.

19. Select the web application checkbox and click Start.
   A message appears to confirm that the web application started successfully.

The web application has been deployed, configured, and started. Test the web application by using the root context you provided above. Repeat these steps for each web application.

5.1.5.3.1 To change the WebSphere 7.0, 8.5, or 8.5.5 deployment time-out setting

The deployment of SAP BusinessObjects Business Intelligence platform web applications to a WebSphere 7, 8.5, or 8.5.5 web application server may take some time.

If you receive a time-out message while deploying web applications to a WebSphere 7, 8.5 or 8.5.5, increase the deployment time-out setting.

1. Use a text editor to edit the configuration file deployment.xml. The location of deployment.xml will vary depending on how your server was installed and configured.

   The deployment.xml configuration file is typically located in<br>   \isclite.ear\deployments\isclite\deployment.xml.

   Substitute <DEPLOYMENT_CELL> with the name of the deployment server cell name.

   For example, if the cell is named NetworkDeploymentCell01, the full path to deployment.xml could be<br>   C:\Program Files\IBM\WebSphere\AppServer\profiles\Dmgr01\config\cells<br>   \NetworkDeploymentCell01\applications\isclite.ear\deployments\isclite<br>   \deployment.xml.

2. Set the attribute invalidationTimeout to the desired value, in minutes, where the maximum value is -1 (do not time out).
3. Save deployment.xml.
4. Restart the WebSphere service.
The WebSphere time-out setting has been changed.

5.1.5.4 To deploy to a WebSphere cluster

To manually deploy SAP BusinessObjects Business Intelligence platform web applications to a WebSphere web application cluster distributed over multiple machines, you need to deploy the web applications to the machine hosting the WebSphere Deployment Manager. Once all the required web applications have been installed, you can use the WebSphere Integrated Solutions Console to separately deploy these applications to the cluster.

Tip
It is recommended that you install and configure a hardware or software load balancer if running SAP BusinessObjects Business Intelligence platform web applications on a WebSphere web application cluster. To configure the load balancer and cluster setup, consult your WebSphere documentation.

To deploy your web applications to a WebSphere cluster, use the following general workflow:

1. If SAP BusinessObjects Business Intelligence platform is installed to the same machine hosting the WebSphere Deployment Manager, skip to step 3. If SAP BusinessObjects Business Intelligence platform and the WebSphere Deployment Manager runs on different machines first copy the WDeploy tool and environment to the machine hosting the WebSphere administration server.

2. Modify the config.websphere<X> file located in <BOE_INSTALL_DIR>SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf.
   You need to provide information for the administration server. For example:

   ```
   as_dir=C:\Program Files\IBM\WebSphere\AppServer
   as_soap_port=8779
   as_virtual_host=default_host
   as_admin_is_secure=false
   enforce_file_limit=true
   ```

3. Open a command-line console and run the following command:

   wdeploy.bat websphere6 predeployall

4. Open the WebSphere Integrated Solutions Console.

5. Go to Applications > Enterprise Applications to separately install each web application to deploy from the following directory: <BOE_INSTALL_DIR>SAP BusinessObjects Enterprise XI 4.0\wdeploy\workdir\websphere<X>\application

   i Note
   All web applications are stored as EAR modules.

6. Follow the Install new application steps in the console to install the web application
**Note**

In *Map modules to servers*, make sure that you highlight the target cluster and select the module to install before clicking Apply.

7. After installing the application, click *Save*.
8. Repeat steps 5 to 7 for each EAR file to install.
9. Go to *System administration > Nodes* and select the nodes in the cluster that are not indicated as synchronized
10. Click *Synchronize*.
11. For each application server in the cluster, go to *Servers > Application servers >* `<app_server_name>` > *Session management > Distributed environment settings > Tuning parameters > Custom tuning parameters* and select *All session attributes* from the *Write contents* property. The *Write contents* property must be set to *All session attributes* to ensure proper fail-over of your web application. If you are not using custom settings, ensure that you are using a suitable tuning level for your deployment, such as *High* or *Low*, that sets this property to *All session attributes*.
12. Go to *Applications > Enterprise Applications* to start the application just installed.
6 Known issues and work-arounds

6.1 Renaming BOE web application or web application source tree

When the SAP BusinessObjects Business Intelligence platform web application source tree in folder is renamed, it may not be properly deployed by the WDeploy tool. This occurs on all supported platforms. The source tree folder is located in:

```
<<BOE_INSTALL_DIR>>\SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps
```

To work around this issue, follow these steps:

1. Locate the BOE web application configuration file, BOE.properties in
   `<<BOE_INSTALL_DIR>>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\apps`
2. Rename BOE.properties so that it reflects the new name for the web application WAR file. For example, if you want to rename the web application from BOE to MYBOE, and you have already renamed BOE.war to MYBOE.war, rename BOE.properties to MYBOE.properties.
3. Use a text editor to update the contents of the newly named .properties file. Update the web application information in the configuration file.

   ```
   #Business Objects Configuration Utility
   #BOE specific properties
   warfile=<<WEB_APP_NAME>>.war
   appvdir=<<WEB_APP_NAME>>
   buildfile=<<WEB_APP_NAME>>.xml
   osgisupported=true
   ```

   For example, if you want to rename the web application from BOE to MYBOE, replace `<<WEB_APP_NAME>>` above with MYBOE.
4. Rename BOE.xml so it reflects the new name for the web application WAR file. For example, if you want to rename the web application from BOE to MYBOE, and you have already renamed BOE.war or BOE.ear to MYBOE.war or MYBOE.ear, rename BOE.xml to MYBOE.xml.

The WDeploy tool can now deploy the newly-named web application to the web application server.

6.2 Using WDeploy in a pure IPv6 environment

Using the wdeploy command in a pure IPv6 environment with the Sun Java Development Kit (JDK), the Sun JDK may not allow the web application server to bind with an IPv6 address, causing wdeploy commands to fail.

This is because the Sun JDK defaults to use IPv4 addresses. Change the Sun JDK settings so that Java uses IPv6 addresses by setting the JAVA_OPTIONS variable in your environment or start-up script:

```
JAVA_OPTIONS="-Djava.net.preferIPv6Addresses=true"
```

For example, on a WebLogic web application server, add `JAVA_OPTIONS="-Djava.net.preferIPv6Addresses=true"` to the setDomainEnv.sh or setDomainEnv.cmd scripts.
Restart your web application server, and verify connectivity with the ::1 or localhost alias in the hosts file.

6.3 Web Services on split web tier servers

The Web Services web application (dswsbobje.war) is not supported on split web tier deployments. Split web tier deployments have separate web and web application servers.

6.4 Paths with a trailing backslash character (\) cause deployment to fail

The deployment of web applications may fail when giving a path enclosed in double-quote characters (") to the WDeploy command with a trailing backslash character (\). Parameters affected by this issue include:

- as_dir
- ws_dir
- war_dir
- appsource_dir
- app_source_tree

For example, calling the WDeploy command-line tool with the parameter -Dwar_dir="C:\App Server\" may fail to deploy web applications to the web application server.

To resolve this issue, do not use a trailing backslash character when giving a path enclosed in double-quotes to the WDeploy command.

For example, to correct the war_dir parameter above, the trailing backslash can be removed: -Dwar_dir="C:\App Server".

6.5 WDeploy with non-English languages

When using a non-English language in the WDeploy tool:

- The WDeploy GUI tool does not support non-English characters in the server admin username or password parameters in the config.<WEB_APP_SERVER> configuration file.
- On Windows, the WDeploy GUI and command-line tools may fail and throw an exception when passing in non-English file paths with UTF-8 characters. The log file indicates that the path consists of invalid characters and cannot be found.
6.6 WDeploy GUI Browse window on Windows operating systems

The WDeploy UI Browse buttons may not function with the keyboard on some Microsoft Windows operating systems. This is a known limitation with Windows operating systems.

6.7 Web application not removed from server

If a web application was not removed with the WDeploy undeploy or undeployall commands, use the administrative console to stop all web applications and restart the server, then re-run the undeploy or undeployall command.

6.8 Copy MobileOTA14.properties after performing Web Tier installation

If you plan to use SAP BusinessObjects Business Intelligence platform Mobile support, and you have performed a Web Tier installation, you must copy the MobileOTA14.properties file to the host that received the Web Tier installation (mostly likely, the web application server).

To copy MobileOTA14.properties to the host that received the Web Tier installation, use the following steps.

1. Locate MobileOTA14.properties on a host that received a Full or Custom / Expand installation of SAP BusinessObjects Business Intelligence platform.
   The file MobileOTA14.properties is located in:
   \<BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\apps

2. Copy MobileOTA14.properties to the corresponding path on the host that received the Web Tier installation.

6.9 Cancel button in WDeploy GUI tool

Pressing the WDeploy Cancel button during the deployment of web applications to a web application server may not remove web applications or supporting files that have already been copied to the web application server.

To work around this problem, manually undeploy or delete the files from the web application server. With some web application servers, the Cancel button may be disabled. This is a known limitation of the JDK being used for deployment.
6.10 JBoss

6.10.1 Undeploy web applications from JBoss using WDeploy

The `wdeploy undeploy` command on a JBoss web application server may encounter an error if the web application server is not shut down and still in use. Work around this issue by shutting down the JBoss web application server before attempting to run the `wdeploy undeploy` command.

6.10.2 Servlet exception after logging onto AdminTools on JBoss 5.0

Users may encounter a servlet exception after logging onto the AdminTools web application deployed on JBoss 5.0.

To work around this problem, extract the `AdminTools.war` file contents and restart the JBoss web application server:

1. Stop the JBoss web application server.
2. Rename the `AdminTools.war` file to `AdminTools.original.war`.
3. Extract the contents of `AdminTools.original.war` to a folder named `AdminTools.war`:
   ```
   <JBOSS_HOME>\server\<as_instance>\deploy\AdminTools.war\n   ```
4. Delete the `AdminTools.original.war` file.
5. Restart the JBoss web application server.

6.11 SAP NetWeaver

6.11.1 SAP NetWeaver 7.2 web application deployment

When using the WDeploy tool to deploy web applications to SAP NetWeaver AS Java 7.2 SP3 with a MaxDB database, the deployment may fail to complete.

This occurs when there is not enough space in the MaxDB log volume. To add a MaxDB log volume:

1. Install and launch `SAP MaxDB Database Studio 7.7.06.09`.
2. Navigate to the `Servers` screen for the database instance registered to SAP NetWeaver AS Java 7.2 SP3.
3. Select the database instance and click `Open Administration` on the Explorer tab.
4. Navigate to the `Log Area` tab, located in the right-hand pane.
5. Right-click the `LOG002` log and select `New`. Ensure that the size of the LOG volume is a minimum of 6 GB. After clicking OK, the `LOG002` volume turns blue.
6. Restart the MaxDB database instance.
7. Re-run the WDeploy command to deploy web applications to NetWeaver AS Java 7.2 SP3.

### 6.11.2 Deployment of dswsbobje web application fails on SAP NetWeaver 7.2

When deploying the dswsbobje web application on SAP NetWeaver AS Java 7.2, the deployment exception `javax.xml.transform.TransformerFactoryConfigurationError: Provider org.apache.xalan.processor.TransformerFactoryImpl not found` may be thrown, and the deployment may fail.

To work around this issue, restart SAP NetWeaver AS Java 7.2 and re-deploy the dswsbobje web application.

### 6.11.3 To undeploy web applications from SAP NetWeaver 7.2

If you have already undeployed SAP BusinessObjects Business Intelligence platform web applications, it is possible that some web application related files or folders remain on the web application server. If this is the case, stop the web application server, manually remove the files or folders, and restart the web application server.

To undeploy web applications from SAP NetWeaver 7.2 web application servers, follow the steps below:

1. Log off and close all the browser sessions for web applications, such as BI launch pad, the Central Management Console (CMC), Web Services, and portals.
2. Restart the web application server.
3. Use the WDeploy command to undeploy the web applications from the web application server.

### 6.11.4 The WDeploy tool does not support deployment to or undeployment from SAP NetWeaver 7.3x or 7.4

The WDeploy tool does not support deployment to or undeployment from SAP NetWeaver 7.3x or 7.4. You must use the `predeploy` or `predeployall` commands of the WDeploy tool to create SCA files and deploy manually using SAP Software Update Manager (SUM). For detailed instructions on how to perform a manual deployment to SAP NetWeaver 7.3x or 7.4, see [SAP NetWeaver AS 7.3 deployment with SAP Software Update Manager (SUM)](https://help.sap.com/).

### 6.11.5 Configuration required before deploying SAP BusinessObjects Explorer to SAP NetWeaver 7.3x or 7.4

Before deploying the SAP BusinessObjects Explorer web application (explorer) to SAP NetWeaver 7.3x or 7.4, you must set the `disable.compression.filter` property to `true` in the `/WEB-INF/classes/`
default.settings.properties file. By default this value is set to false. Modify default.settings.properties from the following location:

- <BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps\explorer \WEB-INF\classes\

**Note**

The WDeploy tool does not support deployment to or undeployment from SAP NetWeaver 7.3x or 7.4. You must use the predeploy or predeployall commands of the WDeploy tool to create SCA files and deploy manually using SAP Software Update Manager (SUM). For detailed instructions on how to perform a manual deployment to SAP NetWeaver 7.3x or 7.4, see SAP NetWeaver AS 7.3 deployment with SAP Software Update Manager (SUM).

6.12 **Tomcat**

6.12.1 **Using Tomcat in IPv6-only mode on Windows Vista or 2008 Server**

If you are using Tomcat on a Windows Vista or 2008 Server in IPv6-only mode, disable IPv4 through the Windows Control Panel Network Connections applet. Do not uninstall IPv4. If you do, Tomcat may not start.

This is a known issue with JDK 5 and 6.

6.12.2 **Undeploy web applications from Tomcat using WDeploy**

The `wdeploy undeploy` command on a Tomcat web application server may encounter an error if the web application server is not shut down and still in use. Work around this issue by shutting down the Tomcat web application server before attempting to run the `wdeploy undeploy` command.

6.12.3 **Tomcat may not initially load web applications after running WDeploy**

Web applications newly deployed on Tomcat with the WDeploy tool may not initially load if a non-default context path is used. Restart Tomcat for the changes to take effect.
6.13 WebLogic

6.13.1 Undeploy Web Services from WebLogic

The `wdeploy undeploy` or `wdeploy undeployall` commands may not remove the BusinessProcessBI and dswsbobje Web Services web applications from a WebLogic 10.0 or 10.3 web application server.

To work around this problem, stop the BusinessProcessBI and dswsbobje web applications with the WebLogic administrative console and restart the web application server. When the web application server has restarted, use the `wdeploy undeploy` or `wdeploy undeployall` commands to remove BusinessProcessBI and dswsbobje.

6.14 WebSphere

6.14.1 Deployment to WebSphere in secured mode

A validation error may be generated when using WDdeploy with a WebSphere installation that uses Secure Socket Layer (SSL) encryption. To work around this issue, use the `wsadmin` command to manually accept the SSL certificate before attempting to deploy with WDdeploy.

For example, change directories to `</WEBSPHERE_INSTALL_DIR>/AppServer/bin` and run the following command:

```
wsadmin -conntype SOAP -port <<SOAP_admin_port>> -user <<as_admin_username>> -password <<as_admin_password>>
```

Replace `<<SOAP_admin_port>>` with the port number used by WebSphere (e.g. 8880), `<<as_admin_username>>` with the username for your administrator account (e.g. admin), and `<<as_admin_password>>` with the password for the account you specified for `<<as_admin_username>>`.

Press Y to accept the certificate, then proceed with the web application deployment using WDdeploy.

6.14.2 List of Web Services link not available with WebSphere 7.0 and 8.5

After using the WDdeploy command to deploy Web Services to WebSphere 7.0 or 8.5, the List of Web Services link is not available in the Web Services interface. To work around this issue follow the steps below:

1. Start the WebSphere web application server.
2. Use the WDdeploy command to deploy dswsbobje and BusinessProcessBI web applications.
3. Stop the WebSphere web application server.
4. Copy the .mar files from WEB-INF’s modules subfolder to WEB-INF’s lib subfolder, and change the .mar extension to .jar.
To do this, copy the file `<WEBSPHERE7_INSTALL_DIR>\profiles\AppSrv01\installedApps \<WS7_NODE_NAME>\dswsbobje.ear\dswsbobje.war\WEB-INF\modules\addressing-1.3.mar` to a new file as: `<WEBSPHERE7_INSTALL_DIR>\profiles\AppSrv01\installedApps \\
<WS7_NODE_NAME>\dswsbobje.ear\dswsbobje.war\WEB-INF\lib\addressing-1.3.jar.`

For example:

```
<WEBSPHERE7_INSTALL_DIR>\profiles\AppSrv01\installedApps\<WS7_NODE_NAME>\dswsbobje.ear\dswsbobje.war\WEB-INF\modules
```

```
copy addressing-1.3.mar ..\lib\addressing-1.3.jar
```

**Note**

Do not remove or rename `addressing-1.3.mar` in the `modules` folder. Ensure that the file is named `addressing-1.3.jar` in the `lib` folder.

5. Repeat step 4 for each `.mar` file in the `modules` folder for both the `dswsbobje` and `BusinessProcessBI` web applications.
6. Restart the WebSphere web application server.
7. Launch the `dswsbobje` and `BusinessProcessBI` web applications.

The List of Web Services link now displays a list of Web Services.

### 6.14.3 Internal server error after deploying Web Services to WebSphere 7.0

You may encounter an internal server error after deploying the Web Services provider (`dswsbobje.war`) to WebSphere 7.0 with the Axis2 WS-addressing module enabled. The web services provider application (`dswsbobje.war`) is built on the Apache Axis2 web service framework which contains this module.

To workaround this issue, the addressing module is disabled in a default installation of the BI platform.

If you are deploying to a web application server other than WebSphere 7.0, and want to enable the Axis2 WS-addressing module, edit the `axis2.xml` file and uncomment the line `<!--module ref="addressing"/>-->

The `axis2.xml` file is located at `/WEB-INF/conf` in your Web Service provider WAR file. Restart your web application server for the changes to take effect.

### 6.14.4 WASX7017E: Exception deploying in WebSphere

You may encounter the following exception while using WebSphere:

```
com.ibm.websphere.management.exception.ConfigServiceException
com.ibm.websphere.management.exception.ConnectorException
org.apache.soap.SOAPException: [SOAPException: faultCode=SOAP-ENV:Client;
msg=Read timed out; targetException=java.net.SocketTimeoutException: Read timed out]
```

To workaround this issue, try modifying the timeout values in the following locations:
• Open the `soap.client.props` file and increase or remove the SOAP connection timeout set by the property:

```
com.ibm.SOAP.requestTimeout=0
```

`soap.client.props` is located at:

`<WAS_INSTALL_DIR>/profiles/<PROFILE>/properties/soap.client.props`

• In the WebSphere Integrated Solutions Console, increase the value of the `requestTimeout` property on the JMX SOAP connector for the application server:

![Figure 1: (English example)](image)

**Note**

Access the WebSphere console at `http://<WAS_HOSTNAME>:<PORT>/ibm/console`. The default port number is 9060.
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