

**Oracle® Health Sciences WebSDM
and Empirica Study**

Upgrade Instructions

Release 3.1.2.1 for Windows 2003/2008 Server

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Upgrade Instructions, Release 3.1.2.1 for Windows 2003/2008 Server

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Preface

This guide describes tasks that a system administrator performs to apply the WebSDM 3.1.2.1 patch update to an existing WebSDM 3.1.2 installation on a Windows 2003 or Windows 2008 server. If you are running a version of the WebSDM and Empirica Study applications prior to version 3.1.2, contact Oracle for assistance because you must upgrade to version 3.1.2 before performing this upgrade procedure.

Audience

This guide is for system administrators or database administrators who are familiar with Oracle relational databases and who host the WebSDM and Empirica Study application in their own environments, rather than contracting for this service from Oracle.

Note: In this guide, the product name WebSDM refers to both the WebSDM standalone product and WebSDM with the optional Empirica Study features, which are licensed separately.

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Related Documents

For more information, see the following documents in the Oracle Health Sciences WebSDM and Empirica Release 3.1.2.1 documentation set:

- *Oracle® Health Sciences WebSDM and Empirica Study Known Issues*
- *Oracle® Health Sciences WebSDM and Empirica Study Release Notes*
- *Oracle® Health Sciences WebSDM and Empirica Study Installation Instructions*
- *Oracle® Health Sciences WebSDM and Empirica Study Third Party Licenses and Notices*

Conventions

Oracle recommends that you familiarize yourself with the procedures in this guide by reading all instructions before you begin the upgrade.

While the instructions in this guide are detailed, they are generic. This guide does not address all variations that might occur. An experienced administrator should read all instructions and be prepared to work through site-specific differences from the provided text.

The following text conventions are used in this document:

Convention	Meaning
monospace font	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.
boldface font	User interface controls, including menu options, buttons, and links.
<text_in_angle_brackets>	Substitute the values in the Prerequisites tables for the <text_in_angle_brackets>.
Optional	A procedure or step that is not required for all installations.
Note:	Information of particular significance.
<u>32-bit server</u>	Server-specific alternative instructions.
<u>64-bit server</u>	

Introduction

An application server that hosts multiple instances of WebSDM or other Empirica products might not be suitable to support an upgrade to the WebSDM and Empirica Study 3.1.2.1 applications. If your environment fits this profile, contact Oracle for assistance.

This guide assumes that you are familiar with administrative tasks such as setting up and configuring the Oracle database, administering IIS, configuring Windows Services, and setting Windows file permissions.

1.1 Removing and Setting the Read-only Attribute

If the installation instructions require you to edit a file, check whether the read-only attribute is set. If the read-only attribute is set, you must remove it before editing.

1. Open Windows Explorer and navigate to the file.
2. Right-click the file name and select **Properties**.
3. Clear **Read-only**.
4. Click **OK**.

When you finish editing the file, set the read-only attribute:

1. Open Windows Explorer and navigate to the file.
2. Right-click the file name and select **Properties**.
3. Select **Read-only**.
4. Click **OK**.

1.2 Saving Files

If the installation instructions require you to edit a file, be sure to save the file with the original name. Some editors add the TXT extension to the file name by default.

Upgrade to WebSDM 3.1.2.1

This chapter contains information on upgrading to WebSDM 3.1.2.1.

2.1 Prerequisites

You must have the following information when you start the upgrade. In these procedures, the values are shown in <text_in_angle_brackets>.

- The installation media for WebSDM 3.1.2.1
The product ZIP file from My Oracle Support (<https://support.oracle.com>).
- Windows administrator account
<win_admin_acct> and <win_admin_pass>
Windows account and password on the server where WebSDM is installed. The account must have the Administrator role.
- Installation root
<root>
File system root where the \Lincoln subdirectory is located, typically C:\.
- WebSDM instance name
<instance>
Name of the WebSDM 3.1.2 instance you are upgrading.
- WebSDM Superuser account and password. For example, the admin username supplied with WebSDM is a Superuser.
<app_admin_acct> and <app_admin_pass>
Password for the WebSDM user account with the reserved name **admin**, or other Superuser.
Note whether the WebSDM application server is 32-bit or 64-bit.
Note the operating system version running on the WebSDM server (Windows 2003 or Windows 2008).
- WebSDM Windows user account
<win_user_acct>
Name of the Windows account that is running the WebSDM service. Usually this is the WebSDM instance name, with the suffix, _app, appended. For example, **websdm_app**.

You must also have access to the Java jar and jarsigner utilities, and to your company's jar signing process.

2.2 Stop the WebSDM Service

1. Log into WebSDM as <app_admin_acct>.
2. Click **Settings**, and then click **View Currently Logged in Users**.
3. If sessions in addition to your own are running, either instruct the users to finish their sessions or cancel the sessions from the WebSDM interface.
4. Exit WebSDM.
5. Log into the Windows administrator account using <win_admin_acct>.
6. Select **Start > Administrative Tools > Services**.
7. Right-click the <instance> service, and then click **Stop**.
8. Right-click **World Wide Web Publishing Service**, and then click **Stop**.
9. Navigate to the <root>\Lincoln\apps\<instance>\bin folder.
10. Do one of the following:
 - (Windows 2008 server)-Right-click the uninstall_service.bat file, and select **Run as administrator**.
 - (Windows 2003 server) -Double-click the uninstall_service.bat file.

2.3 Modify the Tomcat and JDK Configurations

1. Back up the <root>\Lincoln folder.
2. Locate the Lincoln.zip file on the installation media. (For a 64-bit server, use Lincoln_x64.zip.)
3. Extract the contents of this file to a temporary folder, making sure that path names stored in the archive will be used (for example, in WinZip, the **Use folder names** checkbox must be selected).
4. Copy the apache-tomcat-6.0.41 folder from the temporary folder to the <root>\Lincoln folder.
5. Delete the \apache-tomcat-6.0.36 folder under <root>\Lincoln.
6. Update the JDK:
 - a. Delete the jdk1.x folder under <root>\Lincoln\.
 - b. Locate the jdk1.6 folder in the temporary folder, and copy the folder to the <root>\Lincoln folder.
7. Delete all the files from the <root>\Lincoln\apps\<instance>\bin folder.
8. Copy all the files from the temporary \Lincoln\apps\<instance>\bin folder into <root>\Lincoln\apps\<instance>\bin folder.

2.4 Upgrade the WebSDM Software

1. Locate the <root>\Lincoln\apps\<instance>\webapps\web_root folder on the server that is running your current installation of WebSDM. Copy the contents of this folder to a temporary folder, such as C:\temp\web_root.

2. Delete the contents of the <root>\Lincoln\apps\<instance>\webapps\web_root folder, keeping the folder itself in place.
3. Locate the websdm-3_1_2_1_4xx.zip file (where 4xx represents a specific build number) on the installation media. Extract the contents of this file to the <root>\Lincoln\apps\<instance>\webapps\web_root directory, making sure that path names stored in the archive are used (for example, in WinZip the **Use folder names** checkbox must be selected).
4. Restore your saved copy of website.properties, and of license.config, if it exists, from the temporary folder C:\temp\web_root\WEB-INF\classes\ to <root>\Lincoln\apps\<instance>\webapps\web_root\WEB-INF\classes.
5. Restore your saved copy of ojdbc*.jar (either ojdbc6.jar or ojdbc14.jar) from the temporary folder C:\temp\web_root\WEB-INF\lib\ to <root>\Lincoln\apps\<instance>\webapps\web_root\WEB-INF\lib.
6. If you have created or included any custom content (home pages or logos), copy the files from the \customhomes or \image subfolder under C:\temp\web_root\ to the respective subfolder under <root>\Lincoln\apps\<instance>\webapps\web_root.
7. Delete the contents of the <root>\Lincoln\apps\<instance>\work folder.

2.5 Reinstall the WebSDM Service

This section contains information on reinstalling the WebSDM Service on Windows 2003 and 2008 configurations.

2.5.1 Reinstall the WebSDM Service for Windows 2008

This section is for Windows 2008 Server only.

1. Delete the existing Windows user account that is running the WebSDM service.
 - a. Select **Start > Administrative Tools > Server Manager > Configuration > Local Users and Groups > Users**.
 - b. Right-click the account named <win_user_acct> (usually <instance>_app) that is running the WebSDM service.
 - c. Click **Delete**, and then click **Yes** to confirm.
2. Close **Administrative Tools**.
3. Navigate to the <root>\Lincoln\apps\<instance>\bin folder.
4. If you are using a WebSDM instance name other than **websdm**:
 - a. Edit the uninstall_service.bat file.
 - b. Change the value of SERVICE_NAME from **websdm** to the value of <instance>.
 - c. Save your changes.
 - d. Edit the install_service.bat file.
 - e. Change the value of SERVICE_NAME from **websdm** to the value of <instance>.
 - f. Change the value of the APPLICATION_DIR from **websdm** to the value of <instance>.

- f. Change the value of the APPLICATION_DIR from **websdm** to the value of <instance>.
- g. Save your changes.
4. Double-click the install_service.bat file.
5. After install_service.bat has completed, inspect the transcript to ensure that no errors occurred. When you are finished, press any key.
6. Close the Command window.
7. Right-click the server's desktop **My Computer** icon and select **Manage**. Expand **System Tools > Local Users and Groups > Users**.
8. Right-click <instance>_app, and select **Set Password**.
9. In the **Set Password for <instance>_app** dialog box, click **Proceed**.
10. Change the password, using the password policy restrictions at your site, and click **OK**.
11. Expand the **Services and Applications** directory, and then click **Services**.
12. Right-click the <instance> service, and select **Properties**.
13. On the **Log On** tab, click **This account**. Clear the password fields, and enter the password you just changed.
14. On the **Recovery** tab, select **Restart the Service** for both **First Failure** and **Second Failure**.
15. Click **OK**.

2.6 Add Manifest Entries and Sign JAR Files

If you do not perform these steps, security-related dialog boxes appear for end users when they work with DataMontage graphs in applet mode, and DataMontage may even be completely blocked by a client machine's security settings. To perform these steps, you need access to the Java jar and jarsigner utilities in the Java jdk1.6\bin directory (jdk1.6\bin must be in the application server's PATH), and you must have access to your company's jar signing process.

1. From the <root>:\Lincoln\apps\<instance>\webapps\web_root\AppJars\DataMontage23\ folder, copy files lti.jar and DataMontage.jar to a temporary folder such as C:\temp\UpdateJarManifest\.
2. Update the manifest in both JAR files:
 - a. In the temporary folder where you copied the JAR files, create a text file and save it. The example later in this procedure uses the name MANIFEST.MF.
 - b. Insert two lines of text in the file, supplying the fully qualified domain name of the Windows application server (or its IP address) and the connection port on each line. For example:


```
Codebase: <server_name>.example.com:80
Caller-Allowable-Codebase: <server_name>.example.com:80
```

Alternatively you can use an asterisk (*) as a wildcard for the most specific part of the domain name, but this will result in a less secure deployment.
 - c. Be sure to insert a line break after the second line of text. Then save and close the file.

- d. Open a DOS Command window and navigate to the temporary folder containing the JAR files and the text file you created.
- e. At the DOS prompt, issue the following commands, replacing MANIFEST.MF with the name of the text file you created:

```
jar -ufm DataMontage.jar MANIFEST.MF
```

```
jar -ufm lti.jar MANIFEST.MF
```
3. You must now sign the modified JAR files before they will work correctly within the WebSDM application. Use your company's jar signing process to perform this signing task, which probably includes using Java's jarsigner utility. (See <http://docs.oracle.com/javase/7/docs/technotes/tools/windows/jarsigner.html> for additional information about this utility.)
4. Copy both signed JAR files to the
<root>:\Lincoln\apps\<instance>\webapps\web_root\AppJars\DataMontage23\ folder, replacing the original files.
5. Finally, copy the signed DataMontage.jar file to the
<root>:\Lincoln\apps\<instance>\webapps\web_root\WEB-INF\lib\ folder, replacing the original file. (You do not need a copy of lti.jar in this location.)

2.7 Set File Permissions

1. Navigate to the <root>\Lincoln\apps\<instance>\bin folder.
2. Use a text editor to open the file set_permissions.bat and review the values of SERVICE_NAME, INSTALL_ROOT and APPLICATION_DIR, and WORKING_DIR:
 - a. If the value of <instance> is other than **websdm**, change the values of SERVICE_NAME, APPLICATION_DIR, and WORKING_DIR to the value of <instance>.
 - b. If the value of <root> is other than the **C** drive, change the value of the INSTALL_ROOT to the value of <root>.
 - c. If the **D** drive is not an acceptable location for the working directory, change the drive for WORKING_DIR to an acceptable drive.
 - d. Verify that CATALINA_HOME is defined correctly.
3. Optionally, grant permissions to a Windows group of non-administrator users who might require access to the log files and \web_root folder.
 - a. While editing the set_permissions.bat file, locate the following lines:

```
REM -
```

```
REM - Local Administrators group
```

```
REM -
```

```
REM SET ADMIN_GROUP=Study Operators
```
 - b. Remove REM from the REM SET ADMIN_GROUP line.
 - c. Replace Study Operators with the Windows user group that requires access.
4. If changes are needed, edit, save, and close the file.
5. When you are prompted, press any key.

6. Examine the log file <root>\Lincoln\apps\<instance>\logs\set_permissions.log for errors. If errors occur, you must take ownership, recursively, of C:\Lincoln\apps\<instance> and D:\websdm, and then repeat this procedure.
7. Do one of the following:
 - (Windows 2003 server) -Double-click the set_permissions.bat file.
 - (Windows 2008 server) -Right-click the set_permissions.bat file, and then select **Run as administrator**.

2.8 Start Instance

1. Select **Start > Administrative Tools > Services**.
2. Right-click the <instance> service, and then select **Start**.
3. Right-click the **World Wide Web Publishing Service**, and then click **Start**. If the service is already running, click **Restart**.
4. In an Internet Explorer window, access the URL for WebSDM.
5. If you receive a message that the server is still initializing, wait a few minutes and access the URL again.

2.9 Set Site Options and Restart Listener

1. Log into WebSDM as <app_admin_acct>.
2. Click **Settings**.
3. Click **Set Site Options**.
4. Set **System Version Description** to **Version 3.1.2.1**.
5. Click **Save**.
6. Click **Continue**.
7. Click **Restart Listener**.
8. Log out.

2.10 Verify the WebSDM Upgrade

For Upgrade Qualification (UQ) and Operational Qualification (OQ) testing, see the UQ_Test.doc and OQ_Test.doc files on the installation media.