Installing and Deploying LiveCycle® ES for JBoss® Using Turnkey

Adobe® LiveCycle® ES

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Adobe® LiveCycle® ES 8.0 Installing and Deploying LiveCycle ES for JBoss® Using Turnkey for Microsoft® Windows®
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About This Document

This document explains how to install and configure Adobe® LiveCycle® ES (Enterprise Suite) for JBoss® and MySQL by using the turnkey method. The turnkey method automatically installs and configures the product.

Perform this type of installation and configuration to rapidly get a LiveCycle ES system up and running for a small-scale production, demonstration, evaluation, development, or training purposes. The turnkey method installs and configures a default set of Adobe and third-party products that provide a functioning LiveCycle ES environment.

Who should read this document?

This document is intended for evaluators, administrators, or developers who are responsible for installing, configuring, administering, or deploying LiveCycle ES. The information provided is based on the assumption that anyone reading this document is familiar with the Microsoft® Windows® operating systems and web environments.

Additional information

The resources in this table can help you learn about LiveCycle ES.

For information about	See
Upgrading	*Upgrading to LiveCycle ES for JBoss Turnkey* at http://www.adobe.com/go/learn_lc_upgradeTurnkey
General information about LiveCycle ES and the solution components	*LiveCycle ES Overview* at http://www.adobe.com/go/learn_lc_overview
What's new in the Adobe LiveCycle ES (Enterprise Suite) release	http://www.adobe.com/go/learn_lc_whatsNew
LiveCycle ES terminology	http://www.adobe.com/go/learn_lc_glossary
Other services and products that integrate with LiveCycle ES	www.adobe.com/products/livecycle
Other Adobe LiveCycle ES solution components	http://partners.adobe.com/public/developer/main.html
All the documentation available for LiveCycle ES	http://www.adobe.com/go/learn_lc_documentation
LiveCycle ES release information and last-minute changes that occur to the product	http://www.adobe.com/go/learn_lc_releaseNotes
Patch updates, technical notes, and additional information about this product version	www.adobe.com/support/products/enterprise/index.html

1 Installing and Configuring LiveCycle ES

This document describes how to install LiveCycle ES using the turnkey method. The turnkey installation automatically performs all of the tasks required to install and configure LiveCycle ES on a JBoss Application Server and MySQL database running on Microsoft Windows only.

The turnkey installation performs the following tasks:

- Installs the product files
- Installs a preconfigured version of JBoss 4.0.3 SP1 Application Server (with Apache Tomcat servlet container embedded)
- Installs the MySQL 5.0 database
- Starts LiveCycle Configuration Manager
- Configures and assembles the LiveCycle ES EAR files
- Deploys LiveCycle ES to JBoss
- Initializes the MySQL 5.0 database
- Deploys all of the required components to JBoss

System prerequisites

Before installing LiveCycle ES, you must ensure that you have the following prerequisite hardware and software installed:

- "Hardware" on page 5
- "Operating system" on page 6
- "Software Development Kit" on page 6
- "Web browser support" on page 7
- "Application server and database" on page 7
- "Available port number" on page 7
- "Reader Extensions ES credential" on page 7

Additionally, if you include Adobe LiveCycle PDF Generator ES as part of your LiveCycle ES solution, you must complete the following tasks before beginning the installation:

- "Granting the Logon As Service right when installing PDF Generator ES" on page 7
- "Installing Acrobat for LiveCycle PDF Generator ES (Windows only)" on page 8

Hardware

For any installation, these settings are recommended as the minimum:

- Disk space for installation: 3 GB
- System temp space during installation: 3 GB
- Memory for running LiveCycle ES: 2 GB
- Processor: Intel® Pentium® 4 or equivalent, 1.6 GHz or higher processor

Operating system

The turnkey method supports the following operating systems:

- Microsoft Windows 2003 Server® (for a production environment)
- Microsoft Windows XP (for LiveCycle ES evaluation and development)

Software Development Kit

- Sun™ Java™ Software Development Kit (JDK) 1.5.0_11 or a later update of JDK 1.5.0.

You can download and install updates to JDK 1.5.0 from http://java.sun.com.

After you install the JDK, you must create or set the `JAVA_HOME` environment variable and the `PATH` to point to the location where your JDK is installed.

➤ **To create and set the JAVA_HOME environment variable:**

1. Select **Start** > **Control Panel** > **System**.
2. Click the **Advanced** tab**.**
3. Click **Environment Variables**.
4. In the System Variables area, click **New.**
5. Enter `JAVA_HOME` as the variable name and enter the directory where you installed the Java SDK. This directory contains the /bin subdirectory. For example, type the following directory:

```
C:\Program Files\Java\jdk1.5.0_11
```

Note: To verify your `JAVA_HOME` environment variable, open a command prompt and run the following command:

```
cd %JAVA_HOME%\bin
java -version
```

You should receive a response beginning with Java version `1.5.0_11` (or a later version of 1.5.0).

➤ **To update the PATH environment variable:**

1. Select **Start** > **Control Panel** > **System**.
2. Click the **Advanced** tab**.**
3. Click **Environment Variables**.
4. In the **System variables** area, select **Path**, and then click **Edit**.
5. Add the directory where you installed the Java SDK to the **Variable value** field. For example, type the following directory:

```
C:\Program Files\Java\jdk1.5.0_11
```

Note: To verify the update to your `PATH` environment variable, open a command prompt and run the following command:

```
java -version
```

You should receive a response beginning with Java version `1.5.0_11` (or a later version of 1.5.0).

Web browser support

You must have one of the following supported web browsers:

- Internet Explorer 6 or later
- FireFox 2.0.0.1

Note: "or later" includes major revisions. For example, Microsoft Internet Explorer 6.0 or later also covers Microsoft Internet Explorer 7.0.

In addition, to view some LiveCycle ES solution components, for example Workspace ES, you require Adobe Flash® Player 9. You can download the latest version of Flash Player from www.adobe.com.

Application server and database

The turnkey method installs and configures JBoss (which includes the Apache Tomcat servlet container) and a MySQL database; therefore, no application server or database is required.

Available port number

The turnkey installation includes an application server that uses port 8080 by default. If you have other services that use this port, you should reconfigure them or disable them during the installation. You can change the default port number after the installation is complete.

Reader Extensions ES credential

If you are installing Adobe LiveCycle Reader Extensions ES, ensure that you have a valid credential and password before running the installation. If you do not have this information, contact your Adobe account representative. You can choose to skip importing the Reader Extensions ES credential during the installation process and install the credential at a later time using the Trust Store component in the LiveCycle Administration Console.

Granting the Logon As Service right when installing PDF Generator ES

If you are installing PDF Generator ES using the turnkey method and you need to enable native application file support (which supports converting files from native formats, such as Microsoft Word, to PDF), you must grant the Logon As Service right to the Microsoft Administrator in Windows before starting the turnkey installation.

➤ **To set the Logon As Service right:**

1. Select **Start** > **Control Panel** > **Administrative Tools** > **Local Security Policy** > **Local Policies** > **User Rights Assignment**.
2. Double-click **Log on as a service**.
3. Click **Add User or Group**.
4. Type the user name for the Microsoft Administrator and click **OK**.

Installing Acrobat for LiveCycle PDF Generator ES (Windows only)

Note: This section applies only if your configuration requires native file format conversion (for example, Microsoft Word to PDF).

LiveCycle PDF Generator ES can convert many native file formats to PDF. Such native file formats include Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Project, Microsoft Visio, Corel WordPerfect, Adobe Photoshop®, Adobe FrameMaker®, and Adobe PageMaker®.

If you plan to use PDF Generator ES native application format conversion or optical character recognition (OCR) generation, you must install Acrobat 8.1 on the computer where PDF Generator ES will run before you run the LiveCycle ES installation program. If you do not install Acrobat 8.1 prior to installing LiveCycle ES, you must install Acrobat 8.1 afterward and perform some additional manual tasks. A copy of Acrobat 8.0 is included on the LiveCycle ES DVD.

If you do not want to configure PDF Generator ES to support this functionality, you do not need to install or upgrade to Acrobat 8.1. However, it is recommended that you upgrade to Acrobat 8.1 in order to support conversions using Microsoft Office 2007.

➤ **To install Acrobat 8.1 for PDF Generator ES:**

1. Uninstall any other version of Acrobat by using the **Add/Remove Programs** window in the Windows Control Panel.
2. Restart your computer if prompted.
3. Navigate to one of the following folders on the LiveCycle ES installation media, depending on your locale:
   - additional\acrobat\efg\Adobe Acrobat 8 Professional
   - additional\acrobat\jpn\Adobe Acrobat 8 Professional
4. Double-click the **Setup.exe** file to run the Acrobat installer.
5. Follow the instructions on the Acrobat installer screens.

Before you install

Before you begin installing LiveCycle ES, read through the following information to ensure that your installation runs smoothly:

- Ensure that you uninstall any prerelease versions of LiveCycle ES by selecting the Add/Remove Programs option from the Windows Control Panel. When uninstalling, choose the option to remove both JBoss and MySQL during the uninstall, and then restart your computer before you begin the full LiveCycle ES installation.
- To reduce the time to complete the installation, it is recommended that you install LiveCycle ES either by using a local copy of the installation file set or directly from the DVD instead of installing from a shared network location.
- To improve the speed of the installation, disable any on-access virus scanning software for the duration of the installation.
- During the installation, you will be prompted to enter your product serial number(s).

- The turnkey installation creates the following Windows services, which, by default, are set to run automatically on startup:
  - JBoss for Adobe LiveCycle ES v.8.0
  - MySQL for Adobe LiveCycle ES v8.0

  These services manage the application server and the database for the turnkey installation. You can start, stop, and pause these services by using the Windows Services Control Manager. To open the Windows Services Control Manager, go to Control Panel > Administrative Tools > Services. Using this tool, you can also configure the services to start when the computer starts or to require manual startup.

  Note: If JBoss and MySQL are already installed, you must stop the services before running the turnkey installation and set the services to be started manually.
- By default, the turnkey installation places LiveCycle ES, including all of its related components and software, in the \Adobe\LiveCycle8\ directory (referred to as the *[LiveCycle root]* directory).
- By default, JBoss is installed to and run from the *[LiveCycle root]*/jboss directory.
- When completing the configuration using LiveCycle Configuration Manager, you can choose Express Mode or Custom Mode:

  Express Mode: Completes the configuration using defaults and limited configuration screens. Express Mode is recommended if you do not want any special system configuration.

  Custom Mode: Allows you to customize the system configuration and requires some advanced knowledge of LiveCycle ES, JBoss Application Server, and the MySQL database. Custom mode is recommended if you want to configure your system in a specific way or want more control over the tasks that LiveCycle Configuration Manager completes.

Installing LiveCycle ES

Before you install LiveCycle ES, make sure you have reviewed the following sections:

- "System prerequisites" on page 5
- "Before you install" on page 8

➤ **To install LiveCycle ES:**

1. Do one of these tasks:
   - On the DVD, navigate to the \livecycle_server\8.0 folder and double-click the **win_livecycle8_setup.exe** file to start the installation.
   - Download and decompress the LiveCycle ES Electronic Software Download (ESD) to your file system. After it is downloaded, navigate to the \livecycle_server\8.0 folder and double-click the **win_livecycle8_setup.exe** file to start the installation.
2. When prompted, select the language for the installation to use, and then click **OK**.
3. On the Welcome screen, click **Next**.
4. Accept the default directory as listed or click **Browse** and navigate to the directory where you want to install the product, and then click **Next**. This directory is referred to as *[LiveCycleES root]*.
5. In the **Serial Number** box, type or copy the serial numbers and then click **Add**. If you have licensed multiple solution components, repeat this step for each serial number you have.

6. Verify that the list of solution components is correct and click **Next**.
7. On the Type of Installation screen, select **Turnkey** and click **Next**.
8. Read the Adobe LiveCycle ES Server License Agreement, select **I accept the terms of the license agreement**, and then click **Next**.
9. Read the JBoss Application Server License Agreement, select **I accept the terms of the license agreement**, and then click **Next**.
10. Read the MySQL License Agreement, select **I accept the terms of the license agreement**, and then click **Next**.
11. Verify the path to your Java5 SDK or click **Browse** to navigate to its root directory, and then click **Next.** This directory be the same one that is specified in the `JAVA_HOME` environment variable.
12. **(PDF Generator ES only)** Select **Yes, enable native application support for LiveCycle PDF Generator ES**.

    Note: Adobe Acrobat® version 8.1 is required to configure support for native Windows applications. For information about installing Acrobat 8.1, see "Installing Acrobat for LiveCycle PDF Generator ES (Windows only)" on page 8.

13. **(PDF Generator ES only)** Type the user name and password for the user who installed Microsoft Office and click **Next**. You must provide the correct administrator name and password; otherwise, LiveCycle ES will not run. This administrator account name must be the same user who installed Microsoft Office on the system and should include the Windows DOMAIN prefix if that user is not a local account on the target computer.
14. Set the MySQL 5.0 root administrator password and, optionally, type your MySQL port number (for version 5.0). Ensure that you record this password for future reference.
    - To verify that the port number is not in use, click **Test**. If the port is available, the installer displays a green check mark. If the port is in use, the installer displays a red X.
    - If the port is in use, type a new port number and repeat the process until you find a port that is available.
15. Click **Next**, review the preinstallation summary, and then click **Install**. The installation program displays the progress of the installation.
16. Review the Release Notes and click **Next**.
17. Review the post-installation summary information and choose one of these options:
    - Ensure that **Start the LiveCycle Configuration Manager** is selected and click **Finish**.
    - If you were prompted earlier to install Acrobat 8.1, deselect **Start the LiveCycle Configuration Manager**, exit the installer, and install Acrobat 8.1 from either the installation DVD or from your decompressed ESD. (See "Installing Acrobat for LiveCycle PDF Generator ES (Windows only)" on page 8.) To complete the configuration, run LiveCycle Configuration Manager by using the ConfigurationManager.bat file located in *[LiveCycleES root]*\configurationManager\bin.

Configuring LiveCycle ES

➤ **To configure LiveCycle ES:**

1. If you are continuing from the LiveCycle ES installation, proceed to step 2; otherwise, navigate to the *[LiveCycleES root]*\configurationManager\bin folder and run `ConfigurationManager.bat`.
2. On the LiveCycle Configuration Manager Welcome screen, click **Next**.
3. Choose one of these options:
   - If this installation is an upgrade from a LiveCycle 7.x deployment, select **Upgrade from LiveCycle 7.x**, select the appropriate options, and click **Next**. For more information, see *Upgrading to LiveCycle ES for JBoss Turnkey* at http://www.adobe.com/go/learn_lc_upgradeTurnkey.
   - If this installation is not an upgrade, ensure that **Upgrade from LiveCycle 7.x** is deselected and click **Next**.
4. On the Turnkey Mode screen, select **Express Mode** or **Custom Mode**.
   - If you select Express Mode, click **Next** and go to "Configuring LiveCycle ES using Express Mode" on page 11.
   - If you select Custom Mode, click **Next** and go to "Configuring LiveCycle ES using Custom Mode" on page 12.

Configuring LiveCycle ES using Express Mode

Express Mode completes the configuration using defaults and limited configuration screens.

You can view the configuration progress at any time by clicking View Process Log from the Configuration Manager.

➤ **To configure LiveCycle ES using Express Mode:**

1. Review the list of solution components, ensure the appropriate options are selected, and click **Next**.
2. **(Connector for EMC Documentum and Connector for IBM FileNet only)** Review the LiveCycle ES connector configuration information and click **Next**. After you finish configuring LiveCycle ES, you must configure the Connector for EMC Documentum service and the Connector for IBM FileNet service. For more information, see "Configuring the Connector for EMC Documentum service" on page 22 and "Configuring the Connector for IBM FileNet service" on page 26.
3. Click **Start** to start the configuration.
4. When the deployment and express mode configuration are complete, click **Next**.
5. If you installed LiveCycle Reader Extensions ES, choose one of these options:
   - Browse to the location of your LiveCycle Reader Extensions ES Rights credential file, type your credential password as provided by Adobe, type the name for the configured credential that will be displayed in the Reader Extensions ES application, click **Configure**, and then click **Next**.
   - To skip this step and complete the Rights credential configuration by using the LiveCycle Administration Console, select **Configure Later Using LiveCycle Administration Console** and click **Next**. To configure the Rights credential at a later time, log in to LiveCycle Administration Console and select **Settings** > **Trust Store Management** > **Local Credentials**.

6. On the LiveCycle ES Samples Import screen, choose one of these options:
   - Click **Import** to import the LiveCycle ES Samples and then click **Next**.
   - To skip this step, select **Skip LiveCycle ES Samples Import** and click **Next**. You can import the samples at a later date by restarting LiveCycle Configuration Manager and choosing to import the samples.

Caution: Do not import the LiveCycle ES Samples if either of these options apply to your situation:

- If you are deploying LiveCycle ES to a production system. Importing the samples creates users with default passwords, which may be a security concern for your production environment.
- If you are deploying either the Connector for EMC Documentum service or the Connector for IBM FileNet service and you want to import LiveCycle ES Samples into the Documentum repository or FileNet object store, skip this step. You can import the samples after you configure, enable, and activate the ECM to be the repository provider using LiveCycle Administration Console. For more information, see "Configuring the Connector for EMC Documentum service" on page 22 or "Configuring the Connector for IBM FileNet service" on page 26.

7. Review the LiveCycle Configuration Manager task summary list and click **Next**.
8. Review the Next Steps information. When finished, click **Exit** to exit LiveCycle Configuration Manager.
9. After you finish configuring LiveCycle ES, you must complete the post-configuration activities that apply to your solution implementation. For more information, see "Post-Configuration Activities" on page 15.

Configuring LiveCycle ES using Custom Mode

Custom Mode allows you to customize the system configuration and requires some advanced knowledge.

You can view the configuration progress at any time by clicking View Process Log.

➤ **To configure LiveCycle ES using Custom Mode:**

1. Ensure that the appropriate solution components are selected and click **Next**.
2. On the Task Selection screen, ensure that all the available options are selected. (The Configure Application Server option and Validate Application Server Configuration option are not available.)
3. Click **Next**.
4. Review the list of LiveCycle ES EAR files, click **Configure**, and then click **Next**.
5. On the Configure LiveCycle screen, select the fonts for the product and perform the tasks, as needed:
   - In the **Customer Fonts directory** box, type the path or browse to the directory that contains the fonts to add.

     Note: Your right to use fonts provided by parties other than Adobe is governed by the license agreements provided to you by such parties in connection with those fonts, and is not covered under your license to use Adobe software. Adobe recommends that you review and ensure you are in compliance with all applicable non-Adobe license agreements before using non-Adobe fonts with Adobe software, particularly with respect to use of fonts in a server environment.
   - (Optional) To change the default locations of the Adobe Server Fonts and System Fonts directories, type the path or browse to the directory.

- (Optional) To specify the locations of the Temp directory and Global Document Storage root directory, click **Browse**.
- To configure the directories, click **Configure**.
- To enable FIPS, ensure that **Enable Federal Information Processing Standards (FIPS) 140-2 cryptography** is selected. Select this option only if you require FIPS to be enforced.

When the configuration is complete, click **Next**. The configured archives are located in the *[LiveCycleES root]*\configurationManager\export folder.

6. Click **Next**.
7. **(Connector for EMC Documentum and Connector for IBM FileNet only)** Review the LiveCycle ES connector configuration information, and click **Next**. After you finish configuring LiveCycle ES, you must configure the Connector for EMC Documentum service and the Connector for IBM FileNet service. For more information, see "Configuring the Connector for EMC Documentum service" on page 22.
8. Review the list of LiveCycle ES EAR files to be deployed, click **Deploy**, and then click **Next**.
9. Verify the host and port information, click **Initialize,** and then click **Next**.
10. **(Business Activity Monitoring ES only)** On the Initialize Business Activity Monitoring screen, provide the information for the following fields, click **Initialize**, and then click **Next**:

    Database type: The database on which BAM metadata is running.

    BAM Host: The name or IP address of the computer that hosts the application server on which BAM Server is running.

    BAM HTTP Port: The HTTP service port that the database uses (for example, 9080 for IBM® WebSphere®, 8080 for JBoss, or 7001 for BEA WebLogic®).

    BAM Administrator User ID: The administrator ID required to log in to BAM Workbench. The default User ID is `system`.

    BAM Administrator Password: The password to log in to BAM Workbench. The default password is `manager`.
11. Review the LiveCycle ES server information. This information will be used when you log in to the LiveCycle Administration Console.
12. (Optional) To test the server connection, click **Test Server Connection** and then click **Next**.
13. Review the list of components, some of which are packaged as LCA files, click **Deploy**, and then click **Next**.
14. To validate the deployment of the components, click **Validate** and then click **Next**.
15. **(LiveCycle Reader Extensions ES only)** Choose one of these options:
    - Browse to the location of your LiveCycle Reader Extensions ES Rights credential file, type your credential password, type the name for the configured credential that will be displayed in the Reader Extensions ES solution component, and then click **Configure**.
    - To skip this step and complete the Rights credential configuration using the LiveCycle Administration Console, select **Configure later using LiveCycle Administration Console** and click **Next**. In the LiveCycle Administration Console, go to **Home** > **Settings** > **Trust Store Management** > **Credentials**.

16. On the LiveCycle ES Samples Import screen, choose one of these options:
    - Click **Import** to import the LiveCycle ES Samples, and then click **Next**.
    - To skip this step, select **Skip LiveCycle ES Samples Import** and click **Next**. You can import the samples at a later date by restarting LiveCycle Configuration Manager and choosing to import the samples.

Caution: Do not import the LiveCycle ES Samples if either of these options apply to your situation:

- If you are deploying LiveCycle ES to a production system. Importing the samples creates users with default passwords, which may be a security concern for your production environment.
- If you are deploying either the Connector for EMC Documentum service or the Connector for IBM FileNet service and you want to import LiveCycle ES Samples into the Documentum repository or FileNet object store, you need to skip this step. You can import the samples after you configure, enable, and activate the ECM to be the repository provider using LiveCycle Administration Console. For more information, see "Configuring the Connector for EMC Documentum service" on page 22 or "Configuring the Connector for IBM FileNet service" on page 26.

17. On the Summary page, click **Exit**.

18. After you finish configuring LiveCycle ES, you must complete "Post-Configuration Activities" on page 15.

2 Post-Configuration Activities

This section details post-installation tasks that should be completed before using LiveCycle ES.

Viewing the log files

Events, such as run-time or startup errors, are recorded to the application server log files. If you have problems deploying to the application server, you can use the log files to help you find the problem.

The JBoss Application Server log files are located in the *[LiveCycleES root]*/jboss/server/all/log directory.

The LiveCycle Configuration Manager log files are in the *[LiveCycleES root]*/configurationManager/log directory.

You can open the log files by using any text editor.

Accessing LiveCycle Administration Console

LiveCycle Administration Console is the web-based portal for accessing a variety of configuration pages, where you set run-time properties that control the way LiveCycle ES operates. When you log in to the LiveCycle Administration Console, you can change the attributes and behaviors of specific services and change global settings. You access Archive Administration, which administrators use for deploying services to a production environment, from within LiveCycle Administration Console.

The default user name and password for logging in to the LiveCycle Administration Console is *administrator* and *password*. After you log in the first time, you can access User Management and change the password for the LiveCycle ES administrator account.

Before you access the LiveCycle Administration Console, LiveCycle ES must be deployed and running on your application server.

For information about using LiveCycle Administration Console, see *Adobe Administration Help* (available from the Help menu of the Administrator page).

➤ **To access LiveCycle Administration Console:**

1. Open a web browser and enter this URL:

   http://localhost:8080/adminui (local deployment using the default port)

2. Log in using the default user name and password:

   User name: administrator

   Password: password

3. Click **Login**.

4. Click **Services** to access the services' pages, and click **Settings** to access the Core System Settings, User Management, and Trust Store Management pages.

Accessing solution component web applications

After LiveLiveCycle ES is deployed, you can access the web applications that are associated with the following solution components:

- Adobe LiveCycle Reader Extensions ES
- Adobe LiveCycle Workspace ES
- Adobe LiveCycle Rights Management ES
- Adobe LiveCycle Business Activity Monitoring ES

After you access the web applications, using the default administrator permissions to ensure that they are accessible, you can create additional users and roles so that others can log in and use the applications. For information, see the *User Management Help*, which is accessible from *LiveCycle Administration Console Help* or the User Management page.

➤ **To access Reader Extensions ES web application:**

1. Open a web browser and enter this URL:

   http://localhost:8080/ReaderExtensions (local deployment using the default port)

2. Log in using the default user name and password:

   User name: administrator

   Password: password

Note: You must have administrator or super user privileges to log in using the default user name and password. To allow other users to access Reader Extensions ES, you must create the user accounts in User Management and grant the users the role Reader Extensions Web Application.

➤ **To access Workspace ES web application:**

1. Open a web browser and enter this URL:

   http://localhost:8080/workspace (local deployment using the default port)

2. Log in using the default user name and password:

   User name: administrator

   Password: password

➤ **To access Rights Management ES web application:**

1. Open a web browser and enter this URL:

   http://localhost:8080/edc/Login.do (local deployment using the default port)

2. Log in using the default user name and password:

   User name: administrator

   Password: password

Note: Before you can access Rights Management ES, you must create a user account in User Management and assign it the role LiveCycle Rights Management End User, and then log in to Rights Management ES using the login information associated with that user. The Super Administrator user name and password will not have access to Rights Management ES.

For information about configuring SSL and setting up users and roles for Rights Management ES, see *Administering LiveCycle ES* at http://www.adobe.com/go/learn_lc_administration.

➤ **To access Business Activity Monitoring ES web application:**

1. Open a web browser and enter one of these URLs:

   http://localhost:8080/bam/login/dashboard.htm (local deployment using the default port)

   http://localhost:8080/bam/login/workbench.htm (local deployment using the default port)

2. Log in using the default user name and password:

   User name: system

   Password: manager

Accessing User Management

Adobe User Management allows administrators to maintain a database of all users and groups. The database can be synchronized with one or more third-party user directories to include users and groups from those databases. User Management provides authentication, authorization, and user management for LiveCycle ES solution components, including Reader Extensions ES, Workspace ES, Rights Management ES, LiveCycle Process Management ES, and LiveCycle Forms ES.

➤ **To access User Management:**

1. Open a web browser and enter this URL:

   http://localhost:8080/adminui (local deployment using the default port)

2. Log in using the default user name and password:

   User name: administrator

   Password: password

3. Click **Settings** > **User Management**.

Note: For information about configuring users with User Management, click **User Management Help** in the upper-right corner of the User Management page.

Encrypting the plaintext password

To encrypt the plaintext password in the data source configuration, follow the instructions at http://wiki.jboss.org/wiki/Wiki.jsp?page=EncryptingDataSourcePasswords.

Note: This step is optional. You should consider whether your security policy allows for passwords to be stored in clear text files.

Managing the MySQL database

The turnkey installation and configuration supports the transaction-safe storage engine (InnoDB) in MySQL. This means that all document services must operate in the same storage engine and have consistent version support. For details about the InnoDB storage engine, go to http://dev.mysql.com/doc/refman/5.0/en/innodb.html.

Enabling Federal Information Processing Standard (FIPS)

LiveCycle ES provides a FIPS mode to restrict data protection to Federal Information Processing Standard (FIPS) 140-2 approved algorithms using the RSA BSAFE Crypto-C 2.1 encryption module.

If you did not enable this option using LiveCycle Configuration Manager during the LiveCycle ES configuration or if you enabled it but want to turn it off, you can change this setting through LiveCycle Administration Console.

To modify FIPS mode, you must restart the server.

FIPS mode does not support encryption algorithms used in Acrobat versions earlier than 7.0. If FIPS mode is enabled and you use the Encryption service to encrypt the PDF using a password with a compatibility level set to Acrobat 5, the encryption attempt will fail with an error.

In general, when FIPS is enabled, the Assembler service will not apply password encryption to any document. If this is attempted, a FIPSModeException is thrown indicating that `"Password encryption is not permitted in FIPS mode."` Additionally, the Document Description XML (DDX) `PDFsFromBookmarks` element is not supported in FIPS mode when the base document is password-encrypted.

➤ **To turn FIPS mode on or off:**

1. Log in to LiveCycle Administration Console.
2. Browse to **Settings** > **Core System** > **Configurations** > **Core Configurations**.
3. Select **Enable FIPS** to enable FIPS mode or deselect it to disable it.
4. Click **OK**.
5. Restart the application server.

Note: LiveCycle ES software does not validate code to ensure FIPS compatibility. It provides a FIPS operation mode so that FIPS-approved algorithms are used for cryptographic services from the FIPS-approved libraries (RSA).

Configuring LiveCycle ES to access LDAP

Use the following procedure as a guideline when configuring User Management to support authentication using Lightweight Directory Access Protocol (LDAP). For a complete list of supported LDAP servers, see *Preparing to Install LiveCycle ES* at http://www.adobe.com/go/learn_lc_prepareInstall.

➤ **To configure User Management with LDAP:**

1. Open a web browser and enter this URL:

   http://localhost:8080/adminui (local deployment using the default port)

2. Log in using the default user name and password:

   User name: administrator

   Password: password

3. Select **Settings** > **User Management** > **Domain Management** and click **New Enterprise Domain** or **New Local Domain**.
4. In the **ID** box, type a unique identifier for the domain and, in the **Name** box, type a descriptive name for the domain.
5. Choose whether to enable account locking.
6. Click **Add Authentication** and, in the **Authentication Provider** list, select **LDAP**.
7. Click OK and, on the page that appears, click **Add Directory**.
8. In the **Profile Name** box, type a unique name, (optional) select **Custom SPI Provider** to enable a custom SPI provider, and then click **Next**.
9. Perform the appropriate tasks:
   - If you selected **Custom SPI Provider**, click **Finish**; otherwise, specify values for the **Server**, **Port**, **SSL**, **Binding**, and **Populate page with** options.
   - If you select **User** for the **Binding** option, you must also specify values for the **Name** and **Password** fields.
   - (Optional) Select **Retrieve Base DN** to retrieve base domain names, as required. When finished, click **Next**.

   For details about the settings, see *User Management Help* at http://www.adobe.com/go/learn_lc_adminUM.
10. Configure the user settings, click **Next**, configure group settings, as required, and then click **Next**. For details about the settings, see *User Management Help* at http://www.adobe.com/go/learn_lc_adminUM.
11. (Optional) Test your configuration:
    - Click **Test**.
    - On the Test Directory pane, in the **Find** box, enter an object name and, in the **using** box, select the object's type, such as **Login ID**.
    - Click **Test**. If successful, your object's details will be displayed. If so, click **Back**.
12. Click **OK** to exit the Add Directory page, and then click **OK** again.

Configuring PDF Generator ES

If you installed PDF Generator ES as part of your LiveCycle ES solution, complete the following tasks:

- "Setting environment variables" on page 20
- "Starting JBoss with HTTP proxy host setting" on page 20
- "Setting the Adobe PDF Printer as the default printer" on page 21
- "Configuring Acrobat 8.1" on page 21
- "Ensuring all languages are displayed after conversion" on page 22

Setting environment variables

If you installed the PDF Generator ES solution component and configured it to convert files to PDF, for some file formats, you must manually set an environment variable that contains the absolute path of the executable that is used to start the corresponding application. The table below lists the native applications for which PDF Generator ES requires you to set up environment variables.

Application	Environment variable	Example
Acrobat	`Acrobat_PATH`	`C:\Program Files\Adobe\Acrobat 8.1\Acrobat\Acrobat.exe`
FrameMaker®	`FrameMaker_PATH`	`C:\Program Files\Adobe\FrameMaker7.1\FrameMaker.exe`
Notepad	`Notepad_PATH`	`C:\WINDOWS\Notepad.exe`
OpenOffice	`OpenOffice_PATH`	`C:\Program Files\OpenOffice.org 2.0`
PageMaker®	`PageMaker_PATH`	`C:\Program Files\Adobe\PageMaker 7.0\PageMaker.exe`
PhotoShop®	`Photoshop_PATH`	`C:\Program Files\Adobe\Adobe Photoshop CS2\Photoshop.exe`
WordPerfect	`WordPerfect_PATH`	`C:\Program Files\WordPerfect Office 12\Programs\wpwin12.exe`

Note: The environment variable `OpenOffice_PATH` is set to the installation folder instead of the path to the executable.

You do not need to set up the paths for Microsoft Office applications such as Word, PowerPoint, Excel, Visio, and Project, or for AutoCAD. The Generate PDF service starts these applications automatically if they are installed on the server.

➤ **To create a new Windows environment variable:**

1. Select **Start** > **Control Panel** > **System**.
2. Click the **Advanced** tab.
3. Click **Environment Variables**.
4. In the System variables section, click **New.**
5. Enter the environment variable name you need to set (for example**,** `Photoshop_PATH`). This folder is the folder containing the executable file. For example, type the following code:

```
D:\Program Files\Adobe\Adobe Photoshop CS2\Photoshop.exe
```

Starting JBoss with HTTP proxy host setting

If the computer on which LiveCycle ES is running uses proxy settings to access external websites, the application server should be started with the following values set as Java Virtual Machine (JVM) arguments:

```
-Dhttp.proxyHost=[server host]
-Dhttp.proxyPort=[server port]
```

➤ **To add the setting to JBoss:**

1. Navigate to *[JBOSS HOME]*/bin/ and open the run.bat or run.sh file in a text editor.
2. Add the following text to the file:

```
Set JAVA_OPTS=%JAVA_OPTS%
   -Dhttp.proxyHost=[server host]
   -Dhttp.proxyPort=[server port]
```

3. Save and close the file.

Setting the Adobe PDF Printer as the default printer

You must set the Adobe PDF Printer to be the default printer on the server. If the Adobe PDF Printer is not set as the default, PDF Generator ES cannot convert files successfully.

➤ **To set the default printer:**

1. Select **Start** > **Printers and Faxes**.
2. In the Printers and Faxes window, right-click **Adobe PDF** and select **Set as Default Printer**.

Configuring Acrobat 8.1

This procedure is required only if you upgraded to or installed Acrobat 8.1 after completing the LiveCycle ES installation. It can be completed after you run LiveCycle Configuration Manager and deploy LiveCycle ES to the application server.

➤ **To configure Acrobat 8.1 for use with PDF Generator ES:**

1. If a previous version (8.0 or earlier) of Acrobat is installed, uninstall it using Add or Remove Programs in the Windows Control Panel.
2. Navigate to one of the following folders on the LiveCycle ES installation media:
   - additional\acrobat\efg\
   - additional\acrobat\jpn\
3. Install Acrobat 8.1 by running the AutoPlay.exe file.
4. Navigate to the additional\scripts folder on the LiveCycle ES installation media.
5. Run the following batch file:

```
Acrobat_for_PDFG_Configuration.bat [LiveCycleES root]
```

➤ **To validate the Acrobat 8.1 installation:**

1. Navigate to a PDF file on your system and double-click it to open it in Acrobat.
2. If the PDF file opens successfully, Acrobat 8.1 is installed correctly. If the PDF fails to open correctly, uninstall Acrobat and reinstall it.

Note: Ensure that you dismiss all the Acrobat dialog boxes that are displayed after Acrobat installation is complete, and disable the automatic updates for Acrobat.

Set the environment variable, `Acrobat_PATH` to point to Acrobat.exe (for example, C:\Program Files\Adobe\Acrobat 8.0\Acrobat\Acrobat.exe.

Ensuring all languages are displayed after conversion

When HTML files are converted to PDF using PDF Generator ES, some East Asian languages, such as Japanese, Korean, and Chinese, as well as left-to-right languages, such as Arabic, Armenian, Georgian, Hebrew, Indic, Thai, and Vietnamese, may not be displayed in the PDF file.

To display these languages, appropriate fonts must be present on the client and server.

➤ **To ensure that East Asian characters are displayed in Windows:**

1. Select **Start** > **Control Panel** and open **Regional and Language Options**.
2. On the **Languages** tab, select **Install Files for East Asian Languages**.
3. On the **Advanced** tab, select all the options under Code Page Conversion Tables.

If converted PDF files are still missing fonts, verify that the Arial Unicode MS (True Type) font (ARIALUNI.TTF) is present in the C:\WINDOWS\Fonts directory.

Configuring the Connector for EMC Documentum service

If you installed the Connector for EMC Documentum service as part of your LiveCycle ES solution, complete the following procedure to configure the service to connect to the Documentum repository.

➤ **To configure Connector for EMC Documentum:**

1. Locate the `adobe-component-ext.properties` file in the *[LiveCycleES root]*\jboss\bin folder, and add a new system property that provides the location of the Documentum Content Server config folder and the following Documentum Foundation Classes JAR files:
   - dfc.jar
   - dfcbase.jar

   The new system property should take this form:

   ```
   [component id]_[component version].ext=[JAR files and/or folders]
   ```

   For example, using default Content Server and Documentum Foundation Classes installations, you add the following system property on a new line, with no line breaks, and end the line with a carriage return, to the file:

   ```
   com.adobe.livecycle.ConnectorforEMCDocumentum_8.0.3174.1.156395.1.ext
   =C:/Documentum/Config,C:/Program Files/Documentum/Shared/dfc.jar,
   C:/Program Files/Documentum/Shared/dfcbase.jar
   ```

   You can determine the version of the component by logging in to the LiveCycle Administration Console and navigating to **Services** > **Archive Administration** > **Service Management**, and then searching for the component. The version number is listed in the **Component Version** column.

2. If JBoss is not currently running, start the JBoss for Adobe LiveCycle ES service. Otherwise, if JBoss is currently running, stop and then restart the service.

3. Open a web browser and enter this URL:

   http://localhost:8080/adminui (local deployment using the default port)

4. Log in using the default user name and password:

   User name: administrator

   Password: password

5. Navigate to **Services** > **LiveCycle ES Connector for EMC Documentum** > **Configuration Settings**.

6. Type all of the required Documentum repository information. To use Documentum as your repository provider, in the Repository Service Provider Information area, select **EMC Documentum Repository Provider**, and then click **Save**. For more information about the Documentum repository information, see *Documentum Administration Help* at www.adobe.com/go/learn_lc_adminDocumentum.

7. (Optional) Navigate to **Repository Credentials Settings**, click **Add**, specify the Docbase information, and then click **Save**. For more information about the Documentum repository information, see *Documentum Administration Help* at www.adobe.com/go/learn_lc_adminDocumentum.

8. Navigate to **Services** > **Archive Administration** > **Service Management**, select the following services, and then click **Start**:
   - EMCDocumentumAuthProviderService
   - EMCDocumentumContentRepositoryConnector
   - EMCDocumentumRepositoryProvider

   If any of the services do not start correctly, check the settings entered in step 6.

9. Do one of the following tasks:
   - To use the Documentum Authorization service (EMCDocumentumAuthProviderService) to display content from a Documentum repository in the Resources view of Workbench ES, continue with this procedure. Using the Documentum Authorization service overrides the default LiveCycle ES authorization and must be configured to log in to Workbench ES using Documentum credentials.
   - To use the LiveCycle ES repository, log in to Workbench ES using the LiveCycle ES super administrator credentials (by default, *Administrator* and *password*). You have now completed the required steps for this procedure. The credentials provided in step 6 are used for accessing the default repository in this case and use the default LiveCycle ES authorization service.

10. Select **Start** > **Control Panel** > **Administrative Tools** > **Services** and restart the **JBoss for Adobe LiveCycle ES** service.

11. Log in to the LiveCycle Administration Console, navigate to **Settings** > **User Management** > **Domain Management**, and click **New Enterprise Domain**.

12. Type a domain ID and name. The domain ID is the unique identifier for the domain. The name is a descriptive name for the domain.

13. Add a custom authentication provider:
    - Click **Add Authentication**.
    - In the **Authentication Provider** list, select **Custom**, and select **EMCDocumentumAuthProvider**.
    - Click **OK**.

14. Add an LDAP authentication provider:
    - Click **Add Authentication**.
    - In the **Authentication Provider** list, select **LDAP**.
    - Click **OK**.

15. Add an LDAP directory:
    - Click **Add Directory**.
    - In the **Profile Name** box, type a unique name, and then click **Next**.
    - Specify values for the **Server**, **Port**, **SSL**, **Binding**, and **Populate page with** options. If you select **User** for the **Binding** option, you must also specify values for the **Name** and **Password** fields. (Optional) Select **Retrieve Base DN** to retrieve base domain names, as required. When finished, click **Next**.

      For details about the settings, see *User Management Help* at www.adobe.com/go/learn_lc_adminUM.
    - Configure the user settings, click **Next**, configure group settings, as required, and then click **Next**.

      For details about the settings, see *User Management Help* at www.adobe.com/go/learn_lc_adminUM.
16. Click **OK** to exit the Add Directory page, and click **OK** again.
17. Select the new enterprise domain and click **Sync Now**. Depending on the number of users and groups in your LDAP network and the speed on your connection, the synchronization process may take several minutes.

    To verify the status of the synchronization, click **Refresh** and view the status in the **Current Sync State** column.
18. Click **Settings** > **User Management** > **Users and Groups**.
19. Search for users that were synchronized from LDAP. Select one or more users, click **Assign Role**, select one or more LiveCycle ES roles, and then click **OK**. Click **OK** a second time to confirm the role assignment. Repeat this step for all users you assign roles to. For more information about assigning LiveCycle ES roles, see *User Management Help* at www.adobe.com/go/learn_lc_adminUM.
20. Start Workbench ES and log in using the following credentials:

    Username: *[username]@[repository_name]*

    Password: *[password]*

    The Documentum repository should now be visible in the Resources view within Workbench ES. If you do not log in using the *username@repository name*, Workbench ES attempts to log in to the default repository specified in step 6.

After you configure your Connector for EMC Documentum service, you should see *Administering LiveCycle ES* at www.adobe.com/go/learn_lc_administration for information on correctly configuring Workbench ES functions properly with your Documentum repository.

Creating the XDP format in your Documentum repository

Before users can store and retrieve XDP files from a Documentum repository, you must do one of these tasks:

- Create a corresponding XDP format in each repository where users will access XDP files.
- Configure the Connector for EMC Documentum service to use a Documentum Administrator account when accessing the Documentum repository. In this case, the XDP format is created by the Connector for EMC Documentum service whenever it is required.

➤ **To create the XDP format on Documentum Content Server using Documentum Administrator:**

1. Log in to Documentum Administrator.
2. Click **Formats**.
3. Select **File** > **New** > **Format**.
4. Type the following information into the corresponding fields:

   Name: `xdp`

   Default File Extension: `xdp`

   Mime Type: `application/xdp`
5. Repeat steps 1 - 4 for all other Documentum repositories where users will store XDP files.

➤ **To configure the Connector for EMC Documentum service to use a Documentum Administrator:**

1. Open a web browser and enter this URL:

   http://localhost:8080/adminui (local deployment using the default port)
2. Log in using the default user name and password:

   User name: administrator

   Password: password
3. Click **Services** > **LiveCycle ES Connector for EMC Documentum** > **Configuration Settings**.
4. In the Documentum Principal Credentials Information area, update the following information and then click **Save**:

   User Name: *[Documentum Administrator user name]*

   Password: *[Documentum Administrator password]*
5. Click **Repository Credentials Settings**.
6. Select a repository from the list or, if none exist, click **Add**.
7. Type the following information:

   Repository Name: *[Repository Name]*

   Repository Credentials User Name: *[Documentum Administrator user name]*

   Repository Credentials Password: *[Documentum Administrator password]*
8. Click **Save**.
9. Repeat steps 7 - 9 for all repositories where users will store XDP files.

Configuring the Connector for IBM FileNet service

If you installed the Connector for IBM FileNet service as part of your LiveCycle ES solution, complete the following procedure to configure the service to connect to the FileNet object store.

➤ **To configure Connector for IBM FileNet:**

1. Locate the `adobe-component-ext.properties` file in the *[LiveCycleES root]*\jboss\bin folder and add a new system property that provides the location of the following Application Engine JAR files:
   - activation.jar
   - javaapi.jar
   - log4j-1.2.8.jar
   - mailapi.jar
   - p8cjares.jar
   - soap.jar
   - xercesimpl.jar
   - xml-apis.jar

   The new system property should take this form:

   ```
   [component id]_[component version].ext=[JAR files and/or folders]
   ```

   For example, using a default Application Engine installation, add the following system property on a new line, with no line breaks, and end the line with a carriage return, to the file:

   ```
   com.adobe.livecycle.ConnectorforIBMFileNet_8.0.3174.1.156395.1.ext=
   C:/Program Files/FileNet/lib2/activation.jar,
   C:/Program Files/FileNet/lib2/javaapi.jar,
   C:/Program Files/FileNet/lib2/log4j-1.2.8.jar,
   C:/Program Files/FileNet/lib2/mailapi.jar,
   C:/Program Files/FileNet/lib2/p8cjares.jar,
   C:/Program Files/FileNet/lib2/soap.jar,
   C:/Program Files/FileNet/lib2/xercesImpl.jar,
   C:/Program Files/FileNet/lib2/xml-apis.jar
   ```

   You can determine the version of the component by logging in to LiveCycle Administration Console and navigating to **Services** > **Archive Administration** > **Service Management**, and then searching for the component. The version number is listed in the **Component Version** column.

2. If JBoss is not currently running, start the JBoss for Adobe LiveCycle ES service. Otherwise, if JBoss is currently running, stop and then restart the service.

3. Open a web browser and enter this URL:

   http://localhost:8080/adminui (local deployment using the default port)

4. Log in using the default user name and password:

   User name: administrator

   Password: password

5. Navigate to **Services** > **LiveCycle ES Connector for IBM FileNet** > **Configuration Settings**.

6. Type all of the required FileNet repository information and, in the Repository Service Provider Information area, select **IBM FileNet Repository Provider**, and then click **Save**. For more information about the FileNet repository information, see *FileNet Administration Help* at http://www.adobe.com/go/learn_lc_adminFileNet.

   Note: The credentials you provide during this step are validated when the IBM FileNet repository services are started in the next step. If the credentials are invalid, an error is thrown and the services will fail to start.

7. Navigate to **Services** > **Archive Administration** > **Service Management**, click the following services, and then click **Start**:
   - IBMFileNetAuthProviderService
   - IBMFileNetContentRepositoryConnector
   - IBMFileNetRepositoryProvider

   If any of the services do not start correctly, check the settings entered in step 6.

8. Do one of the following tasks:
   - To use the FileNet Authorization service (IBMFileNetAuthProviderService) to display content from a FileNet object store in the Resources view of Workbench ES, continue with this procedure. Using the FileNet Authorization service overrides the default LiveCycle ES authorization and must be configured to log in to Workbench ES using FileNet credentials.
   - To use the LiveCycle ES repository, log in to Workbench ES using the LiveCycle ES super administrator credentials (by default, `Administrator` and `password`). You have now completed the required steps for this procedure. The credentials provided in step 6 use the default LiveCycle ES authorization service for accessing the default repository in this case.

9. Select **Start** > **Control Panel** > **Administrative Tools** > **Services** and restart the **JBoss for Adobe LiveCycle ES** service.

10. Log in to the LiveCycle Administration Console, navigate to **Settings** > **User Management** > **Domain Management**, and click **New Enterprise Domain**.

11. Type a domain ID and name. The domain ID is the unique identifier for the domain. The name is a descriptive name for the domain.

12. Add a custom authentication provider:
    - Click **Add Authentication**.
    - In the **Authentication Provider** list, select **Custom**, and select **IBMFileNetAuthProviderService**.
    - Click **OK**.

13. Add an LDAP authentication provider:
    - Click **Add Authentication**.
    - In the **Authentication Provider** list, select **LDAP**.
    - Click **OK**.

14. Add an LDAP directory:
    - Click **Add Directory**.
    - In the **Profile Name** box, type a unique name, and then click **Next**.
    - Specify values for the **Server**, **Port**, **SSL**, **Binding**, and **Populate page with** options. If you select **User** for the **Binding** option, you must also specify values for the **Name** and **Password** fields. (Optional) Select **Retrieve Base DN** to retrieve base domain names, as required. When finished, click **Next**.

      For details about the settings, see *User Management Help* at http://www.adobe.com/go/learn_lc_adminUM.
    - Configure the user settings, click **Next**, configure group settings, as required, and then click **Next**.

      For details about the settings, see *User Management Help* at http://www.adobe.com/go/learn_lc_adminUM.
15. Click **OK** to exit the Add Directory page, and click **OK** again.
16. Select the new enterprise domain and click **Sync Now**. Depending on the number of users and groups in your LDAP network and the speed on your connection, the synchronization process may take several minutes.

    To verify the status of the synchronization, click **Refresh** and view the status in the **Current Sync State** column.
17. Click **Settings** > **User Management** > **Users and Groups**.
18. Search for users that were synchronized from LDAP. Select one or more users, click **Assign Role**, select one or more LiveCycle ES roles, and then click **OK**. Click **OK** a second time to confirm the role assignment. Repeat this step for all users you want to assign roles to. For more information about assigning LiveCycle ES roles, see *User Management Help* at http://www.adobe.com/go/learn_lc_adminUM.
19. Start Workbench ES and log in using the following credentials:

    Username: *[username]@[repository_name]*

    Password: *[password]*

    The FileNet object store should now be visible in the Resources view within Workbench ES. If you do not log in using the *username@repository name*, Workbench ES attempts to log in to the default repository specified in step 6.

After you configure your Connector for IBM FileNet service, you should see *Administering LiveCycle ES* at www.adobe.com/go/learn_lc_administration for information on correctly configuring Workbench ES functions properly with your FileNet repository.

Uninstalling LiveCycle ES

Before removing MySQL, back up any data that you do not want to lose.

➤ **To remove the product files:**

1. Use **Add or Remove Programs** in the Windows Control Panel to start the uninstall program.
2. Follow the on-screen instructions, and then click **Finish**.
3. Restart your computer.