INSTALLING
ADOBE® DIGITAL ENTERPRISE PLATFORM

Prerelease

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Contents

Chapter 1: Adobe Digital Enterprise Platform overview

The Adobe® Digital Enterprise Platform (ADEP) is based on the Content Repository Extreme (CRX) 2.2 platform. ADEP includes the following components:

Content Repository Extreme (CRX) Is a highly scalable content repository system that manages all the content as defined in the Content Repository for Java Technology API Version 2.0 specification, Java Content Repository (JCR) 2.0.

Foundation Provides the base platform for building ADEP applications, and includes Data Services, security, and integration with the LiveCycle User Manager.

Composite Application Framework Provides a framework for modular assembly of Flex and HTML assets into a rich experience for web and Adobe Interactive Runtime (AIR) environments.

Process Management Client Components Provides software components and a user interface for building, running, and managing business processes. It also provides integration with LiveCycle Process Management.

Platform SDK is a grouping of technologies that are characteristic of all Customer Experience Management (CEM) applications. The technologies are Security, Content, DataServices, Client Component Framework. Each of these technologies spans the client and server tiers. These capabilities are delivered as a single SDK package (containing SWC and JAR files) that is placed on the developer's file system and referenced by Adobe Flash Builder.

RIA Tooling Includes software and plug-ins for Flash Builder that enable you to create applications using Flex, Data Services, and Composite Application Framework.

Samples Includes Test Drive samples for RIA and Data Services, as well as Composite Application Framework samples.

Chapter 2: System requirements

Operating System	Architecture	JDK
Microsoft Windows Server 2008 R1/R2	64-bit OS / 64-bit JVM	Java 6 update 24 or later (64-bit)

Note: The 32-bit and 64-bit versions of Windows 7 and Windows Vista are supported only for evaluation and development purposes.

2.1 JAVA_HOME environment Variable

Before you install ADEP, ensure that you have 64-bit Sun JDK 6 update 24 or later installed on your machine. Also, set the JAVA_HOME environment variable to point to the directory where the Sun Java JDK is installed.

2.1.1 Set the JAVA_HOME and Path environment variables

1 Select **Start** > **Control Panel** > **System**.

2 Click the **Advanced** tab and click **Environment Variables**.

3 In the **System Variables** area, click **New**.

4 In the **New System Variable** box, type `JAVA_HOME` as the variable name.

5 In the **Value** field, specify the path to the directory where you installed the Java JDK and that contains the `bin` directory. For example, `C:\Program Files\Java\jdk1.6.0_24`.

6 Click **Ok**.

7 In the System Variables area, select **Path** and click **Edit**.

8 Append `%JAVA_HOME%\bin;` at the beginning of the value.

9 Click **Ok**.

2.1.2 Verify the JAVA_HOME environment variable setting

Open the command prompt and execute the following command:

```
java -version
```

The command returns the Java version installed on your machine (for example, 1.6.0_24).

Chapter 3: RIA Quickstart

The RIA Quickstart JAR file automatically installs a JCR-compliant repository, CRX, and Apache Sling, which is a web framework for developing web applications on Java. In addition, it deploys other ADEP components described in "Adobe Digital Enterprise Platform overview" on page 1.

3.1 Generate the QuickStart license key

Before you run the RIA Quickstart, perform the following steps to obtain a license key:

1 Go to http://www.adobe.com/go/adep-prerelease-reg and log in using your Adobe ID user name and password. The License Key Provisioning page opens.

2 Click **Prerelease Agreement.pdf** and review the license agreement for prerelease software.

3 Go back to the License Key Provisioning page and click **Retrieve License Key**.

The license key is generated and displayed on the web page and also sent to the email address associated with your Adobe ID. Make a note of the license key as it will be required while installing ADEP.

3.2 Run the RIA Quickstart

1 Download the *ria-quickstart-10.0.0_<latest>.jar* file from the **Downloads** section of the prerelease website.

   Note: ADEP will be installed in the same directory where the Quickstart JAR file is placed. Therefore, you must download or move the file to the desired installation directory. Also, you must ensure that the installation directory path doesn't contain any space characters.

   Important: Ensure that there is no other JAR file present in the installation directory as it will cause problems with the installation.

2 *(Optional)* The default port number for the CRX server is **4502**. However, you can change the default port number by renaming the JAR file as ria-quickstart-p<*port*>.jar. Replace <*port*> with the desired port number for the CRX server.

   Note: If the default or the specified port is not available, the Quickstart configures the next available port.

   You can optionally configure the ADEP security to integrate with LiveCycle by including -**lc** in the filename. For example, ria-quickstart-lc-p<*port*>.jar. This configuration is required if your ADEP applications need to interact with the LiveCycle services and components.

   Note: You can manually integrate the ADEP security with the LiveCycle later. For more information, see "6.1 Manually configure ADEP security" on page 9.

3 Double-click the JAR file to begin the installation program. It launches the Quickstart window, which displays the progress of the installation. When the installation is complete and the CRX server is running, the Quickstart window displays the **ON** button, and the registration page for ADEP page opens in a browser window.

   You can click the ON button to stop the running CRX server. The ON button changes to OFF as the server stops. To restart the server, double-click the JAR file.

If the login page does not open automatically, enter http://[*host*]:[*port*]/ in your browser. The default values for host and port are **localhost** and **4502**, respectively.

Note: The first time you run the JAR file, it extracts all the files contained in it, which may take several minutes. The subsequent startups are quicker as the repository and other associated files have already been extracted and placed in the installation directory.

4   On the registration page, review and accept the license agreement, specify your name and the license key, and click **Register**. A dialog box displaying the registration details opens.

5   Click **Close** to exit the dialog box. The login page for ADEP opens.

6   Specify admin/admin as the username/password and click **Sign In**. The ADEP Welcome page opens.

Important: Do not delete the RIA Quickstart JAR file from the installation directory as it will cause some operations to fail. Also, the JAR file is required to restart the server.

Chapter 4: Prepare the development environment

You need to prepare the development environment for creating applications using the ADEP.

You can install Adobe Flash Builder 4.5, which is an Eclipse-based Integrated Development Environment (IDE). Flash Builder enables you to create rich Internet applications for various devices using the Flex framework and ActionScript. See "4.1 Install Adobe Flash Builder 4.5" on page 5.

In addition, the following plug-ins for Flash Builder are available publically. These plug-ins compose the RIA tooling.

Adobe Data Model Components Provides a framework for developing models using the Adobe application modeling technology. It is a common practice to build the Flex applications on top of an application model.

Adobe Data Model CRX Integration Components Integrates application modeling technology with CRX. Facilitates the development of Data Services applications in the CRX environment.

Adobe Digital Enterprise Platform Document Services Discovery Extension Enables you to quickly build Flex and AIR applications that invoke LiveCycle services through its remoting endpoints. These applications are able to use LiveCycle to process data, create documents, and initiate workflows.

RIA Tooling Enables you to create applications using Flex, Data Services, and Composite Application Framework.

4.1 Install Adobe Flash Builder 4.5

Follow the instructions in the **Downloads** section of the prerelease site for installing Flash Builder.

(Applicable only if Flash Builder is installed on Mac OS) After Flash Builder is installed, perform the following steps:

1 Exit Flash Builder if it is running.

2 Open the Flash Builder installation directory in Finder.

3 Navigate to the *<FB_install_dir>*\eclipse\configuration directory, where *<FB_install_dir>* is the Flash Builder installation directory.

   Note: There is another configuration directory in the <FB_install_dir>\ directory. However, ensure that you navigate to the configuration directory in the <FB_install_dir>\eclipse\ directory.

4 Open the **config.ini** file in a text editor and remove the following lines:

```
osgi.configuration.area=@user.home/Documents/Adobe Flash Builder
4.5/cascaded/<build_number>/configuration
osgi.shared.configuration.area=file\:configuration
osgi.configuration.cascaded=true
```

5 Save and close the file.

The changes will come in effect the next time Flash Builder is started.

4.2 Install plug-ins for Flash Builder

1 Select **Start** > **All Programs**, right-click **Adobe Flash Builder 4.5**, and select **Run as administrator** to launch Flash Builder as an Administrator.

2 Click **Help** > **Install New Software.**

3 Click **Add**.

4 In the Add Repository dialog box, do the following:

- In **Name**, type `ADEP Prerelease Tooling`.

- Copy the following URL and paste into the **Location** field:

    `http://aesplugins.adobe.com/aes/tooling/plugin/10.0-M6/`

- Click **OK**.

5 Click **Select All** to select all available plug-ins and click **Next**.

*For optimum installation performance, deselect **Contact all update sites during install to find required software**. However, if you deselect this option, Flash Builder will not receive updates, if any, from the update sites.*

6 Review the installation details and click **Next**.

7 Review the Adobe Systems Incorporated license agreement, accept the terms, and click **Finish**.

8 When the installation is complete, click **Restart Now**.

9 When Flash Builder restarts, select **Window** > **Reset Perspective**.

*Important: You must reset the perspective, otherwise the menu items contributed by the RIA Tooling will not be available in the **File** > **New** menu in Flash Builder.*

Chapter 5: Deploy RIA SDK and Samples

The RIA SDK is required to develop applications using Composite Application Framework and Data Services.

5.1 Download RIA SDK and samples

1 Go to http://[*host*]:[*port*] and log in using admin/admin as the username/password.

2 Click **Package Share** and log in using your Adobe ID user name and password.

3 Click **Download** next to the **es-sdk-pkg-1.0.0_<*latest*>.zip** package.

4 Click **Download** next to the **es-samples-pkg-1.0.0_<*latest*>.zip** package.

5.2 Install RIA SDK and samples

1 Go to http://[*host*]:[*port*] and click **Packages**. The Package Manager screen opens.

2 Click **Install** next to the **es-sdk-pkg-1.0.0_<*latest*>.zip** package.

3 Click **Install** on the confirmation screen.

4 Go back to the Package Manager screen and click **Install** next to the **es-samples-pkg-1.0.0_<*latest*>.zip** package.

5 Click **Install** on the confirmation screen.

5.3 Create a basic Flex project for ADEP

To create a Flex project for ADEP, you need to first configure the Flash Builder plug-ins.

5.3.1 Configure plug-ins

Note: Ensure that you restarted Flash Builder and selected **Window > Reset Perspective** *after installing Adobe Enterprise Suite extensions for FlashBuilder 4.5. For details, see Install plug-ins for Flash Builder.*

1 Start Flash Builder.

2 Select **Windows > Preferences**.

3 In the left panel, select **Adobe > LiveCycle**.

4 In the **AEP SDK Root Directory** field, specify the location where you want the SDKs to be saved.

5 Click **Retrieve SDK from Server**.

6 *(Optional)* Test the RDS connection.

- Select **Adobe > RDS Configuration**.
- In the **Currently Configured RDS Server panel**, select **Adobe Digital Enterprise Platform (localhost)**.
- Review the server information and click **Test RDS Connection**.

- Click **Test Mosaic Server** to verify that the Composite Application Framework server is available.

7 Click **OK**.

5.3.2 Create and test a Flex project for ADEP

1 In Flash Builder, select **File** > **New** > **Flex Project for Adobe Enterprise Platform**.

2 Specify a project name and click **Next**.

3 Review the server information and click **Finish**. The project opens in Flash Builder.

4 Add elements and save the project.

5 Select **Run** > **Run** or press Ctrl+F11 to deploy the application on the ADEP server. It also launches the application in a browser.

Chapter 6: ADEP and LiveCycle server

For your ADEP applications to interact with the LiveCycle server and leverage LiveCycle User Management, you must do the following configurations:

• Configure ADEP security.

*Important: ADEP security is configured automatically if you renamed the Quickstart JAR filename to include -**lc** before installing ADEP. Otherwise, you need to manually configure ADEP security as described in "6.1 Manually configure ADEP security" on page 9.*

• Configure the LiveCycle SOAP endpoint in your ADEP server. For details, see "6.2 Configure LiveCycle URL within CRX" on page 9.

6.1 Manually configure ADEP security

*Important: ADEP security is configured automatically if you renamed the Quickstart JAR filename to include -**lc** before installing ADEP. In that case, skip this configuration.*

1 Open the *<ria_install_dir>*/crx-quickstart/repository/repository.xml file, and comment out the following lines of code:

```
<LoginModule class="com.day.crx.core.CRXLoginModule">
    <param name="anonymousId" value="anonymous"/>
    <param name="adminId" value="admin"/>
</LoginModule>
```

2 Add the following module:

```
<Modules>
    ...
    <Module class="com.adobe.livecycle.usermanager.crx.clientsdk.LCClientSDKModule">
        <param name="configWspName" value="crx.default"/>
        <param name="configPath" value="/libs/riacore/config" />
    </Module>
</Modules>
```

3 Verify the following entry in the *<ria_install_dir>*/crx-quickstart/server/etc/jaas.cofig file:

```
com.day.crx {
    com.day.crx.core.CRXLoginModule sufficient;
    com.adobe.livecycle.usermanager.crx.loginmodule.LCLoginModule required
principalProvider="com.adobe.livecycle.usermanager.crx.loginmodule.UMPrincipalProvider"
;
};
```

4 Restart the server using the server.bat file in the *<ria_install_dir>*/crx-quickstart/server/ directory.

Note: To retain the security settings, you must use the server.bat file for any subsequent server restart.

6.2 Configure LiveCycle URL within CRX

1 Go to http://[*host*]:[*port*]/ and log in using admin/admin as the username/password.

2 Click **CRXDe Lite**.

3 In the left panel, expand **libs > riacore > config** and select **com.adobe.livecycle.clientsdk.ServiceClientFactory-default**.

4 In the right panel under the Properties tab, double-click **DSC_DEFAULT_SOAP_ENDPOINT**. The **Value** field becomes editable.

5 Specify the fully qualified URL to the machine where the LiveCycle server is installed. It is used to create ServiceClientFactory for all LiveCycle service invocations and User Manager.

6 Click **Save All**.

6.3 Verify security configuration

To verify that the ADEP security is configured to authenticate users against the LiveCycle ES3 server:

1 Go to http://[*host*]:[*port*]/ and click **Sign Out**.

2 Go to the CRX repository, http://[*host*]:[*port*]/crx/, and log in using the administrator credentials for the LiveCycle server. The default user name and password are administrator and password, respectively.

3 Log out and log in again using admin/admin as the username/password.

4 Click **User Administration**.

5 Expand the folder **l > lc**.

 If you see **DefaultDom::SuperAdmin** in the list of users, your ADEP security is properly configured.

Important: Users will have limited access to the protected resources on the ADEP server unless they are assigned to some group and given appropriate rights. For information about how to administering user, groups, and rights, see http://dev.day.com/content/docs/en/crx/current/administering/user_group_ac_admin.html.

6.4 Next Steps

Review the *Getting Started for Developers* and *Adobe Digital Enterprise Platform Developer* documents in the **Documentation** section of the prerelease site.