



LiveCycle® Changes Based on Upgrading to LiveCycle ES 8.2

July 2008

Adobe® LiveCycle® ES

Update 1

© 2008 Adobe Systems Incorporated. All rights reserved.

Adobe® LiveCycle® ES Update 1 LiveCycle Changes Based on Upgrading to LiveCycle ES 8.2 for Microsoft® Windows® Edition 1.0, July 2008

If this guide is distributed with software that includes an end user agreement, this guide, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. Except as permitted by any such license, no part of this guide may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written permission of Adobe Systems Incorporated. Please note that the content in this guide is protected under copyright law even if it is not distributed with software that includes an end user license agreement.

The content of this guide is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Adobe Systems Incorporated. Adobe Systems Incorporated assumes no responsibility or liability for any errors or inaccuracies that may appear in the informational content contained in this guide.

Please remember that existing artwork or images that you may want to include in your project may be protected under copyright law. The unauthorized incorporation of such material into your new work could be a violation of the rights of the copyright owner. Please be sure to obtain any permission required from the copyright owner.

Any references to company names, company logos and user names in sample material or sample forms included in this documentation and/or software are for demonstration purposes only and are not intended to refer to any actual organization or persons.

Adobe, the Adobe logo, and LiveCycle are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Java is a trademark or registered trademark of Sun Microsystems, Inc. in the United States and other countries.

Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

All other trademarks are the property of their respective owners.

This product contains either BSAFE and/or TIPEM software by RSA Security, Inc.

This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>).

This product includes software developed by the IronSmith Project (<http://www.ironsmith.org/>).

This product includes software developed by the OpenSymphony Group (<http://www.opensymphony.com/>).

This product includes software developed by the Indiana University Extreme! Lab (<http://www.extreme.indiana.edu/>).

This product includes copyrighted software developed by E. Wray Johnson for use and distribution by the Object Data Management Group (<http://www.odmg.org/>).

Portions © Eastman Kodak Company, 199- and used under license. All rights reserved. Kodak is a registered trademark and Photo CD is a trademark of Eastman Kodak Company.

Powered by Celequest. Copyright 2005-2008 Adobe Systems Incorporated. All rights reserved. Contains technology distributed under license from Celequest Corporation. Copyright 2005 Celequest Corporation. All rights reserved.

Single sign-on, extending Active Directory to Adobe LiveCycle ES provided by Quest Software “www.quest.com/identity-management” in a subsequent minor release that is not a bug fix (i.e., version 1.1 to 1.2 but not 1.1.1 to 1.1.2) of the Licensee Product that incorporates the Licensed Product.

The Spelling portion of this product is based on Proximity Linguistic Technology.

©Copyright 1989, 2004 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 1990 Merriam-Webster Inc. © Copyright 1990 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 2003 Franklin Electronic Publishers Inc. © Copyright 2003 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 2004 Franklin Electronic Publishers, Inc. © Copyright 2004 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 1991 Dr.Lluis de Yzaguirre I Maura © Copyright 1991 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 1990 Munksgaard International Publishers Ltd. © Copyright 1990 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 1995 Van Dale Lexicografie bv © Copyright 1996 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 1990 IDE a.s. © Copyright 1990 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 2004 Franklin Electronics Publishers, Inc. © Copyright 2004 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 1992 Hachette/Franklin Electronic Publishers, Inc. © Copyright 2004 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 2004 Bertelsmann Lexikon Verlag © Copyright 2004 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 2004 MorphoLogic Inc. © Copyright 2004 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 1990 Williams Collins Sons & Co. Ltd. © Copyright 1990 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA. © Copyright 1993-95 Russicon Company Ltd.

© Copyright 1995 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

© Copyright 2004 IDE a.s. © Copyright 2004 All Rights Reserved Proximity Technology A Division of Franklin Electronic Publishers, Inc. Burlington, New Jersey USA.

Adobe Systems Incorporated, 345 Park Avenue, San Jose, California 95110, USA.

Notice to U.S. Government End Users. The Software and Documentation are "Commercial Items," as that term is defined at 48 C.F.R. §2.101, consisting of "Commercial Computer Software" and "Commercial Computer Software Documentation," as such terms are used in 48 C.F.R. §12.212 or 48 C.F.R. §227.7202, as applicable. Consistent with 48 C.F.R. §12.212 or 48 C.F.R. §§227.7202-1 through 227.7202-4, as applicable, the Commercial Computer Software and Commercial Computer Software Documentation are being licensed to U.S. Government end users (a) only as Commercial Items and (b) with only those rights as are granted to all other end users pursuant to the terms and conditions herein. Unpublished-rights reserved under the copyright laws of the United States. Adobe Systems Incorporated, 345 Park Avenue, San Jose, CA 95110-2704, USA. For U.S. Government End Users, Adobe agrees to comply with all applicable equal opportunity laws including, if appropriate, the provisions of Executive Order 11246, as amended, Section 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974 (38 USC 4212), and Section 503 of the Rehabilitation Act of 1973, as amended, and the regulations at 41 CFR Parts 60-1 through 60-60, 60-250, and 60-741. The affirmative action clause and regulations contained in the preceding sentence shall be incorporated by reference.

1

Upgrading from LiveCycle 7.x to LiveCycle ES 8.2

This section lists some of the changes that you will see in your Adobe® LiveCycle® ES (Enterprise Suite) Update 1 implementation after upgrading from LiveCycle 7.x to LiveCycle ES 8.2.

LiveCycle ES uses Java 5 instead of Java 1.4

Java™ 5 differs from Java 1.4 in ways that result in code that is written against Java 1.4 may no longer work when run in a Java 5 environment. Java 5 contains some additional data types, and some libraries have changed. This change may affect custom applications, custom Quick Process Action Components (QPACs), or any other collateral written in Java 1.4.

API differences between LiveCycle 7.x and LiveCycle ES

Several LiveCycle 7.x APIs are no longer supported in LiveCycle ES, and others have changed slightly. Custom applications that are written using the LiveCycle 7.x API may need to be updated after the upgrade process is complete. The [Upgrading Applications to LiveCycle ES Using APIs](#) document lists deprecated APIs and maps LiveCycle 7.x API methods to LiveCycle ES methods.

Repackaging custom applications with new client JAR files

Client applications that are developed using LiveCycle 7.x may need to be repackaged with new client JAR files, depending on the application server. See “Updating client applications” in [Preparing for Upgrading to LiveCycle ES from 7.x](#).

Custom QPACs required updating

Custom QPACs provided by Avoka may have to be replaced in LiveCycle ES with updated versions so that they continue to work properly. After upgrading to LiveCycle ES 8.2, you must deploy the updated QPACs to the LiveCycle ES server. Check with your third-party vendor or your developers before upgrading to determine whether these updates are required.

Changes in variable types

Adobe LiveCycle Workflow 7.x supported a series of variable types that you can use in process definitions. The form variable type is renamed *lc7form* when you upgrade to LiveCycle ES. The upgrade will automatically update your processes to use the new variable type name; therefore, in most cases, the change is transparent. However, if you are using a custom QPAC from a third-party or have created one internally and the QPAC makes an explicit reference to the form variable type, the QPAC must be updated to recognize the *lc7form* variable type name instead. The new QPAC must then be deployed to the server from Adobe LiveCycle Workbench ES.

XPath Expression changes

LiveCycle ES is stricter than LiveCycle Workflow 7.x about correctly formed XPath expressions. In many cases, XPath expressions in LiveCycle Workflow 7.x do not have the correct number of parentheses. The most common case occurs when the `concat()` function is used within variable assignment expressions within a process map. If you have an instance that does not have the proper number of parentheses or is not correct in some other way, you must manually update the XPath expression to work in LiveCycle ES.

Font colors may not be supported in Workspace ES

In LiveCycle Workflow 7.x, you could specify different font colors in the user messages that LiveCycle Form Manager displayed. This feature is also present in Adobe LiveCycle Process Management ES because Adobe LiveCycle Workspace ES can display different font colors. However, because Workspace ES is based on Adobe Flex® and LiveCycle Form Manager 7.x is based on HTML, you must ensure that font colors conform to the format that is supported by Flex. If you used the real name of a color, such as blue, red, or green, you must convert the color reference to the hex representation so that Workspace ES can display the color correctly. For example, change blue to #0000ff, red to #ff0000, and green to #00ff00. For other colors, you must determine what the hex representation is.

Loose forms are not supported in LiveCycle ES

Loose forms are not supported in LiveCycle ES and do not appear in Workspace ES after upgrading. Process Management ES and Workspace ES only support forms that have a process associated with them. If you used loose forms, you must manually create a workflow that enables the form to appear in Workspace ES. If you are using forms in LiveCycle Form Manager that exist only on disk and do not have a process associated with them, you must create processes in Process Management ES for the forms to appear in Workspace ES.

Upgraded processes outputs XHTML instead of CSS2HTML

When a LiveCycle 7.x workflow that generates CSS2HTML is upgraded to a LiveCycle ES process by using the Process Upgrade Tool in Adobe LiveCycle Workbench ES, the upgraded process outputs XHTML instead of CSS2HTML.

Email settings for task assignment, reminder or deadline notification maintains only one message

In LiveCycle 7.x, secondary notification messages could be configured and stored under LiveCycle Workflow server settings for task assignments with form data attachments. In LiveCycle ES 8.2, only a single notification message is stored for each notification type. When you upgrade from LiveCycle 7.x to LiveCycle ES 8.2, only the main message set for task assignments is migrated for Task Assignment, Reminder, and Deadline email settings. Messages and settings for form data are not migrated.

In LiveCycle ES 8.2, you can change the message for task assignment, reminder, or deadline notifications in the main message box on the Process Management ES > Server Settings > Task Notification page of the LiveCycle Administration Console. This task can be done after enabling or disabling data support in the notification.

PDFMM service no longer re-renders forms for minor modifications

In LiveCycle 7.x, the PDFMM service would re-render a form even for minor modifications. For example, simply modifying the XMP metadata of the form would trigger re-rendering.

This activity had the undocumented side effect of pushing data values from XFA data to the Fields array under AcroForm Dictionary. In a few cases, LiveCycle 7.x users have exploited this side effect to flatten all forms and data prior to sending them for printing as PDF files.

In LiveCycle ES 8.2, this side effect of the PDFMM service is no longer present; the XFA data is not being written to the AcroForm dictionary for each modification. Therefore, any LiveCycle 7.x application that relies on this undocumented behavior may stop working, or produce unexpected output.

To simply re-render the form before flattening it, use the `generatePDFOutput` or `transformPDF` methods from Adobe LiveCycle Output ES. However, if you need to re-render the form specifically to push data values from XFA to AcroForms, there is no current method.

Upgrading from LiveCycle ES 8.0.x to LiveCycle ES 8.2

This section lists some of the changes that you will see in your LiveCycle ES implementation after upgrading from LiveCycle ES 8.0.x to LiveCycle ES 8.2.

Processes can be approved directly in Summary view of Workspace ES

In LiveCycle ES, end users can approve steps in a process directly in the summary view, saving them the trouble of opening up the form in LiveCycle Workspace ES in order to approve it. If this feature is not appropriate for your organization's business processes, you can turn it off in LiveCycle Workbench ES.

► To enable approval in the summary view:

1. Log in to Workbench ES.
2. Select the **Assign Task** operation in your process diagram.
3. In the Properties view, expand the **Form Data Mappings** property group.
4. Select **Form Must Be Saved**.

Changes in the way Repository Service API is used in custom components

In LiveCycle ES 8.0.x, the LiveCycle ES repository client classes were globally available in the root EAR classloader. Server-side Java clients (custom components) did not need to declare an explicit dependency on the client classes. This design has been improved in LiveCycle ES 8.2, as server-side Java clients must explicitly import the LiveCycle ES repository client classes from the Repository service. For a custom component, this step is accomplished by adding several `<package . . . >` directives to the component's `component.xml`.

A custom component developed for LiveCycle ES 8.0.x is affected if it relies on the globally available LiveCycle ES repository client classes, meaning the component successfully invokes the Repository service and both of the following conditions are true:

- The component's `component.xml` file does not contain the `<import-package>` directives described below.
- The component does not include the `adobe-repository-client.jar` file and declare that JAR file in the `<class-path>` directive in its `component.xml` file.

With LiveCycle ES 8.2, any custom component calling the Repository service must include the `<import-package>` directives in its `component.xml` file.

► To update LiveCycle ES 8.0.x custom components:

1. Locate the component's jar file.
2. Extract the component's contents to a temporary folder.
3. Open `[temporaryFolder]/component.xml` in an editor:
 - Add the `<import-packages>` directive if not present already.

- Add the following code to the `<import-packages>` directive:

```
<package version="1.0">org.apache.commons.codec</package>
<package version="1.0">org.apache.commons.codec.binary</package>
<package version="1.0">com.adobe.uuid</package>
<package version="1.0">com.adobe.repository.logging</package>
<package version="1.0">com.adobe.repository.io</package>
<package version="1.0">com.adobe.repository.infomodel</package>
<package version="1.0">com.adobe.repository.infomodel.bean</package>
<package version="1.0">com.adobe.repository.query</package>
<package version="1.0">com.adobe.repository.query.sort</package>
<package version="1.0">com.adobe.repository.bindings</package>
<package version="1.0">com.adobe.repository.bindings.dsc</package>
<package
version="1.0">com.adobe.repository.bindings.dsc.client</package>
<package version="1.0">com.adobe.repository</package>
```

- Locate the `<class-path>` directive and remove the reference to `adobe-repository-client.jar`.
- Save and close `component.xml`

4. Delete `adobe-repository-client.jar` from `[temporaryFolder]`.
5. Repackage and redeploy the component.

► **To create custom components for LiveCycle ES 8.2:**

1. Open `component.xml` in an editor.
2. Add the `<import-packages>` directive if not present already.
3. Add the following code to the `<import-packages>` directive:

```
<package version="1.0">org.apache.commons.codec</package>
<package version="1.0">org.apache.commons.codec.binary</package>
<package version="1.0">com.adobe.uuid</package>
<package version="1.0">com.adobe.repository.logging</package>
<package version="1.0">com.adobe.repository.io</package>
<package version="1.0">com.adobe.repository.infomodel</package>
<package version="1.0">com.adobe.repository.infomodel.bean</package>
<package version="1.0">com.adobe.repository.query</package>
<package version="1.0">com.adobe.repository.query.sort</package>
<package version="1.0">com.adobe.repository.bindings</package>
<package version="1.0">com.adobe.repository.bindings.dsc</package>
<package
version="1.0">com.adobe.repository.bindings.dsc.client</package>
<package version="1.0">com.adobe.repository</package>
```

4. Make sure that the `<class-path>` directive does not reference `adobe-repository-client.jar`.
5. Save and close `component.xml`.
6. Develop and deploy your component as usual.

Note: Do not add any reference to the `adobe-repository-client.jar` file to your CLASS PATH.

xfaForm variable data no longer requires *

There was a known issue in LiveCycle ES 8.0.1 that caused runtime errors when passing data from a parent process to a sub-service. The recommended fix was to add an "*" when reassigning xfaForm variable data.

For example, in SetValue use:

```
/process_data/secondForm/object/data/xdp/datasets/data=/process_data/firstForm/object/data/xdp/datasets/data/*,
```

where firstForm and secondForm are xfaForm variables.

The issue was fixed in LiveCycle ES 8.0.1 SP1 and the workaround is no longer required and in fact does not work anymore, so that the "*" needs to be deleted. The correct statement is now:

```
/process_data/secondForm/object/data/xdp/datasets/data=/process_data/firstForm/object/data/xdp/datasets/data
```