

# Adobe Reader 9.0 Compatibility Overview

I Updated for Adobe Reader 9.2

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## Introduction

There are numerous features in Adobe Reader 9.0 that may be of interest to you as you engage in efforts to install and use Adobe Reader in the enterprise. These features include improvements in the experiences of installing, document viewing, performance, security, accessibility, and real-time collaboration. There are also changes in Adobe Reader 9.0 of which you should be aware. These changes, which occurred since Adobe Reader 8.0, may affect workflows used in your company.

## Installing Adobe Reader

There are new installation options for Adobe Reader 9.0.

### Product Improvement Program

When enabled, the Product Improvement Program will track and return data to Adobe. This data is used to help improve the product. Please consider enabling this feature for your organization. You can control whether this feature is enabled by clicking Help > Improvement Program Options.

### Customize installer behavior

You can customize the behavior of the installer.

You can specify whether silent installation takes place, set up pre-serialization, and specify other custom setup choices.

You can also customize key application preferences, determine whether to enable automatic updates, add and set default job options, customize collaboration settings, enable or disable advanced security settings, and customize security settings.

You can prevent the user from modifying certain preferences. You can restrict installation to only using an Adobe PDF printer, suppress the End User License Agreement and registration, embed license management information, opt out of the Product Improvement Program, specify shared review settings, and customize the toolbar appearance.

You can also pre-populate PDF Portfolio templates, turn off Hosted or Shared workflow settings, specify redaction settings, suppress PDF

online creation, and choose supported CAD formats. While AIR and Shared workflow are included in the Adobe Reader installation, you will need to determine whether to deploy those components in the enterprise. In case you do not want to deploy those components, a version of Adobe Reader that excludes them is available for download.

## **Viewing documents**

There are several changes to the user interface for Adobe Reader 9.0.

### **Next and previous document commands removed**

The Next Document and Previous Document commands have been removed from the View > Go To menu.

### **PDF/A, PDF/E, and PDF/X files**

When you open a file that is compliant with the PDF/A, PDF/E, or PDF/X standard, a Standards pane will open and provides file details and options.

### **How To command removed**

The Help > How To command, which had provided brief explanations of the usage of tools or how to perform specific tasks, has been removed. Use the Adobe Reader Help instead.

## **Performance improvements**

There have been numerous improvements to Adobe Reader performance, including support for multi-threading, thereby allowing Adobe Reader to take advantage of environments that have multiple processors. Launch times for Adobe Acrobat Professional and Acrobat Standard, Adobe Reader, and Adobe LiveCycle LiveCycle Designer ES have been reduced, as have rendering times for certain forms.

### **Plug-ins are now loaded on demand**

The launch time for Acrobat and Adobe Reader has been significantly reduced because Adobe plug-ins are now loaded on demand. However, non-Adobe plug-ins are still loaded as they have been before. Note that your plug-in's handshake and initialization callback procedures can significantly affect the product launch time.

### **Form performance**

There have been numerous improvements to the product performance with respect to forms, including support for form workflows.

### **LiveCycle Designer ES**

The launch time of LiveCycle Designer ES from Acrobat has significantly improved.

## Barcoded forms

There have been rendering enhancements in barcoded forms. See [Page rendering performance](#) for more information.

## Adobe Reader Extensions Server

Forms processed with the Adobe Document Server 5.0 for Reader Extensions Server will no longer open with Adobe Reader 9.0 and later. Please see your Adobe representative for more information. There is also a technical article on this topic in the Adobe developer forum.

## Page rendering performance

GPU support for Macintosh is provided in Acrobat and Adobe Reader 9.0 and later. Select 2D graphics by clicking Edit > Preferences under the Page Display category.

In Adobe Reader, when viewing documents that are not rights-enabled, if the Paper Metadata 2D Barcode-related field changes, the barcode appears dimmed.

In all cases, barcoded forms now honor language pack checking.

## IPv6 support added

Internet Protocol version 6 is now supported in Adobe Reader and Acrobat. Both Adobe Reader and Acrobat can run in IPv6 mode, IPv4 mode, or mixed mode networks.

## Security enhancements

There are several security-related enhancements to Adobe Reader and Acrobat.

### AES 256-bit encryption is supported

Through the File > Properties option, it is now possible to specify an Encryption Level of 256-bit AES for both password and certificate security.

### Passwords can contain Unicode

Passwords used for document protection can contain Unicode characters.

## Importing and exporting security settings

You can now import and export security settings, save them on a server, and load them by specifying the URL for the server. You can also use the exported settings to back up and restore your settings as needed. An early version of an enhanced security feature has been added to Adobe Reader and Acrobat. Although this feature may not be ready for use in all network situations, you may want to enable it to improve security in your network. Please report any problems found with this feature to Adobe. See *Enhanced Security in Adobe Acrobat 9 and Adobe Reader 9* for more details.

## Using digital signatures

There have been significant changes to the ways in which the status of digital signatures is displayed and verified. See *Adobe Acrobat 9 Digital Signatures, Changes and Improvements* for more details.

## Using forms

**Adobe Reader 9.0** - Public keys cannot be embedded in forms for Adobe Reader 9.0, and those forms cannot be encrypted. Adobe Acrobat 9.0 removed the ability to embed public keys in PDF documents. Adobe Reader 9.0 cannot process forms with embedded public keys that were created by earlier versions of Adobe Acrobat.

**Adobe Reader 9.1** - Reader 9.1 will now correctly handle and encrypt forms created with embedded public keys.

## Authentication using proxy servers

Adobe Reader 9.0 and later has improved authentication capabilities when using proxy servers. The following tables summarize the differences between Adobe Reader 9.0 with earlier versions.

**TABLE 1 Adobe Reader 8.x and earlier**

Proxy server	In browser	Standalone
Non-authenticating proxy	Adobe Reader uses the operating system's TCP stack to locate the proxy server. The proxy server passes the request to the intended HTTP address.	Adobe Reader uses the operating system's TCP stack to locate the proxy server. The proxy server passes the request to the intended HTTP address.
Authenticating proxy	Adobe Reader uses the operating system's TCP stack to locate the proxy server. The proxy server requests authentication but Adobe Reader does not have a mechanism to request authentication, so the request fails.	Adobe Reader uses the operating system's TCP stack to locate the proxy server. The proxy server requests authentication but Adobe Reader does not have a mechanism to request authentication, so the request fails.

**TABLE 2 Adobe Reader 9.0 and later**

<b>Proxy server</b>	<b>In browser</b>	<b>Standalone</b>
Non-authenticating proxy	Adobe Reader uses the browser's TCP stack to locate the proxy server. The proxy server passes the request to the intended HTTP address.	Adobe Reader uses the operating system's TCP stack to locate the proxy server. The proxy server passes the request to the intended HTTP address.
Authenticating proxy	<p>Adobe Reader uses the browser's TCP stack to locate the proxy server.</p> <p>The browser's existing credentials (basic, digest, or certificate) are used to authenticate with the proxy server for all HTTP requests from XFA scripts/actions and for JavaScript for Acrobat SOAP requests where the <code>UsePlatformAuth</code> authentication parameter is set to <code>true</code>.</p> <p>If the browser does not have the credentials stored, it will display a dialog requesting the credentials.</p>	<p>Adobe Reader uses the operating system's TCP stack to locate the proxy server.</p> <p>Adobe Reader prompts the user for a username and password for HTTP basic or digest authentication. It may prompt the user for certificate selection, depending on the host operating system settings.</p>

## Accessibility support

Data accessibility for forms created in LiveCycle Designer ES is now supported through the Adobe Accessibility API.

## Real-time collaboration

You can share PDF files on your computer screen and collaborate in a live session with other users. You can see who else is working on the document, chat with them, and sync up mouse pointer, screen views, page flipping, zoom, 3D views, layers, and other actions within the PDF file in real time. All changes are reflected in every participant's view in real time.

## Additional addressed issues

### Forms

#### **xfa.host.getFocus() returns an incorrect SOM expression**

The returned value is an incorrect SOM expression. For example, for the form structure:

```
form1
  -> sfMain
    -> TextField1
```

The SOM expression of the object returned from `xfa.host.getFocus()`, results in:

```
Page1[0].#contentArea[1].form1[0].sfMain[0].TextField1[0]
```

The proper SOM expression is:

```
xfa[0].form[0].form1[0].sfMain[0].TextField1[0]
```

**Recommended action:** Form scripts that examine the SOM expression for the object returned by `getFocus()` need examination for possible changes.

#### **Events are missing after double-clicking on an image field**

Double-clicking on an image field does not generate the `MouseUp` or `Click` events. These events are now being generated.

**Recommended action:** Image fields containing scripts on the `MouseUp` or `Click` events need examination to ensure expected behavior.

#### **Event ordering between Exit and PrePrint is inconsistent**

The order of the field `Exit` and `Preprint` events are different for printing between the Reader menu (`File->print`) and the icon bar. The order is now consistent in that the `exit` event always fires before the `preprint` event.

**Recommended action:** Forms with `PrePrint` actions need examination for possible conflicts of event ordering with `Exit` scripts. In general, any side effects of this change are expected to be benign.

#### **SOM expressions accessing the form incorrectly now failing in Acrobat/Reader 9.0**

A SOM expression such as `"xfa.form1.nodes.length"` which worked in previous versions of Reader now fails in Reader 9.0. This is an invalid SOM expression. The correct SOM expression is `"xfa.form.form1.nodes.length"`.

**Recommended action:** Forms that contain SOM expressions of this type need correction.

#### **Change in behavior (output) of saveXML function**

In Reader 9.0 and 9.1 the `SaveXML` function on a template node no longer returns the results as it should. The `SaveXML` function on data nodes is not affected by this problem.

**Recommended action:** This is an issue with the XFA forms processing it should not affect most forms.

**setItemState method does not work as expected a multi select list box within a table, and with direct rendering OFF.**

When using the setItemState method on a multi-select list box inside a table, the items are not selected. This worked in Reader 8 but does not work in Reader 9.

**Recommended action:** For this functionality, enable direct rendering.

**Forms containing the new USPS barcode crash Reader 9.0 on Mac only**

LiveCycle ES 2 implements a new barcode type for the US Postal Service. Forms containing this barcode will fail in Reader 9.0 on Macintosh. The forms do not fail in Reader 8.1.3 or 9.1. The forms work as expected all Reader versions on all other platforms.

**Recommended action:** Upgrade to Reader 9.1.

**XFA Forms containing empty values for numeric fields, signed in Acrobat/Reader 6 and viewed in Acrobat/Reader 8 or later may show "miscellaneous change" when no change has occurred.**

The processing of empty fields changed between Reader 6 and Reader 8. This results in a form with signature status as "valid" in Reader 6 while the result in when viewed in Reader 9 shows a "changed" state with a "miscellaneous change".

**Recommended action:** If a form that has not changed shows a "miscellaneous change" in a later version of Reader, review the form in Reader 6 to ensure the Signature is correct.

**Opening a form designed for Reader 9.1 in Reader 9.0 results in an error message**

A form designed for use in Reader 9.1 has XFA version 3.0. Opening this form in Reader 9.0 results in a "Unrecognized namespace XFA 3.0, defaulting to XFA 2.8" message.

**Recommended action:** Upgrade to Reader 9.1.

## Printing

**Color Postscript printing from Reader has a slightly different color map in Reader 9 compared to Reader 8**

In Reader 9, the color mapping from RGB to CMYK has changed to produce better results. For some printers the results are not as expected.

**Recommended action:** Select a non-Postscript printer or change to color space of the original document to CMYK.

## PDF/A

**PDF/A conversion using Acrobat does not work as expected.**

Converting a PDF file to a PDF/A using Acrobat may work as expected. You may also have questions regarding PDF/A compliance checking.

Recommended action:

- Refer to the "PDF/A in Acrobat and LiveCycle" document for a details on this topic.

- Generate PDF/A directly instead of generating a PDF and then convert it to PDF/A.
- Use the latest version of Acrobat for PDF/A conversion or validation. Acrobat 9.1 contains many improvements in this area.
- The PDF/A standard requires that PDF/A files be viewed with a compliant Reader. The first Reader to be compliant is Reader 9.0. Therefore, always use Reader version 9.0 or later for viewing PDF/A.

## Installing

### **Installing the Reader Language Pack into Reader 9.1 takes longer than expected.**

The language pack installs quickly in Reader 9.0. Installing the language pack in Reader 9.1 takes significantly more time. This is caused by a design limitation in the updater. Once the language pack is installed, there is no performance impact.

**Recommended action:** Enterprises who wish to avoid this problem should install the Language Pack on Reader 9.0 before updating to Reader 9.1.

## Rights Management

### **Unable to open existing protected document after an upgrade of Acrobat to 9.1 using Kerberos SSO or anonymous authentications**

Customers who upgrade their version of Acrobat to 9.1 using Kerberos SSO or anonymous authentication, on any release of LiveCycle Rights Management or Adobe Policy Server with no explicit URL port set, will not be able to open existing protected documents.

This problem affects any server that was configured without explicitly setting the HTTP port number in the baseURL. Adobe documentation suggests the system administrator specify the port number. Since customers enter HTTPS as the URL prefix, Acrobat defaults to 443 if the URL is not explicitly specified. Adding the baseURL port will work for any new documents, but existing documents will still have problems as the baseURL and port is included in the document at the time it was protected.

This issue does not affect Reader, only Acrobat 9.1

**Recommended action:** This issue has been addressed in the 9.1.1 patch for Acrobat. Users can work around the problem by opening the document in Reader 9.1 or by upgrading their Acrobat 9.1 installation.

### **Users cannot add comments to a Rights Managed documents that are Reader Extended**

Starting with Reader 9.1, users are unable to add comments to PDF files that are both policy-protected and Reader Extended. This inadvertent change was introduced as a result of some security fixes.

**Recommended action:** Adobe intends to fix this issue in a later update to Reader 9.

## **Users may be unable to access the rights Management server through a firewall or proxy server**

Reader (and Acrobat) 9.1 implemented some new capabilities in preparation for an upcoming LiveCycle product release. A number of new URLs on the RM server may be accessed by Reader. If the proxy or firewall blocks access to these URLs in such a way as an HTTP error code other than "404" is returned, Reader may fail to access the server.

**Recommended action:** Firewalls or proxy servers should be configured in such a way as to return error 404 for the list of URL's below. An alternative is to open the Firewall or proxy server to pass these URLs to the Rights Management server and allow it to return the 404 error code.

### **List of URL extensions to be also opened.**

- /rmws/rest/secure/server/info
- /rmws/rest/secure/authentication/login
- /rmws/rest/secure/authentication/user
- /rmws/rest/secure/authentication/sso
- /rmws/rest/secure/license/consume
- /rmws/rest/secure/license/batch
- /rmws/rest/secure/events/audit
- /rmws/rest/secure/license/iterate
- /rmws/rest/secure/license/publishAs
- /rmws/rest/secure/offline/synchronize

This issue exists in Reader 9.1 and 9.1.1 only. It is fixed in Reader 9.1.2.

## **AIR**

### **AIR applications are unable to load a PDF using Reader 9.2**

AIR applications that load a PDF in the browser will no longer work with Adobe Reader 9.2.

**Recommended action:** This issue will be addressed in an upcoming patch release to Reader. For enterprises which can control the deployment of Reader, a hotfix is available from Adobe Support.

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