

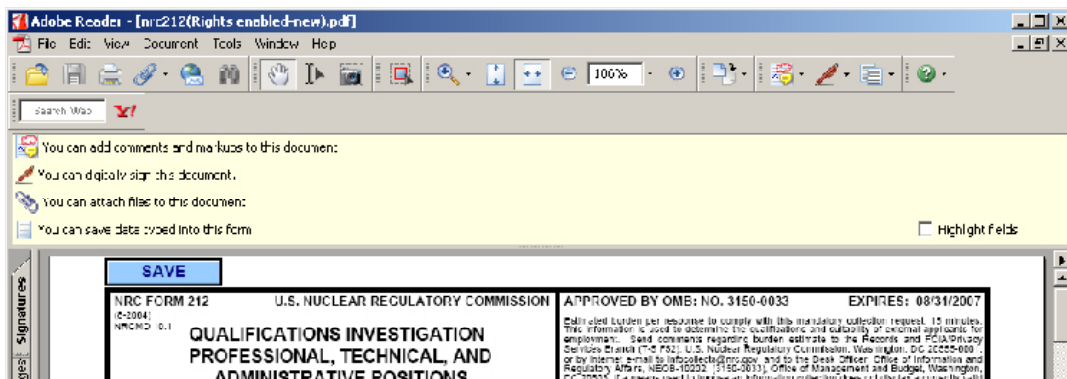
Understanding Digital Certificates for LiveCycle Reader Extensions

This document describes how you can determine and understand the details about the digital certificates you use to activate LiveCycle Reader Extensions, and to determine whether or not the certificate has expired. This document describes the following concepts:

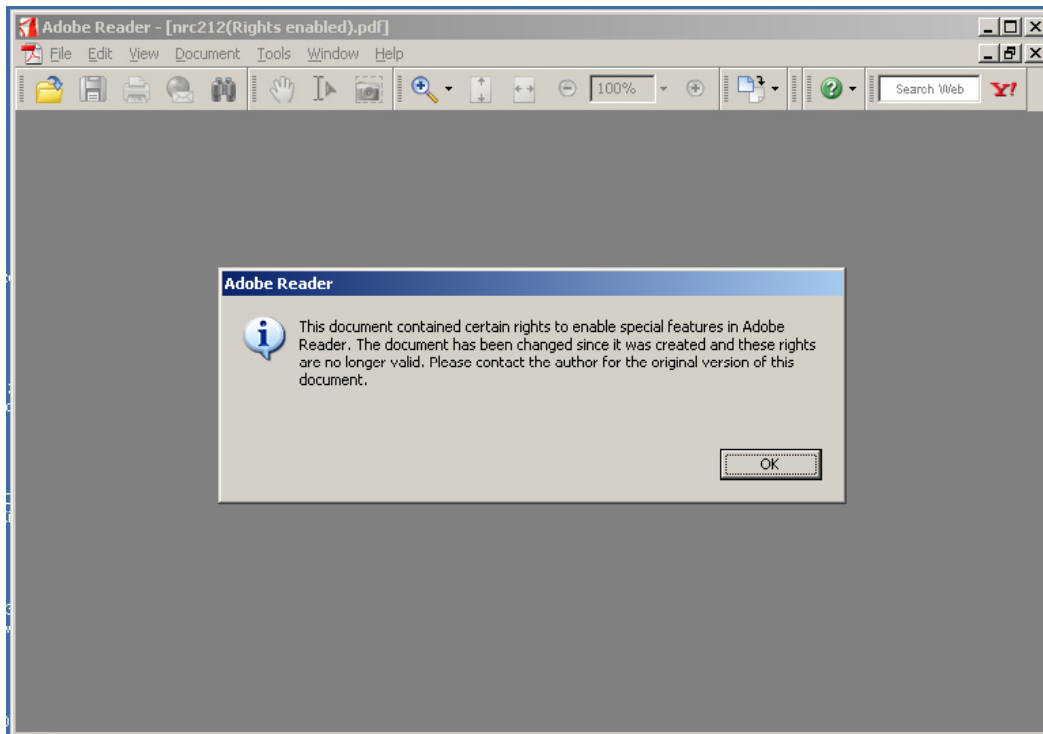
- Recognizing valid and expired LiveCycle Reader Extensions certificates when you open a PDF document in Adobe Reader
- Examining the digital certificate in a PDF document that has usage rights applied by LiveCycle Reader Extensions
- Examining the digital certificate that is installed with LiveCycle Reader Extensions
- Understanding LiveCycle Reader Extensions certificates

Recognizing valid and expired certificates in PDF documents

When a PDF document that has usage rights applied by LiveCycle Reader Extensions is opened in Adobe Reader, a status bar describing the specific usage rights that are enabled in the PDF document appears. In the example below, the status bar shows the information about the available usage rights for a PDF document opened in Adobe Reader 7.0.7.



When the digital certificate that specifies the usage rights for a PDF document expires and the PDF document is opened in Adobe Reader, a dialog box appears advising the user that the PDF document has usage rights, but these rights are disabled.



Although this message indicates that the PDF document has been altered or tampered with, that is not necessarily the case. Adobe Reader displays this message when a certificate has expired or a document has been modified. In Adobe Reader 7.0.x, you cannot determine whether the document has been altered or if the LiveCycle Reader Extensions certificate has expired.

After you close the dialog box, Adobe Reader opens the PDF document. The usage rights that were applied using LiveCycle Reader Extensions are not available, as expected. If the PDF document is an interactive form, the form fields are locked and the user cannot make changes to the form data.

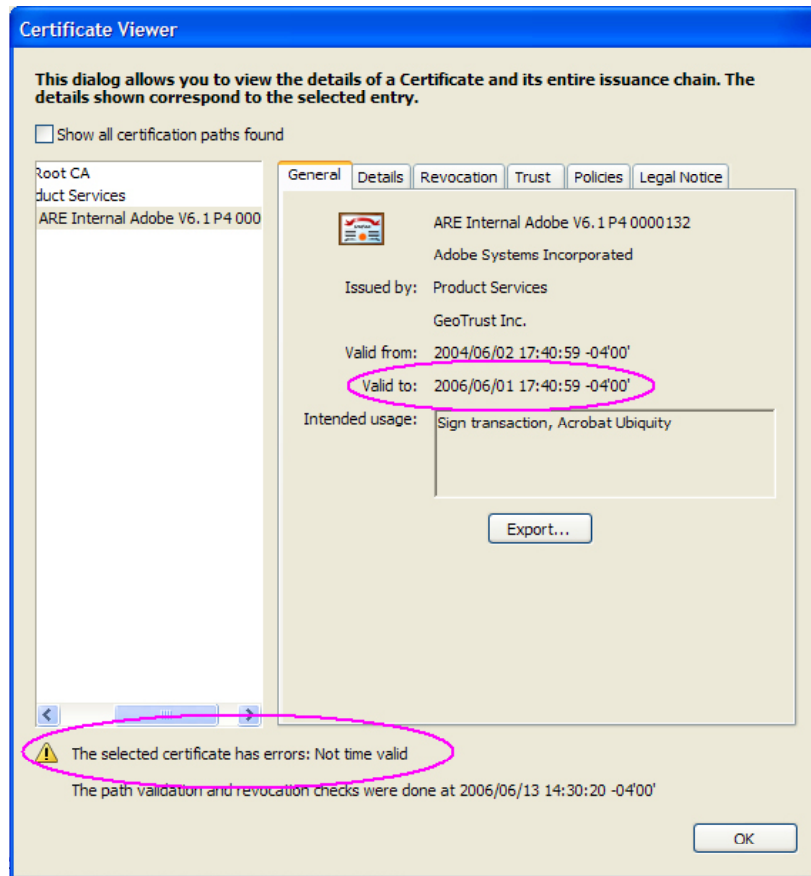
Examining certificates in usage rights-enabled PDF documents

You can verify that a LiveCycle Reader Extensions certificate has expired using Adobe Acrobat Professional.

To determine the expiry date of a LiveCycle Reader Extensions digital certificate:

1. Using Acrobat Professional, open the PDF document that has usage rights.
2. Select **Advanced > JavaScript > Debugger**.
3. In the JavaScript Debugger window, select the **Console** view, click in the blank area below the startup messages, and then type the following command: `this.appRightsValidate({}, 2, true);`
4. Execute the command by selecting it and pressing Ctrl-Enter.
5. On the Summary tab of the Signature Properties dialog box, click **Show Certificate**.

The Certificate Viewer lets you view the properties of the digital certificate that was used to provide usage rights to the PDF document. The General tab contains the basic information about that certificate, including the expiry date.



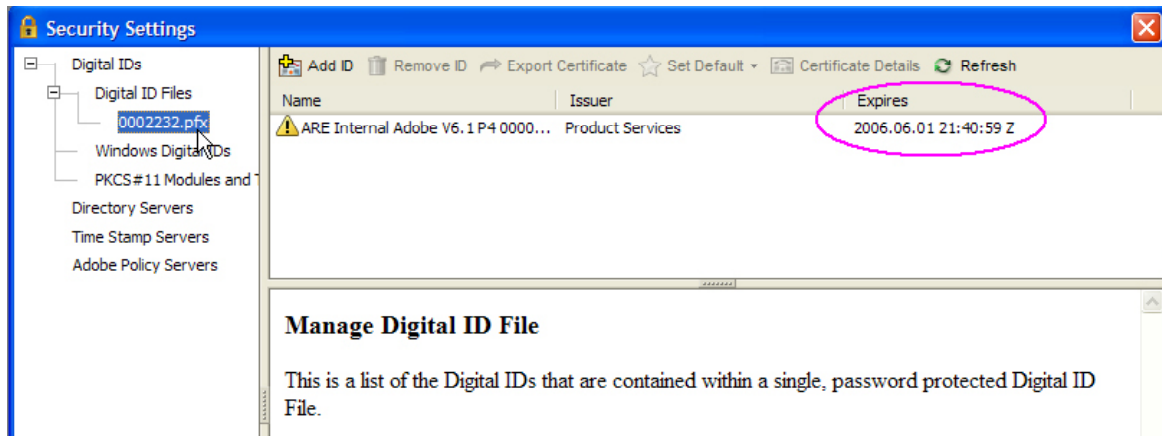
Because the **Valid To** date (the expiry date) is in the past, the certificate has expired and is invalid. The user cannot use the usage rights that were applied to the PDF document.

Examining digital certificates on the LiveCycle Reader Extensions server

A LiveCycle Reader Extensions digital certificate is delivered to the customer in a PFX file, which is accompanied by a password. You can examine the contents of the PFX file that is installed (or intended for installation) in a LiveCycle Reader Extensions server environment using Adobe Reader or Acrobat Professional. You must have the password for the PFX file and the PFX file must be located in an accessible directory.

To view the details of the digital certificate within the PFX file:

1. Start Adobe Reader or Acrobat Professional.
2. Select **Advanced > Security Settings**.
3. In the Security Settings dialog box, click **Add File**.
4. In the File Open dialog box, navigate to the directory where the PFX file is located, and then click **Open**.
5. Type the certificate password. The PFX file is added to the list as a Digital ID File.
6. On the navigation tree on the left side of the Security Settings dialog box, expand Digital ID Files and select the PFX file that you just added. The certificates contained in the PFX file display in the list on the right. The PFX files issued by Adobe typically contain one certificate. (The basic information about the certificate is visible in this window.)



Because the expiry date of 1-Jun-2006 is in the past, the certificate has expired and is invalid. Users will be unable to use documents to which usage rights were added with this certificate, and this certificate cannot be used to apply usage rights to PDF documents using LiveCycle Reader Extensions.

Tip: To open the Certificate View, select the certificate and click Certificate Details. The next section describes in more detail the information you see in this window.

Certificate types used by LiveCycle Reader Extensions

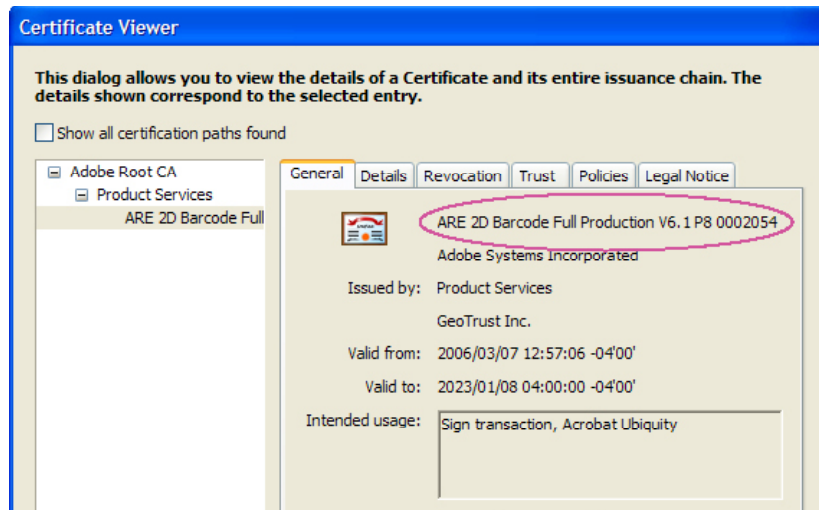
The Certificate Viewer window provides the following information about the certificate:

- Certificate “friendly” name
- Certificate profiles
- Validity period
- LiveCycle Reader Extensions usage rights

Certificate “friendly” name

The “friendly” name of a LiveCycle Reader Extensions certificate is a string describing the properties of the certificate, as in the following example:

ARE 2D Barcode Full Production V6.1 P8 0002054



The string contains the following elements:

Certificate type: The certificate type describes the LiveCycle products that the certificate activates, and the level of product activation (for example, ARE 2D Barcode Full). For a list of the certificate types available, see the Type column in the table in the Certificate Profiles section.

Deployment type: The deployment type indicates the intended use of the certificate (for example, Production). The value can be Evaluation or Production. For a list of deployment types associated with each certificate type, see the Deployment type column in the table in the Certificate Profiles section.

Usage rights version: The usage rights version describes the version of the ubiquity (usage rights) algorithm that the certificate can be used for (for example, V6.1). This version does not signify the version of Acrobat or LiveCycle Reader Extensions.

Profile code: The profile code is a shorthand description of complete certificate properties (for example, P8). For a list of the profile codes associated with each file type, see the Profile code column in the table in the Certificate Profiles section.

Serial number: A serial number is assigned to each certificate issued by Adobe (for example, 0002054). Adobe Enterprise Support or an Adobe Enterprise account representative can use this serial number to trace the certificate to a specific product order or to an OEM relationship.

Certificate profiles

The following table lists the certificate profiles that you may encounter when analyzing LiveCycle Reader Extension certificates.

Profile code	Type	Validity period	Deployment type
P1	SAP Production	Max	Production
P2	SAP Internal Test	2 years	Evaluation and test
P3	LiveCycle Reader Extensions, Production	Max	Production
P4	LiveCycle Reader Extensions, Internal Adobe Use	2 years	Production
P5	LiveCycle Reader Extensions, Partner Integration	2 years	Evaluation and test
P6	LiveCycle Reader Extensions, Evaluation	60 days	Evaluation
P7	LiveCycle Barcoded Forms, Production	Max	Production
P8	LiveCycle Forms and LiveCycle Barcoded Forms, Production	Max	Production

Profile code	Type	Validity period	Deployment type
P9	Adobe Acrobat 7.x, Production	Max	Production
I10	LiveCycle Forms (excluding LiveCycle Barcoded Forms); may be used by OEMs	Max	Production and evaluation
I11	LiveCycle Forms and LiveCycle Barcoded Forms; may be used by OEMs	Max	Production and evaluation
I12	Signature only; may be used by OEMs	Max	Production and evaluation
I13	Offline Commenting only; may be used by OEMs	Max	Production and evaluation
I14	Commenting only; may be used by OEMs	Max	Production and evaluation
I15	Full permissions; may be used by OEMs	Max	Production and evaluation

Validity period

Evaluation certificates are issued to customers and developers to enable them to evaluate and develop sample applications for products. The validity period of these certificates is between 60 and 90 days. They expire at the end of the second month following the date of issue.

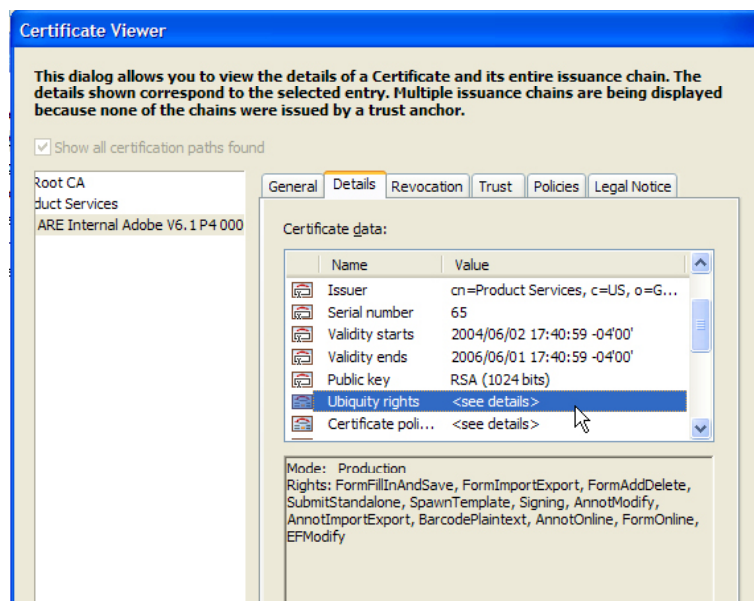
Partner Integration certificates are issued to Adobe business partners to support software development, integration, prototyping, and demonstration. These certificates are valid for two years from date of issue.

Adobe Internal Use certificates are used within Adobe to support software development, integration, prototyping and demonstration. These certificates are valid for two years from the date of issue.

Production certificates are issued to customers who have purchased a LiveCycle Reader Extensions based product (such as LiveCycle Reader Extensions or LiveCycle Barcoded Forms). These certificates are valid for the maximum period permitted by the certificate authority (CA), (shown as “Max” in the Certificate Profiles table). Currently, the expiration date for these certificates is the year 2023.

LiveCycle Reader Extensions usage rights

When you examine the LiveCycle Reader Extensions certificate in the Certificate Viewer, you can select the Ubiquity rights item from the Details tab to see an itemized list of the Adobe Reader usage rights that can be enabled by the certificate. The usage rights enabled on a particular document may be a subset of those enabled by the certificate. Usage (ubiquity) rights items resemble the following example:



The **Mode** property will match the deployment type and be either “production” or “evaluation”.

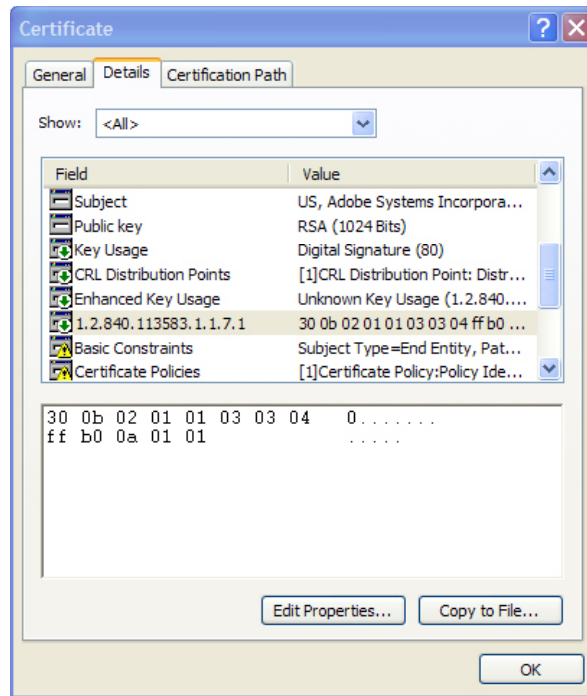
The permitted LiveCycle Reader Extensions usage rights consist of one or more of specific elements. These elements are used in different combinations to achieve varieties of licensed product functionality.

Usage right element	Capability enabled in Adobe Reader (when viewing a rights-enabled PDF document)
FormFillInAndSave	Fill in form fields and save files locally.
FormImportExport	Import and export form data as FDF, XFDF, XML, and XDP files.
FormAddDelete	Add, change, or delete fields and field properties on the PDF form
SubmitStandalone	Submit data to a server when it is not running in a browser session, by email or offline.
SpawnTemplate	Create pages from template pages within the same PDF form.
Signing	Digitally sign and save PDF documents, and clear digital signatures.
AnnotModify	Create and modify document annotations such as comments.
AnnotImportExport	Save annotations such as comments in a separate data file and load comments from a file.
BarcodePlaintext	Print a document with form data barcoded in an unencrypted form that does not require licensed server software to decode.
AnnotOnline	Upload and download annotations such as comments to and from an online document review and comment server.
FormOnline	Connect to web services or databases that are defined within a PDF form.
EFModif	Modify embedded file objects associated with the PDF document.

Note: LiveCycle Reader Extensions usage rights can be licensed from Adobe only in certain combinations that work together: it is not possible to license these capabilities independently. For information about the available combinations of usage rights, contact an Adobe Enterprise account representative.

Using other certificate viewers

The properties of certificates used for LiveCycle Reader Extensions can be inspected using any software that understands standard digital certificates. However, to obtain the most useful information about digital certificates, Adobe recommends using the Adobe Acrobat Certificate Viewer. In a non-Adobe certificate viewers, the specific LiveCycle Reader Extensions Ubiquity Rights item will not be displayed in detail. For example, in the Microsoft certificate viewer, this group of properties appears as an encoded value associated with the object identifier (OID) 1.2.840.113583.1.1.7.130.



Product

LiveCycle Reader Extensions, Version 7.1

Platform(s)

Microsoft Windows Server™ 2003 Enterprise Edition or Standard Edition.

Solaris 9

AIX 5L 5.2 or 5.3

SUSE LINUX Enterprise Server 9.0 i386 (32 bit)

RedHat Linux AS 2.1 Update 3 or 3.0

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