

inFusion eReview 5.13

Developer Documentation



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ITM Associates, Inc.
1700 Rockville Pike
Suite 400
Rockville, MD 20852
U.S.A.
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Chapter 1 Introduction

1.1 Overview

The developer documentation is designed to help database developers easily incorporate inFusion eReview into a new or already existing application.

1.2 System Requirements

On the server:

- Domino 7.0.x or greater server running the HTTP server task

On the user's machine:

- Windows XP, Vista, 7, 8 or 10
- One of the following Acrobat viewers:
 - Acrobat Reader X or greater
 - Acrobat Standard/Pro X or greater
- One of the following web browsers configured to display PDFs using Acrobat/Reader within the browser:
 - Internet Explorer 9 and above
 - Firefox 3 and above

For specific hardware requirements, see the Adobe Acrobat system requirements.

1.3 Files Installed

- *<Acrobat Plugins Folder>\PDFinFus.api*
Adobe Acrobat plug-in used to control inFusion eReview tools and annotations.
- *<Acrobat Plugins Folder>\PDFiSametime.dll*
Module to handle integration with Lotus Sametime.
- *<Acrobat Plugins Folder>\WebComm.dll*
Module to handle communications with the inFusion eReview server.

Chapter 2 Using eReview Elements Database

2.1 Overview

inFusion eReview Elements is a fully functional eReview database. It can open a PDF in the Lotus Notes client or a web browser and allow the creation of InFusion eReview annotations; however, it contains no review process. The elements in this database are the foundation with which the InFusion eReview Review Template is built upon.

This section will show how the eReview Elements database can open a PDF and create annotations.

2.2 Opening a PDF and Adding Annotations

Creating the Main Document

1. Open the eReviewElements.nsf AddPDF form.
 - a. In a web browser go to:
`http://<server name>/<dbPath>/eReviewElements.nsf/AddPDF?OpenForm`
 - b. Attach a PDF to the document, under Section 1.
2. Fill in Section 2 with the following data:
 - a. Combo Box 1 label: Box 1
 - b. Combo Box 1 values: B1value1, B1value2
 - c. Combo Box 2 label: Box 2
 - d. Combo Box 2 values: B2value1, B2value2
 - e. Combo Box 3 label: Box 3
 - f. Combo Box 3 values: B3value1, B3value2
 - g. Combo Box 4 label: Box 4
 - h. Combo Box 4 values: B4value1, B4value2
3. Fill in Section 3 with the following data:
 - a. Allow Color Change: Yes
 - b. Default Annotation Colors:

Note:	Yellow
Strikethrough:	Blue
Rectangle:	Red
Highlighter:	Orange
Stamp:	Hot Pink
Line:	Green
Pencil:	Gray

Text: Light Pink
Edit Marks: Purple

c. Default Line Thickness:

Rectangle: 1
Strikethrough: 2
Line: 3
Stamp: 4
Pencil: 5

d. Launching the Annotation Dialog:

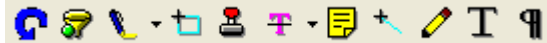
Highlighter: Yes
Line: Yes
Note: Yes
Pencil: Yes
Rectangle: Yes
Stamp: No
Strikethrough: No
Text: No
Edit Mark: No
Edit Mark Selection Dialog: No

4. Click on the “Save and Close” button. You will see “Form Processed”.

Opening the Main Document’s PDF

1. Go back to the database
 - a. In a web browser go to `http://<server name>/<dbPath>/eReviewElements.nsf`
 - b. Click on PDFiWebViewer
 - c. Click on the date of the document
 - a.
2. The PDF will open.

Creating Annotations



1. Once the document is opened, select one of the InFusion eReview annotation tools and create an annotation. For the annotations with “Launching the Annotation Dialog” option selected to “Yes” or left blank, the annotation dialog will appear - the color selector and combo box choices will be populated with the values previously entered on the AddPDF form.

Chapter 3 Adding eReview Functionality to an Application.

3.1 Overview

This section will explain which elements are needed to open a PDF in the browser and describe how each element plays a role within inFusion eReview.

3.2 Required Design Elements

The following design elements are the minimum necessary for inFusion eReview to open a PDF over the web. When making your own application, copy these elements from the eReviewElements.nsf into your database.

1. CGI Reserved Fields (subform)
2. LaunchPDF (agent)
3. LaunchPDFObject (agent)
4. CreatePDFiObject (agent)
5. CreateXML (agent)
6. CreateAnnotation (agent)
7. DeleteAnnotation (agent)
8. eReviewJars (script library)
9. ITM Utilities (script library)
10. PDF Viewer (form)
11. AddPDF (form)
12. Annotation (form)
13. Additional Annotation (form)
14. PDFiWebViewer (view)

3.3 How it all works together

The AddPDF form is broken up into three sections:

- Section 1: The first section is the minimal amount of fields needed to get inFusion eReview to open a PDF over the web. To locate a PDF over the web, specify a URL in the PDFFilename field or attach a PDF using the File Upload control.
- Section 2: The second section is for handling the combo boxes in the annotation dialog. Each combo box has a field for a label and a field to enter the choices for the combo

boxes. When the fields for the combo box choices are not on the form or are left blank the combo boxes in the annotation dialog are hidden from the user.

- Section 3: The third section is used to control properties of the annotation. Annotation colors and line thickness can be initialized, as well as determine if the annotation dialog should open on annotation creation.

Opening the PDF relies on using the PDF Viewer form.

- The PDF Viewer form calls the LaunchPDF agent which in turn calls the following agents: LaunchPDFObject, CreatePDFObject, and CreateXML. Together these agents open the PDF and invoke the inFusion eReview Acrobat plug-in.

Creating and loading annotations uses the Annotation and Additional Annotation forms.

- When an annotation is first created and saved, the plug-in performs an HTTP POST to the CreateAnnotation agent, passing the annotation data to the agent and saving the annotation.
- The creation of additional comments to an existing annotation also performs an HTTP POST to the CreateAnnotation agent. The additional comments are saved as a new child document to the original annotation document.

Chapter 4 Advanced Features

4.1 Overview

Once inFusion eReview is functioning, additional customization can be done using the advanced features discussed in this section.

4.2 Adding a Frame above the PDF

In the InFusion eReview Review Template, a frame is created above the PDF containing the buttons for the review process. This functionality can easily be added to existing review functionality. From the eReviewElements.nsf database, the following elements will be needed:

1. PDFViewerFrameButtons (form)
2. CallLaunchPDFwReviewButtons (agent)
3. LaunchPDFwReviewButtons (agent)

Open the PDF Viewer form for the web in Lotus Domino Designer. Change the agent in the WebQueryOpen event from LaunchPDF to CallLaunchPDFwReviewButtons. When a main document is opened with the PDF Viewer form, a frame will now be displayed above the PDF. To modify the form in the top frame, open the PDFViewerFrameButtons form and customize it to fit your design.

To change the size of the frame, examine the sample code in RevisedNotesReview Script Library. Modify the library to reflect the desired frame size, and change LaunchPDFwReviewButtons to call the class NotesReviewRevised.

4.3 AddPDF Advanced Form

The eReviewElements.nsf database contains a form called AddPDF Advanced. This form contains additional fields which can be added to the AddPDF form to allow more control over the eReview process.

Default Color for People

The initial color for annotations can be set on a per-person basis.

1. Copy the field ColorPeople from the AddPDF Advanced form to your AddPDF form.
2. Add the people and colors in the following format: &Person~Color.
For example: &Chris Reviewer~Blue

In the example above, all of the annotations created by Chris Reviewer will default to the color blue.

Disabling Annotation Tools

inFusion eReview includes the ability to disable individual tools, as well as make the review read-only.

To disable specific InFusion eReview tools:

1. Copy the “Enable...” fields for each tool from the AddPDF Advanced form to your AddPDF form.
2. To disable each of the tools, set the field to “No”.

To make the document read-only:

1. Copy the “ReadOnly” field from the AddPDF Advanced form to your AddPDF form.
2. To prohibit the creation or modification of annotations, as well as disable all the InFusion eReview tools set the “ReadOnly” field to “Yes”.

To make specific annotations read-only:

1. Create a field called “ReadOnly” on the annotation form.
2. Set the field to “Yes” on the annotation document which will be read-only.
3. When the PDF is opened the annotation with ReadOnly marked “Yes” will not allow modifications.

Chapter 5 Details of Elements

This section will explain the various design elements included in the eReview Elements Database.

5.1 Subforms

CGI Reserved Fields

The CGI Reserved Fields subform is used in the PDF Viewer form. The fields on this form are computed for display in order to always register the current web data.

5.2 Agents

LaunchPDF

This agent is called in the WebQueryOpen event of the PDF Viewer form. It creates the frameset which will call the CreatePDFiObject and LaunchPDFObject agents.

LaunchPDFObject

This agent is called during the loading of the eReview frameset to create a reference to the PDF file.

CreatePDFiObject

This agent is called during the loading of the eReview frameset to create a reference to the inFusion eReview web browser control or plug-in.

CreateXML

This agent is called by the Acrobat plug-in to request the review and annotation data via XML. This agent must be run as web user.

CreateAnnotation

This agent is called by the Acrobat plug-in to send new annotation data to the database. This agent must be run as web user.

DeleteAnnotation

This agent is called by the Acrobat plug-in to delete an annotation. The annotation is not actually deleted from the database. This agent simply sets the *Deleted* field on the Annotation document to "Yes".

CallLaunchPDFwReviewButtons

This agent calls the LaunchPDFwReviewButtons agent, which is used to replace LaunchPDF in order to open the PDF in a frameset.

LaunchPDFwReviewButtons

This agent creates the frameset which will call the CreatePDFiObject and LaunchPDFObject agents. It also creates a frame above the PDF which displays the PDFViewerFrameButtons form.

5.3 Script Libraries

eReviewJars

Contains the code necessary for all the web agents.

ITM Utilities

Code used in the CreatePDFiObject and LaunchPDFObject agents.

5.4 Forms

PDF Viewer

This form must contain the CGI Reserved Fields subform and also must include a call to the LaunchPDF agent in the WebQueryOpen event.

AddPDF

This form is used to hold review data to be sent to the Acrobat plug-in. The name of the form is insignificant; however it must contain at a minimum the following data:

1. An attached PDF or a URL to a PDF. If using a URL to the PDF, the URL must be stored in the PDFFilename field.
2. A computed field called Attachments which contains the value. @AttachmentNames.

AddPDF Advanced

Additional options which can be added to the AddPDF form.

Annotation

This form must be called "Annotation". It is the form used when a new annotation is created. A document created with this form will contain the following fields:

1. Author – The creator of the annotation
2. Date – The date the annotation was created on
3. Text – Any annotation text submitted by the author.
4. Category – Value selected in combo box 1.
5. Action – Value selected in combo box 2.
6. Misc – Value for combo box 4, text used with the InFusion eReview text tool, the edit mark tool, or the stamp tool.
7. Type – Number representing the type of annotation used. Note = 1, Rectangle=2, Strikethrough=3, Highlighter=4, Stamp=5, Line=6, Pencil=7, Text=8, Edit Mark=9.
8. Page – The number of the page the annotation is on. The page numbering starts at 0.
9. Coordinates – The position of the annotation on the page.
10. Color – The color of the annotation.
11. Line Thickness – The line thickness of the annotation.

12. Private – When the private box is checked on an annotation, this field gets set to “Yes”. An annotation can only be set to private when it is first created. Setting an annotation to private allows only the creator of the annotation to see it.
13. Readers – When the private field is set to yes, the readers field is computed to contain the Author of the annotation.
14. Deleted – This field is set to “Yes” when the annotation is submitted for deletion.

Additional Annotation

This form must be called “Additional Annotation”. It is the form used for child documents of the Annotation form. Any comments made to an existing annotation are saved using this form.

1. Author – The creator of the annotation
2. Date – The date the annotation was created on
3. Text – Any annotation text submitted by the author.
4. Category – Value selected in drop down control 1. (See Section ??)
5. Action – Value selected in drop down control 2. (See Section ??)
6. Type – For additional annotations, type is always 50.
7. Page – The number of the page the annotation is on. The page numbering starts at 0.
8. Coordinates – The position of the annotation on the page.
9. Color – The color of the annotation.
10. Line Thickness – The line thickness of the annotation.
11. Private – When the private box is checked on an annotation, this field gets set to “Yes”. An annotation can only be set to private when it is first created. Setting an annotation to private allows only the creator of the annotation to see it.
12. Readers – When the private field is set to yes, the readers field is computed to contain the Author of the annotation.

PDFViewerFrameButtons

The form displayed in the frame above the PDF when opened in the browser.

5.5 Views

PDFiWebViewer

The view opens a document using the “PDF Viewer | viewerweb” form. The view also shows how to open a review document using a URL. In column 2 is the formula:

```
"[<a
href=http://itmlns2.itmassociates.com/ajm/ereviewelements.nsf/LaunchPDF!OpenAgent&UNID=" +
@Text(@DocumentUniqueID) + ">Call LaunchPDF Agent</a>"]".
```

Main

The document is opened using the form in the “form” field on the document.

Chapter 6 Troubleshooting

6.1 FAQ

1. Cannot display a PDF in the browser.

Please refer to the link:

<https://helpx.adobe.com/acrobat/using/display-pdf-in-browser.html>

2. The PDF loads in the browser but you cannot see inFusion eReview tools in the toolbar.

Verify that the inFusion eReview plug-in is loading.

- Bring Acrobat to the front. Click on the Help Menu. Under About Plug-ins you should see inFusion eReview.
- Make sure the certified plug-ins only checkbox is deselected in Acrobat. Verify this under the General tab of the Preferences dialog.
- Make sure the CreateXML agent is present in the database. If it is, then the code may have been erased or corrupted. It must be replaced with the agent from the template.

3. Get “The page cannot be displayed” error message when trying to open a document or form on the web.

This error occurs when the signer of the agents in the database does not have unrestricted access to run agents on the server. (See Administration Documentation)

4. When trying to open an inFusion eReview document you repeatedly get the login and it does not open the document.

This can be caused by the signer of the agents not having at least editor access in the database ACL. (See Administration Documentation)

5. Get a “Communications error occurred while saving the annotation” error message, then “Error creating the annotation” error message while saving an annotation.

This can be caused by the CreateAnnotation agent not being present in the database or its code having been erased. The agent will need to be added or replaced from the template.

6. To assist the InFusion eReview Support team in troubleshooting a problem, it is often useful to create and send a log file. To create a log file:

- a. Open your Acrobat application.
- b. Click on Help\About Third-Party Plugins\inFusion eReview.
- c. Click on the *Log File* button. The Log window will open.

- d. If Log Path says “No Log File”, a log file does not exist and will need to be created. Click on *Create Log* button. Log Path will show the path to the log file and the information box will contain the log data.
 - e. Close the Log window and the About dialog. Repeat the process that was causing the problem to allow the pertinent process information to be logged.
 - f. Go to the file listed in Log Path on the Log dialog and send it to inFusionSupport@itmassociates.com.
7. When opening a review document, you get “Agent Done” and a notes exception on the “getDocumentByUNID” is thrown to the server console.

In the ACL uncheck the Read/Write Public Documents options for Anonymous and Default.

Chapter 7 InFusion eReview Support

7.1 Support

While this documentation provides the information you need to understand and use inFusion eReview, there may be times when additional information or assistance is needed.

- If you purchased InFusion eReview from a InFusion eReview Business Partner, please contact the business partner for technical support. Your administrator will have all the contact information that you need.
- Otherwise, send your questions directly to ITM Associates via email to: inFusionSupport@itmassociates.com.

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