



Administration Documentation

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1 Introduction

1.1 Overview

InFusion eForms is a point-and-click tool to automate the definition and execution workflow processes for IBM Workplace Forms™ and PDF forms, without needing programmers. InFusion eForms can quickly set up and handle the review, approval, and action cycles triggered when a form is submitted. The interface is intuitive, therefore does not require extensive end-user training.

1.2 System Requirements

Administration Database and Client Database

On the server:

- Domino server 7.0.2 or higher running the HTTP server task
- For Lotus Forms support
 1. SSO must be enabled on the Domino Server
 2. WebSphere Server 6.0 CF 11 or higher for the ear component

On the user's machine:

- Acrobat Profession, Standard, or Reader 5.x or above.
- Internet Explorer 6 and Internet Explorer 7, Firefox 2.0 and above

For specific hardware requirements, see Adobe Acrobat's requirements and Lotus Forms requirements.

1.3 Installation

1. Create databases from the following files into the Domino data directory or a subfolder in the Domino data directory of the server running the HTTP Server task:
 - eFormsClient6_5.ntf (eForms Client Template)
 - eFormsAdmin6_5.ntf (eForms Admin Template)
 - eFormsLibrary6_5.ntf (eForms Forms Library Template)
 - eFormsSupp6_5.ntf (eForms Supplemental Template)
2. By default, all design elements are signed by PDF inFusion Development. You will need to sign the databases with another ID. The ID you choose to sign the design elements must be given access in the server document to run restricted LotusScript/Java agents on the Domino server.
3. Signing the database with a different ID
 - Switch to the Notes ID with which you would like to sign the database
 - Open Notes Administrator
 - Highlight the correct database
 - Choose Sign Database

Note** If using Basic Authentication on your server, these databases should be kept within the same subfolder to prevent users from having to login multiple times.

1.4 Upgrades

1.4.1 Templates

The templates are used for updating your inFusion eForms databases with future releases.

The template files are as follows:

- **eForms Admin Template** (eFormsAdmin6_5.ntf): The administration database which contains all Workflow and eForms functionality.
- **eForms Client Template** (eFormsClient6_5.ntf): The database in which all end users will interact and store the data.
- **eForms Forms Library Template** (eFormsLibrary6.ntf): The database to store all PDF files used within the inFusion eForms system.
- **eForms Supplemental Template** (eFormsSupp6_5.ntf): The database used for delegating workflows.

1.4.2 Installation Using the Templates

All templates should be installed on the server in which the system databases will reside. To upgrade your eForms databases set your existing eForms databases to inherit their design from the templates.

2 eForms Forms Library Database

2.1 Overview

The eForms Forms Library database stores all the form files to be accessed by inFusion eForms system.

2.2 Access Control List

Recommended access control list for the Forms Library database:

User	Access Level	Roles	Additional Privileges
Default	Reader		
Anonymous	No Access		
PDF Form Creators	Author	[WorkflowManager]	Create documents Delete Documents*
Database Administrators	Manager	[WorkflowManager]	Delete Documents*
Agent Signer	Author	[WorkflowManager]	
Server	Author	[WorkflowManager]	

* Optional setting

2.3 Agents

Below is a list of agents contained in the Forms Library Database.

Agent Name	Agent Trigger	Description
Close Notes UI	On Schedule Never	Closes the current Notes UI Document. Used by the Extract PDF Field Names agent.
Compute Total Lines	On Schedule Never	Computes the total number of records available in the current view. Used when navigating a view over the web.
ExtractPDFFieldNames	On Schedule Never	When saving a PDF document, this agent generates a list of field names contained within the PDF document; the results are stored in the Notes Document. A temporary file is created and deleted upon completion. See section 0 for more information.
ExtractWPFFieldNames	On Schedule Never	When saving a Lotus Form document, this agent generates a list of field names contained within the Lotus Form; the results are stored in the Notes Document.
(GetFieldNames)	On Event Agent List Selection	When configuring metadata options for fields within a workflow profile this agent is used to display the fields available for a specific form.

2.4 Configuration Documents

The Forms Library contains three types of configuration documents. All of the configuration documents can be managed via the web or the Notes Client.

2.4.1 General Configuration Document

The general configuration document allows the Forms Library database to communicate with the other inFusion eForms databases. No more than one general configuration should be created in a database. Creating multiple documents may cause inFusion eForms to function incorrectly. The first time a configuration document is created it must be through the Lotus Notes Client.

Creating a new general configuration document:

- Notes Client:
Select the Configurations link under Administration, and Click the New General Config button.

Workflow Admin Database Path: The file path of the Admin database.

Workflow Client Database Path: The file path of the Client database. If multiple client databases will be used, enter the file paths separated by commas.

Form Repository Database Path: The file path of the Forms Library database.

Supplemental Database Path: The file path to the Supplemental database.

2.4.2 File Attachment Document

The documents to be used with inFusion eForms are stored in the Forms Library as attachment documents.

Note** Before attaching a file, make sure the Admin and Client database configuration documents have been created.

To create a new file attachment document, in a browser, select All Forms from the Administrator Views and select New Document. In the Notes Client, select the Add Form link.

FORM ATTACHMENT DOCUMENT FOR REQUESTFORLEAVE2.XFDL

Created on 11/29/2006 12:43:46 PM By CN=Michael Hiner/O=BTIExternal
Last Modified on 01/17/2007 04:31:13 PM By CN=Thomas B Nelson/O=ITM Associates Inc

File Attachment: C:\requestforleave2.xfdl

Description: No Comments

Type: Form Template

Generated List of Embedded Fields: AccruedSick_Box; AccruedSick_DateFrom; AccruedSick_DateTo; AccruedSick_TimeFrom; AccruedSick_TimeTo; AccruedSick_TotalHours; Accrued_Box; Accrued_DateFrom; Accrued_DateTo; Accrued_TimeFrom; Accrued_TimeTo; Accrued_TotalHours; AdvanceSick_Box; Advance_Box; Advance_DateFrom; Advance_DateTo; Advance_TimeFrom; Advance_TimeTo; Advance_TotalHours; AdvancedSick_DateFrom; AdvancedSick_DateTo; AdvancedSick_TimeFrom; AdvancedSick_TimeTo; AdvancedSick_TotalHours; BirthEntitlement; ...

Do not update field list

Figure 1: File Attachment

File Attachment: The actual file to be used for a given workflow process. Click on the “Browse” button to choose your XFDL or PDF file. In the Lotus Notes client put the cursor in the *File Attachment* field and attach a file from the file system onto the form.

Description: A description of the attached form.

Type: Indicates what purpose the document serves. If a document is specified as a “Form” then the document is launched via the web. If a document is specified as a “Template” it is used when merging and appending files.

Generated List of Embedded Fields: Dynamically generated list of fields embedded in the document.

Do not update field list: If checked, the current List of Embedded Fields will not be updated when the form is saved. If an existing document is updated but no field names have been added, removed, or modified, selecting this option may reduce the save time.

When the document is saved, if *Do not update field List* option is not checked, the Extract Field Names Agent will run, storing the list of fields from the form, in the notes document.

3 inFusion eForms Administration Database

3.1 Overview

inFusion eForms Admin database contains the configuration documents necessary to setup eForms functionality and user lookup information. All agents that handle workflow processing are also stored in the Administration database.

3.2 Access Control List

Recommended access control list for the eForms Administration database should be as follows:

User	Access Level	Roles	Additional Privileges
Default	Author		Create documents Delete Documents
Anonymous	No Access		Read public documents
Database Configuration Document Manager	Author	[ConfigManager]	Create documents Delete Documents*
Database Administrators	Manager	[WorkflowManager]	Delete Documents*
Agent Signer	Author	[ConfigManager] [WorkflowManager]	
Server	Author	[ConfigManager] [WorkflowManager]	

* Optional setting

Users in the [ConfigManager] Role can create and modify all configuration documents.
Users in the [WorkflowManager] Role can create and modify Workflow Profile documents.

3.3 Agents

List of the agents contained in the Administration database is listed below.

Agent Name	Agent Trigger	Description
BatchAction	On Schedule Never	This agent handles batch processing by running the workflow process on multiple documents. If workflow processing failed for any document, an email is sent to the user with links to open each document.
CallPostWorkflow	On Schedule Never	Used to call postworkflow using a GET Request. This allows the PostWorkflow functionality to be called other than when submitting from a form.
Check Times	On Schedule Daily at 1:00 AM	If a time limit was set for a document and the time limit has passed, the agent will send an email to the current reviewer(s), the last reviewer, and the author if specified, indicating that the review time limit has expired. The email contains a link to review the form, as well as a link to allow the author to change the next reviewer. This agent modifies the workflow response document, but does not modify the workflow document.
Compute Total Lines	On Schedule Never	Computes the total number of records available in the current view. Used when navigating a view over the web.

Agent Name	Agent Trigger	Description
Copy Docs in Web View	On Schedule Never	Allows user to copy configuration documents in a view over the web. This agent is available only to the members of the [ConfigManager] and [WorkflowManager] Roles.
Create Reverse Address Lookup View	On Schedule Never	Creates a view in the lookup database for use with the (wGroupMembers) Notes Form. The new view will contain (from left to right) the following columns: all users' fullname , canonical name, and last name, first name. The new view will be named (<i>_WF Reverse Addr Lookup for dataSourceName</i>). The agent is triggered when a datasource document is saved. This agent is available only to members of the [ConfigManager] and [WorkflowManager] Roles. Note: This agent uses functionality only available on an R6.5 server, and is therefore disabled by default.
Create WorkflowProfile In UserDB	On Schedule Never	When a Workflow Profile Document is created or modified, this agent creates the associated "pointer" document in the appropriate Client Database. Triggered when the Workflow Profile Form is saved.
CompilePDF	On Schedule Never	eForms Agent. Do not modify.
Delete Docs In Web View	On Schedule Never	Allows user to delete configuration documents in a view over the web. This agent is available only to members of the [ConfigManager] and [WorkflowManager] Roles.
Delete Orphaned Profiles	On Schedule Daily at 1:00 AM	When a Workflow Profile Document is created, a "pointer" profile doc is created in the Client DB. This agent removes pointer profile docs from the Client DB if there is no associated profile document in the Admin DB.
DirCheckWin32	On Schedule Never	Checks for the compilePDF directories on a Windows machine.
FormOpen	On Schedule Never	Agent is used in email notifications to launch a workflow document in the browser.
GetProfile		Displays a workflow profile to the web for debugging purposes
InstallTemplates		Copies PDF templates for use in CompilePDF to the server file system
MergeForms	On Schedule More than Once a Day (every hour)	Creates and emails a flattened PDF for a workflow document.
NameVerification		Validates names from an LDAP datasource on the Workflow Profile.
NotesTo64		eForms Agent. Do not modify.
NotesToPDF		eForms Agent. Do not modify.
PDFToNotes		eForms Agent. Do not modify.
PostFile		Allows HTTP submissions to update an active workflow with those values.
ResubmitForm	On Schedule Never	This agent allows a user to resubmit a form (create a new form with all of the current form's data). This agent modifies the workflow response document, but does not modify the workflow document.
SetITMXAgentDB		eForms Agent. Do not modify.
SetITMXAgentDBMan		eForms Agent. Do not modify.
UpdateFieldDisplay	On Schedule More than Once a Day (every 6 hours)	Updates the view display data for workflow documents when a profile document has been modified.
VersionInfo	On Schedule Never	Used within the browser to get all the version information on each class used within eForms.
WorkflowGet	On Schedule Never	Handles a POST request to call the postWorkflow functionality.

Agent Name	Agent Trigger	Description
(CleanLog)		Deletes older log entries automatically. (Default is disabled.)
(FileClean)		Deletes temporary files used in the CompilePDF process.
(ManualOpen)	Agent List Selection	Initializes data used for manual routing. Triggered in the WebQueryOpen Event of the (manual) Form.
(manualWorkflow)	Agent List Selection	Calls the postWorkflow functionality for manual processing. Handles a POST request. Triggered when the (manual), (manualauto), or (manualPackage) forms are submitted.
(RawXML)		Not in use.
(TestConnection)		Checks to make sure that the server configuration document has a valid configuration. (Not in use.)
(wAddressLookup)	Agent List Selection	Sets the list of available users in the (wAddress) Form. Triggered in the WebQueryOpen Event and when clicking the Next and Previous buttons of the (wAddress) Form.
(wGroupMembersLoad)	Agent List Selection	Sets the list of available users in the (wGroupMembers) Form. Triggered in the WebQueryOpen Event and when clicking the Next and Previous buttons of the (wGroupMembers) Form.

3.4 Configuration Documents

The inFusion eForms Administration database contains several types of configuration documents. These configuration documents are used to define the workflow rules for a given form.

3.4.1 eForms Configuration Document

The eForms configuration document is used to setup the inFusion eForms product features, and allows the eForms Administration database to communicate with the other inFusion eForms databases.

To create a new eForms Configuration document, in a browser, select Configuration from the Administrator Views and click New Document. In the Notes Client, from the menu bar, select Create - ConfigDoc.

3.4.1.1 General Settings

Configuration for Notes Server: The configuration document can be set for different servers. When a server is specified, the functionality will check for a configuration document for the server it is running on. If it doesn't find a document for the server, it will look for the default configuration document. To specify the default configuration document, set the value to "*".

Form Database: Select other and enter the file path of the Forms Library database.

Log Database: Leave blank to log activity and errors to this database, otherwise specify the path to a Lotus Notes database. If specifying a database here, the database must be created and based on the loga4.ntf Lotus Notes Template for eForms logging to function properly.

Serial Number: Enter your trial or purchased eForms serial number.

General	NotesToPDF	PDFToNotes	CompilePDF	Advanced	Workflow
Configuration For Notes Server:		* (i.e. "myServer/MyDomain", "*" for default config)			
		* (i.e. "www.hostname.com", "*" for default config)			
Form Database:		<input type="radio"/> This Database <input type="radio"/> Client Database <input checked="" type="radio"/> Other <input type="text" value="infusion/wflibrary.nsf"/>			
Log Database:		<input type="text"/> (Leave empty to log to this database)			
Serial Number:		<input type="text"/>			

Figure 2: General eForms Settings

3.4.1.2 NotesToPDF

Enable NotesToPDF

- Yes - The data stored in a database will populate a form and be displayed in the browser. Value should always be yes unless doing an administrative task and workflow should be turned off.
- No – The NotesToPDF functionality will not run.

Log Errors To

- Server Console/Log - Will log to the Domino server console, where the database resides.
- Log Database - Will log errors to the database that is set in the Log Database field on the General Tab.

Default URL/Path - URL to use for requests for new and existing workflows where a type specific URL is not provided. Leave blank to use automatically generated URLs.

FDF URL - URL for use when FDF is requested. Leave blank to use automatically generated URLs.

PDF URL - URL for use when a PDF form is requested. For this function to work this URL must point to the inFusion servlet component.

XFDL URL - URL for use when a Lotus form is requested. For this function to work this URL must point to the inFusion servlet component.

Additional Debug Logging - eForms will log errors and activity based on the level chosen.

- None – No logging will occur.
- Minimal – Logs the start and finish of the process plus any critical errors during the process.
- Medium – All minimal logging plus all major steps in the process.
- Maximum – All minimal and medium logging plus details included in each of the major steps to include specifics about the data.

Enable Agent: Yes
 No

Log Errors To: Server Console/Log
 Agent Database Log

Default URL/Path

FDF URL

PDF URL

XFDL URL

Additional Debug **NotesToPDF** None
 Minimal Debug
 Medium Debug
 Maximum Debug

3.4.1.3 PDFToNotes

Enable PDFToNotes

- Yes - The data displayed via a PDF form will be sent to a Lotus Notes document stored in the database.
- No – A message will be displayed when the Submit button is clicked on the PDF.

Log Errors To

- Server Console/Log - Will log to the Domino server console where the database resides.
- Log Database - Will log errors to the database that is set in the Log Database field on the General Tab.

Save the submitted data to eForms

- Original Notes Document – Any additions or modifications made on the PDF form will be sent to the Lotus Notes document containing the original data.
- New Document – A new document will be created with the data on the PDF Form. The original document will remain the same.
- Nowhere (take no action) –This is the default setting. eForms will not perform any action with the submitted data.

After PDF Form Submit

- Use the browser_redirect field on the PDF – The PDF can have a field called browser_redirect. After the data is submitted the browser will redirect to the URL specified in this field.
- Go to Specific URL – Will return you to the URL specified in the Return URL field.
- Use ITMX_RETURN field on document – The PDF can contain a field called ITMX_RETURN which should include HTML to be displayed after the form is submitted.
- Do Nothing – (Use this setting) eForms functionality will do nothing after the data is submitted.

Return URL – If the “Go to Return URL” option above is selected, once the data is submitted the browser will redirect to this URL.

Additional Debug Logging - eForms will log errors and activity based on the level chosen:

- None – No logging will occur.
- Minimal – Logs the start and finish of the process plus any critical errors during the process.

- c. Medium – All minimal logging plus all major steps in the process.
- d. Maximum – All minimal and medium logging plus details included in each of the major steps to include specifics about the data.

General	NotesToPDF	PDFToNotes	CompilePDF	Advanced	Workflow
Enable Agent:	<input checked="" type="radio"/> Yes <input type="radio"/> No				
Log Errors To:	<input type="checkbox"/> Server Console/Log <input type="checkbox"/> Agent Database Log				
Save the submitted data to:	<input type="radio"/> Original Notes Document <input type="radio"/> New Document <input checked="" type="radio"/> Nowhere (take no action)				
Upon Return:	<input type="radio"/> Use the browser_redirect field on document <input type="radio"/> Go to specified URL <input type="radio"/> Use ITMX_RETURN <input checked="" type="radio"/> Do Nothing				
Return URL:	<input type="text"/>				
Additional Debug Logging:	<input checked="" type="radio"/> None <input type="radio"/> Minimal Debug <input type="radio"/> Medium Debug <input type="radio"/> Maximum Debug				

3.4.1.4 Compile PDF

Enable Compile PDF

- a. Yes - A PDF will be flattened or filled with the data stored in the Lotus Notes document.
- b. No – A message will be displayed when the Save Local PDF functionality is used.

Log Errors To

- a. Server Console/Log - Will log to the Domino server console where the database resides.
- b. Log Database - Will log errors to the database that is set in the Log Database field on the General Tab.

Additional Debug Logging - eForms will log errors and activity based on the level chosen:

- a. None – No logging will occur.
- b. Minimal – Logs the start and finish of the process plus any critical errors during the process.
- c. Medium – All minimal logging plus all major steps in the process.
- d. Maximum – All minimal and medium logging plus details included in each of the major steps to include specifics about the data.

Class Configuration

Enable CompilePDF: Yes No

Use Java Toolset
 Use External Executables (obsolete as of Workflow 3.0)

Log errors to: Server Console/Log
 Agent Database Log

Additional debug logging: None
 Minimal Debug
 Medium Debug
 Maximum Debug

Final PDF Directory – When the Save Local PDF feature is used a PDF is created and it will be saved in the directory in this field.

Forms Template Directory – CompilePDF uses PDF templates to create the new PDFs. The templates will be stored in this directory.

Temporary File Directory – During the CompilePDF process, files are created on a temporary basis and placed in this folder. The files in this folder get deleted after use.

The Compile Log Directory – If the CompilePDF agent create a log file which is stored in this directory.

Path Configuration

Note: Please use complete paths for all directories, i.e. "c:\eForms\CompilePDF".

Final PDF Directory:
 (i.e. "c:\eForms\complete")

Forms Directory:
 (i.e. "c:\eForms\temp")

Temporary File Directory:
 (i.e. "c:\eForms")

Compile Log Directory:

The following settings are obsolete as of Workflow 3.0. They are used for compatibility with prior versions only:

Merge Product ID:

Append Product ID:

The Executable Path:

PDFAppend Logging

- a. Yes – The CompilePDF functionality will place a log file in the directory specified in CompilePDF Log Directory.
- b. No – A log file will not be created.

Log File Name – (Optional) The name of the CompilePDF log file.

Flatten Final PDF

- Yes - The fields on the PDF will be “flattened”. Flattening removes the fields from the PDF, leaving only the values in the fields on the PDF as text.
- No - The fields will remain on PDF with values filled in on the form.

Execution Timeout – Set in seconds. After set period, without successful execution, CompilePDF will terminate.

Advanced Settings

PDFAppend Logging: Yes No
(created in the AppendPDF Directory)

Log File Name:
(created in the AppendPDF Directory)

Flatten Final PDF: Yes No
(replaces text fields with field value as text)

Execution Timeout: +/-
seconds

3.4.1.5 Advanced

Operating System of Server – The operating system of the server the agents are running on.

Enable SDK Functions – Stub functions are provided to allow the database administrator to customize some of the eForms functionality.

- Yes – All stub functions in the database will run.
- No – All stub functions in the database will not run.

Administrative ID (OS/400 Only) - The OS/400 administrative ID under which local commands are to run.

Auto-generate ITMX_SERVER

- Yes - The ITMX_SERVER field on the Lotus Notes document and PDF file will be set when the View Selected PDF button is clicked and filled in with the value of the server the functionality is running on, overriding the values on the document.
- No – ITMX_SERVER field needs to be filled out manually.

Auto-generate ITMX_AGENTDATABASE

- Yes - The ITMX_AGENTDATABASE field on the Lotus Notes document and PDF file will be set when the View Selected PDF button is clicked and filled in with the value of the database the functionality is running on, overriding the values on the document.
- No – ITMX_AGENTDATABASE field needs to be filled out manually.

Test for Agent Database Validity - Performs a check to see if the server can locate the functionality it uses for operation.

Toggle email notifications - Disables all email notifications.

Non-standard port number - Set the port number for HTTP if it runs on a port other than 80 and 443.

Operation System Of Server:	<input checked="" type="radio"/> Windows NT or 2000 <input type="radio"/> AIX <input type="radio"/> OS/400 <input type="radio"/> Solaris <input type="radio"/> Linux <input type="radio"/> Other
Enable SDK Functions:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Send through Domino	<input checked="" type="radio"/> Yes <input type="radio"/> No
Administrative ID (OS/400 only)	<input type="text" value="QNOTES"/>
Auto-generate ITMX_SERVER	<input checked="" type="radio"/> yes <input type="radio"/> no
Auto-generate ITMX_AGENTDATABASE	<input checked="" type="radio"/> yes <input type="radio"/> no
Toggle e-mail notifications	<input checked="" type="radio"/> on <input type="radio"/> off
non-standard port number	<input type="text"/>

3.4.1.6 Workflow Settings

Enable Database for Workflow: Selecting this option will automatically set the necessary options under the NotesToPDF and PDFToNotes tabs.

User Database Path(s): The file path of the Client database. If multiple client databases will be uses, enter each file path separated by commas.

Workflow Admin Database Path: The file path of the Admin database.

Form Repository Path: The file path of the Forms Library database.

Supplemental Database Path:

Additional Debug Logging: To log workflow processes set this option to “Maximum Debug”. It is recommended to leave this option at “None”.

Log Database: The path to the workflow database when logging workflow processes.

General | NotesToPDF | PDFToNotes | CompilePDF | Advanced | **Workflow**

Enable Database for Workflow: Yes No

User Database Path(s): infusion/wfclient.nsf

WorkFlow Admin Database Path: infusion/wfadmin.nsf

Form Repository Database Path: infusion/wflibrary.nsf

Supplemental Database Path: infusion/wfsupp.nsf
(Optional)

Use eForms Log: Yes No

Log Errors To: Server Console/Log
 Agent Database Log

Log Database:
(Leave empty to log to this database)

Additional Debug Logging: None
 Minimal Debug
 Medium Debug
 Maximum Debug

Enable Portal e-mail links: Yes No

Figure 3: eForms Workflow Settings

3.4.2 Data Source Document

The Data Source Configuration document is used to perform three tasks: user lookup, form pre-population, and delegation. Workflow can access this information from a standard Domino Name and Address Book, a Custom Notes Database, and an LDAP connection, or using a JDBC connection. Before creating a data source document, you may need designer access to the databases you are using so that you can determine which views and fields should be used.

To create a new Data Source document, in a browser, select Data Sources from the Administrator Views and click New Document. In the Notes Client, select the Configurations link under Administration, and Click the New Data Source Document button.

Data Source Name: A unique name for the data source document. The name will appear in the profile document.

Data Source Comment: A description of the document.

DATA SOURCE CONFIGURATION DOCUMENT

Data Source Name: Default

Data Source Comment:

Figure 4: Data Source Header

3.4.2.1 Employee Lookup Data Settings

The data entered in the employee lookup tab is used to determine and verify reviewer names for workflow document access. A new document will contain default values based upon the standard Domino Address Book.

Select the type of database. If the Name and Address Book or Custom Notes Database option is selected, the following options will be available (required fields are marked with an asterisk):

* **Database Path:** The path to the database for performing lookups. All inFusion eForms users need read access to all users' documents in this database.

* **Employee View/Table:** The view containing all users' Person Documents. All look-ups performed by workflow will use this view to find a user's Person Document.

* **Employee Name Field:** The field in the Person Document containing the user's full name. The full name field may contain multiple values in the document. (i.e., "John Doe" and/or "John Doe/OrgName" and/or "John Doe/O=OrgName").

Employee First Name Field: The field in the Person Document containing the user's first name.

Employee Last Name Field: The field in the Person Document containing the user's last name.

Employee By Last Name View/Table: The view in the Lookup Database displaying all the Person Documents sorted by user's last name.

Employee's Supervisor Field: The field in the Person Document containing the user's Supervisor's Name (Full Name, ShortName or Group Name). The field is used to retrieve a user's Supervisor, when the Supervisor option is selected in an Automatic Workflow.

Employee's Timekeeper Field: The field in the Person Document containing the user's Timekeeper's Name (Full Name, ShortName or Group Name). The field is used to retrieve a user's Timekeeper when the Timekeeper option is selected in an Automatic Workflow.

Employee Short Name View/Table: The View containing user names sorted by a user's short name. This view is used in conjunction with the Employee Short Name field to retrieve a user's Person Document. It may be the same View/Table as the Employee View/Table, in which case it should be left blank.

Employee Short Name Field: The field in the Person Document containing the user's shortname.

Employee Number View/Table: The view containing users sorted by employee number. When using the employee number option in an Automatic Workflow, this is used in conjunction with the Employee Number Field to retrieve a user's Person Document.

Employee Number Field: The field in the Person Document containing the user's Employee Number. The field is used to retrieve a user's Person Document when the Employee Number option is selected in an Automatic Workflow.

Employee Title View/Table: The view containing users sorted by Title. The view is used in conjunction with the Employee Title Field to retrieve a user's Person document, when using the 'Title' option in an Automatic Workflow.

Employee Title Field: The field in the Person Document containing the user's Title. The field is used to retrieve a user's Person Document when the 'Title' option is selected in an Automatic Workflow.

Group View/Table: The view containing all group names sorted by Group Name. This view is used in conjunction with the Group Name Field to retrieve the members of a particular group.

Group Name Field: The field from the Group document containing the name of the Group. This will be used to search for a group if the group could not be found in the view.

MetaGroup Key Field: The field in the user's Person Document that contains the value corresponding to the MetaData Key in a MetaGroup Document. Used when the MetaGroup option is selected for an automatic Workflow.

Group Members Field: The field in the Group document containing the members of the group.

* **Canonical Name Field:** The field in the Person Document containing the user's Canonical Name. This field is optional if using a NAB, but is necessary when using a custom notes database to correctly set reader and author access.

Signature Field: The field in the Person Document containing the user's signature as it should appear in the form for purposes of electronic signatures. If a value is not entered in this field, the user's canonical username will be used.

Address Lookup View/Table: The view containing the values (usernames, groups, etc),

Address Lookup Value Column: The column number in the address lookup view that contains the user's unique (canonical) name. Column numbers are counted from left to right where the first column is number one.

Address Lookup Alias Column: The column number in the address lookup view that contains the values that should be displayed in the address lookup window. Typically, this column contains each user's last name, comma, first name, and middle initial (i.e., "Smith, Jay B."). Column numbers are counted from left to right where the first column is number one.

Employee Lookup Data	
Choose Type of Employee Lookup DB	Name and Address Book
NAB Database Path	names.nsf
Employee View/Table:	(\$LDAPCN)
Employee Name Field:	FullName
Employee First Name Field:	FirstName
Employee Last Name Field:	LastName
Employees By Last Name View/Table:	(\$People)
Employee's Supervisor Field:	Manager
Employee's TimeKeeper Field:	
Employee Short Name View/Table:	(\$Users)
Employee Short Name Field:	ShortName
Employee Number View/Table:	
Employee Number Field:	EmployeeID
Employee Title View/Table:	
Employee Title Field:	JobTitle
Group View/Table:	(\$/IMGroups)
Group Name Field:	ListName
Group's Members Field:	Members
MetaGroup Key Field:	Location
Canonical Name Field:	FullName
Signature Field:	
Address Lookup View/Table:	(\$PeopleGroupsFlat)
Address Lookup Value Column:	2
Address Lookup Alias Column:	4

Figure 5: Data Source Employee Lookup Options

If the LDAP option is selected, the following options will be available (required fields are marked with an asterisk):

Host: The domain hostname of the LDAP server

Port: The port on which the LDAP server is running. The default value is 389.

LDAP Authorization ID: The login name on the LDAP server

LDAP Authorization Password: The login password on the LDAP server

Base: The base of the schema

Canonical Name: The field containing a user's full name with all organizational qualifiers, spelled out in standard syntax.

Common Name: The field containing user's first and last name without organizational qualifiers and canonical syntax.

Employee Number: The field containing the user's employee number.

Group: A list of users or groups stored directory-wide.

Position: The field containing a name identifying a particular position within a corporate hierarchy.

Role: The field containing a list of users or groups particular to an application.

Supervisor: Field containing a user's supervisor's name.

Common Name Fields: Database fields that hold the common name of a user.

The screenshot shows a configuration window titled "Employee Lookup Data". It contains several fields for LDAP settings:

- Choose Type of Employee Lookup DB: LDAP (dropdown menu)
- Host: ldap.itmassociates.com
- Port: 389
- LDAP Authorization ID: Administrator
- LDAP Authorization Password: [masked with dots]
- Base: O=ITM Associate Inc
- Canonical Name: CN
- Common Name: cn
- Employee Number: billet
- Group: member
- Position: title
- Role: [empty field]
- Supervisor: manager
- Common Name Fields: cn, name, sAMAccountName, distinguishedName (text input with up/down arrows)

Below the Common Name Fields field, there is a note: "(Separate by commas, and list in order of uniqueness and preference)".

Figure 6: Data Source Employee Lookup Options for LDAP

3.4.2.2 Employee Profile Settings

The Employee Profile Tab determines which fields from the Person Documents will be read into the forms for pre-population. For example, a W2 form in inFusion eForms can be pre-populated with the First Name, Last Name, and Social Security number, if the values are in a user's Person Document and the fields are on the form.

There are 2 options for pre-population:

1. **Import fields from database:** Use a user's Person Document to pre-populate the form with data. The same data from the same document will be used for all forms using this data source document.
2. **Use prior version of form:** If a user has previously filled out a form, this option copies values from the latest version of the form. The **Use Current Profile** uses the user's most recent previous version of the current form they are opening to pre-populate the new form. Otherwise, the selected form will be used.

If the Import Fields from Database options is selected, and the Name and Address Book or Custom Notes Database option is selected, the following options will be available (required fields are marked with an asterisk):

* **Database Path:** The path of the database to be used to perform lookups.

Employee Profile View/Table: Enter a view to use to find the user's Person Document.

Employee Name Field: The field containing a user's full name.

Employee First Name Field: The field containing a user's first name.

Employee Last Name Field: The field containing a user's last name.

Employee Job Title Field: The field containing a user's job title.

Employee Number Field: The field containing a user's employee number.

Other Fields to Retrieve: If additional fields should be pre-populated, there are three options for handling these fields:

- **Copy All Fields:** Will retrieve all fields from the user's data source document. Reserved domino fields, (i.e., fields beginning with a "\$") will not be copied to the form.
- **Copy only the following fields:** Will retrieve all fields listed in the field to the right in addition to the First Name, Last Name, Job Title, & Employee Number fields.
- **Omit the following fields:** Will not retrieve any of the fields listed in the field to the right.

3.4.2.3 Delegation Lookup Settings

Delegation functionality is optional. When enabling this option, if a user is out of the office, forms will be automatically routed to the user designated in the delegation view. When a form is delegated, an email will be sent to the original user indicating that a form intended for them has been delegated. The original reviewer will have read access to the document, but will have access to modify the document.

Type of Delegation DB: Valid options are Custom Notes Database, LDAP, and ODBC.

* **Database Path:** The path of the database containing the delegation rule documents.

* **Delegation View/Table:** The view containing the list of delegation rule documents.

Delegation Application Name Field: If user can delegate forms to different users, depending upon the form, this is the field containing the unique value for the delegation rule. This value is required when using the Application Name Value.

Delegation Application Name Value: The unique name of the application stored in the application name field.

Delegation Status Field: The field containing the value that indicates if a delegation rule is active.

Delegation Status Value: The value of the Delegation Status Field that indicates a delegation rule is active.

* **Delegated By Field:** The field containing the unique name of the user whose forms should be delegated.

* **Delegated To Field:** The field containing the unique name of the user to who forms should be delegated.

Delegation Lookup Data	
Choose Type of Delegation DB	Custom Notes Database
Database Path	eforms/delegationrules.nsf
Delegation View/Table:	Delegated Users\By From Name
Delegation Application Name Field:	
Delegation Application Name Value:	
Delegation Status Field:	DelegationStatus
Delegation Status Value:	1
Delegated By Field:	DelegationFromName
Delegated To Field:	DelegationToName

Figure 7: Data Source Options for Delegation

3.4.3 Categories and Groups

Category documents are used for sorting workflow profiles. Category document values appear in the Category 1, Category 2, and Category 3 field in the workflow profile document, and may be used to assign workflow profiles to a given category. This allows users to easily locate and fill out the appropriate forms.

Group documents are used by Workflow Managers to grant or limit access to the inFusion eForms Form. When creating a group document, be sure that an identically named Group is created (or already exists) in the Server's Address book.

To create a new Category or Group document:

In a browser, select Categories & Groups from the Administrator Views and click New Document. In the Notes Client, select the Categories & Groups link under Administration, and Click the New General MetaData Document button. Select the type of document and enter a value for that category.

CATEGORY OR GROUP DOCUMENT	
Select a Type:	Category Level 1
Give a Value:	Human Resources

Figure 8: Meta Definition

3.4.4 Meta Group Document

inFusion eForms allows data and routing lookups that combine information in a user's person document with a general configuration document. For example, a workflow may require that document to be submitted to each user's regional manager. The region code is stored in each user's person document, but the name of the regional manager is not. Rather than add that information to every person document, and maintain that data as personnel move, a meta data document can be used to associate the region code to the regional manager.

To create a new Meta Group Definition document, in a browser, select Meta Groups from the Administrator Views and click New Document. In the Notes Client, select the Meta Groups link under Administration, and Click the New MetaGroup Document button.

Meta Data Key: The value that appears in the user's person document.

Replace Group: The Meta Data Key and Replace Group values combine to form a unique key.

Datasource: Will use the information in the specified datasource to do the MetaGroup lookup.

With People/Group: The resulting value of the lookup.

The screenshot shows a configuration form with the following fields:

- MetaData Key: [Empty text box]
- Replace Group: [Empty text box]
- Datasource: [Dropdown menu with 'Default' selected]
- With People/Group(s): [Empty text box]

Below the 'With People/Group(s)' field, there is a small icon of a person and a tooltip that reads: '<==Click Here to Select Names using Address Book'.

Figure 9: Meta Group

3.4.5 Workflow Profile Document

Once the databases are configured, you can create a Workflow Profile. A Workflow Profile document defines the workflow process, access to the Data Document, where the Data Document should be stored, and which form should be used for viewing the data. The Data Document is the document created by a user when they open and create a workflow from the form. The Data Document stores all the fields and values from the form and workflow fields and values in the backend storage database.

To create a new Workflow Profile document, in a browser, select Workflow Profiles from the Administrator Views and click New Document.

3.4.5.1 General Information

* **Name:** A descriptive name of Workflow Profile.

* **Number:** A number to identify the form. In applications with large number of forms, this may help users quickly locate the correct forms. Clicking the Auto-Generate Number option will set the form number to a sequential number.

Description: The description is seen in the client database when a user's mouse hovers over the icon to launch the form.

* **Data Source File:** The Data Source document to be used with this workflow process.

* **User Database Path:** The database in which the form data should be stored.

* **Form:** The form the user will be presented with when filling out this workflow. This option corresponds to the forms in the Forms Library Database.

* **Template:** The form to be used when using the Save Local PDF feature. Although this document may be the same as the form, frequently, this is a version of the PDF Form with all buttons and JavaScript logic removed. This option corresponds to the PDF Templates in the Forms Library Database.

* **Review Type:** The type of workflow to use when a form is created using this profile. There are four types of workflow process options:

1. **Automatic:** A finite review process is defined in the workflow profile. Based upon the rules in the profile, the workflow process will automatically route the document to the next reviewer. With the exception of creating a manual step (which prompts the current user for the next reviewer), routing is performed without prompting the user for additional information. The workflow process is completed when disapprove, complete, or process option is selected, or no additional review levels are available.
2. **Manual:** The review process is unlimited. After each user takes an action on the form, he/she must select the next reviewer(s) and their available options. The workflow process is completed when disapprove, complete, or process option is selected.

3. **Manual by Requestor:** The requestor will be provided with a form to set the review levels when the form is submitted. Up to ten levels can be defined. Each subsequent user will be prompted to confirm the next reviewer.
4. **Fill and Print:** No workflow will be associated with this form. The user has the option to save the form, exit without saving the form, or complete the form, which controls which views the form will be seen in when saved.

Figure 10: Workflow Profile General Options

Category 1, 2 and 3: Up to three levels of sorting categories may be assigned to a profile. In applications with large number of forms, this may help users quickly locate the correct forms.

Figure 11: Workflow Profile Categories

3.4.5.2 Review Options

Form Creator: Restricts which users have rights to create documents using this form. In addition to the default options of All Users and No Users, Meta Definition Group documents and Meta Group documents are listed here. Selecting No Users prevents all users from creating documents that use this profile.

Form Readers: Grants access to view all documents created using this profile. In addition to the default options of All Users and No Users, Meta Definition Group documents and Meta Group documents are listed here. Selecting No Users prevents all users from creating documents that use this profile. Selecting No Users restricts access to only those users who are listed as part of the workflow process. Conversely, selecting All Users will allow all users who have access to the workflow application to view all documents created using the profile.

Email Author Completed PDF: When checked, a merged PDF will be emailed to the author once the workflow is completed. **This feature is only supported for PDF forms.

Author Can Save PDF Locally: Adds “Save Local PDF” to the selection list for the author of the form, which, when selected, generates a merged PDF version of the form. For PDF form the merged form is emailed to the author. For Lotus Forms the generated PDF form is presented in the browser.

Can add comments outside of workflow: when this option is checked, user who have Read access to the document will be able to see the “Add/View Comment” link from the view. User can click on the link to add comments or view comments already added to the workflow.

Author Can Add Attachments & Comments: Adds “Submit with Options” to the form selection list. This allows the author to attach files and additional comments to the workflow document.

Reviewers Can Add Attachments & Comments: Allows the current reviewer(s) to attach files and additional comments to the workflow document when approving the form.

Types of Attachments to Allow: When either the author or reviewer is granted access to add attachments and comments, there are 3 available options:

1. **File Attachments:** User can attach files to the workflow. Attachments will appear as embedded files, and users will need to manually open the files to view the contents.
2. **In-line Images:** Attached images will be displayed in the HTML page.
3. **Rich Text:** user can add formatted text.

Figure 12: Workflow Profile Review Options

3.4.5.3 Form Creator’s Review Permissions

These review options are for the form authors. Only options selected here will be visible in the drop down selection for form author. By default, all options are selected when a new profile is created. But for existing profile, administrators need to open the profile and resave it in order to set these values.

- **Exit Without Saving:** Allow form creator to exit the form without making any changes.
- **Save:** Allows the form creator to save changes and stays in the form.
- **Save and Exit:** Allows the form creator to save changes and exit the form.
- **Submit:** Allows the form creator to submit the form.

3.4.5.4 Defining an Automatic Workflow

An automatic workflow allows the Workflow Administrator to define a finite workflow for a form. The workflow can be set to route a series of individuals listed in the profile, prompt the user to select the next reviewer, perform lookups to determine the next reviewer, or a combination of all three. In addition to

choosing how the next reviewer is determined, field locking, reviewer permissions, and notification options may be set for each level.

Review Level Type: inFusion eForms includes several methods for determining the next reviewer.

- **Person(s):** The reviewer(s) are explicitly listed by their name.
- **Supervisor:** If the Supervisor field has been defined in the data source document, workflow retrieves the value in the author's person document. To route the form to the author's direct supervisor, enter the value "1" in the Supervisor level field. To route to the author's supervisor's supervisor, enter the value 2, etc.
- **Title:** If the Employee Title View has been defined in the data source document, workflow retrieves the list of users with the matching title.
- **Employee Number:** If the Employee Number View has been defined in the data source document, workflow retrieves the list of users with the matching employee number.
- **Manual:** The current reviewer of the will be prompted to select the next reviewer.
- **Form Author:** The review will be routed to the author of the form. If the "This level is the Author" option has been selected, the form will be routed to the new author, not the original form author.
- **Timekeeper:** If the Timekeeper field has been defined in the data source document, workflow retrieves the value in the author's person document.
- **Groups:** Lists the groups from the group documents and routes them based on the Address book groups being used.
- **Meta Group:** If the Meta Group Key Field has been defined in the data source document, workflow retrieves the value in the author's person document. That value is then combined with the Meta Group value in the workflow profile to create a unique key. Workflow will then search all Meta Group documents for the matching document. If no match is found using both keys, only the value in is used as a key.
- **Field Name:** If review type is Field Name, enter the exact field name from the form to the profile. The form will be routed to the user enter in this field during workflow process. The user's name entered in the field can be in different name formats, the same formats as routing by Person.

Reviewer Permissions: Each review level can have its own set of permissions. These permissions determine the options the current reviewers will have in the form selection list when the form is opened. Multiple options may be selected for each level. In addition to the options listed below, all forms will have the "Exit Without Saving" option.

- **Approve/Disapprove:** Allows the next reviewer to have Approve and Disapprove options. If the next reviewer chooses Approve, it will route the form to the next reviewer. If the next reviewer chooses Disapprove, it will terminate the workflow process.
- **Review:** Allows reviewers to view document without making any changes, then continue or terminate workflow.
- **Save as Draft:** Allows the reviewer to save changes before routing the form to the next reviewer.
- **Cancel Form:** Ends the workflow process without disapproving the form. It's useful when a submitted form is no longer valid.
- **Send to another Reviewer:** Allows users to route the form to a different reviewer.
- **Request Information:** Routes the form to another reviewer without incrementing the workflow step. After the user has responded to the request for additional information, the form is automatically routed back to the requestor.

- **Save PDF Locally:** If it's a PDF form, this option allows users to request a flattened copy of the PDF be emailed to them. If it's Lotus form, the flatten version of the form is presented in a new window from the browser.
- **Complete:** Gives the reviewer the option to approve and completes the workflow process.
- **Exit Without Saving:** Allow reviewer to exit the form without making any changes.
- **Process:** Approves and terminates the workflow process. Similar to the Complete option.
- **Return to Author:** The form is routed back to the author of the form.

This Level is the Author: Allows a user to submit a form on behalf of another user. When this option is selected, the user at this level will see the form listed under "Forms you created". This option is only available for review level 1.

Prevent Take Back After This Level: After a form has been submitted, a user can remove the form from a workflow process by selecting the TAKEBACK option. However, in some instances, a user should not be able to take a form back after a certain point within the review process i.e., a funding request cannot be rescinded after the requested funds have been allocated). Select this option to prevent the author from taking back the form after the review level has been completed.

Figure 13: Workflow Profile Automatic Review Options

Click Remove Review Level or Add Review Level to add additional levels or removed the last level. At least one review level must be defined for an automatic review process.

Prevent Take Back After This Level: If the option is checked, and lookup for the automatic workflow fail, then user will be redirect to the Manual form to enter the next reviewer. If this option is not checked, and lookup fail, form is exited without saving data.

Notification Options

inFusion eForms allows administrators to set notification options for each review level. Click the "Notification Options" link to control when emails should be sent, what information to include, and how often to send that information.

Time Limit Option: The number of days a reviewer/approver has to view the form.

Reminder Option: When a review is past due, a reminder can be sent every x amount of days or once a week.

Notification Only: This will send a notification email to the user, but will not give them any access to approve/disapprove.

Message Options: The next reviewer will get an email when they need to review the document (This is the default setting).

Custom email message: A customized message can be specified here. If no message is specified, a standard message will be included in the email. In addition to message, a standard footer containing links to the specified form and the workflow application are also included.



Time Limit Option: Form must be approved within Days

Reminder Option: Send reminder email to reviewer(s) every Days

Send reminder email to reviewer(s) on Days

Notification Only (reviewer cannot edit document)

Message Options: Send next reviewer a notification email

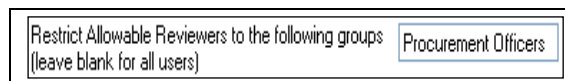
Custom Message:

Figure 14: Workflow Profile Reminder Options

3.4.5.5 Defining a Manual or Manual by Requestor Workflow

Both a Manual and Manual by Requestor Workflow allow users to define the workflow. In a Manual workflow, after a user takes an action on a form (i.e., Submit, Approve, Review), he will be prompted with options to select the next reviewer, select the reviewer’s options and notification options. In the case of a Manual by Requestor, the form author will be prompted to select all reviewers and their options when the form is submitted.

In both cases, the available reviewers can be restricted to a Group or list of Groups. To restrict a Manual or Manual By Requestor review to subset of users, enter the group name in the **Restrict Allowable Reviewers to the following groups**. Leave this field blank to allow reviewers to choose for all available users.



Restrict Allowable Reviewers to the following groups (leave blank for all users)



Figure 15: Workflow Profile Groups

3.4.5.6 Field Options

Field options are available for all review levels. In order to set the field options Click on the Field Options Link at the top of the page. For each field on the form at any level you can set the following:

- **Readonly** – The reviewer/approver cannot modify the field.
- **Required** – The field is marked as required and the user is prompted to fill out the field
- **Hidden** – The field is not visible to the user.
- **Do Not Export** – The field data is not sent to the server on submission.

To add fields to the Field Options click on the *Add Fields* link and then double click on each field to add. To remove field, put a check mark next to the fields and click on *Remove selected*.

Add field options for review level:  

▼ Default Field Options

Field Name	Readonly	Required	Hidden	Do Not Export
Default Level Options	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
<input type="checkbox"/> Pages	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
<input type="checkbox"/> PhoneNumber	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
<input type="checkbox"/> Subject	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
<input type="checkbox"/> ToName	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
<input type="checkbox"/> UserName	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No

[Add fields](#) [Remove selected](#)

Figure 16: Field Option Settings


3.4.5.7 Additional Options

Additional Options

Default Notes Form

Form Processors

Allow these users to process form

 Click icon to lookup user

Display Fields in View

Field Name

Field Label

Data Size

Select Fields

Set Fields

None Selected

Remove
Selected

Add Custom Data to Email

Using a Custom Notes Form

If the document should be viewable in the notes client using a specified form, enter a value in the Default Notes Form. This will set the Form field in the notes document. If no form is specified, a Default Notes form will be used which will allow administrators to view and modify key workflow fields.

Figure 17: Workflow Profile Default Notes Form

3.4.5.8 Form Processors

Users entered in this field are authorized to access and process the workflow. This field is used to allow for administrative processing of workflows.

3.4.5.9 Display Form data in User Views

Data specific to each form can be displayed in the views. Use the Display Fields in View options to select the data for each profile. Data for up to five fields can be displayed.

Field Name: Enter a field containing the data to display in the user views. Enter the field name or click on the Select Fields link to choose from a list of fields in the form selected for this profile.

Field Label: Enter a label. This value would provide users with an explanation of the displayed data.

Data Size: The number of characters displayed for each field.

Set Fields: Click on “Set Fields” to set the values for the field.

Remove Selected: Select a field list from the “Selected Fields” list, and click “Remove Selected” to remove a field from the list.

Figure 18: Workflow Profile View Display Options

3.4.5.10 Adding Form Specific Data to Email Notifications

Data entered in the form can appear in the email notifications for the document. Use the Add Custom Data to Email option to include this information.

In the large text field, enter the text that should appear in the email.

To insert a field, click Select Field(s), and choose from a list of fields in the form selected for this profile. Click the Insert Field(s) button to insert the fields at the current cursor location. Field names will be surrounded by <FIELD></FIELD> tags. If multiple fields are selected, they will be inserted at the same time, separated by commas.

Figure 19: Workflow Profile Custom Email Options

4 inFusion eForms Client Database

4.1 Overview

The inFusion eForms Client Database stores all user documents. This is the database that end-users will access to create, view and modify all workflow documents. Should your application require it, inFusion eForms allows for multiple Client databases.

4.2 Access Control List

Recommended access control list for the inFusion eForms Client database should be as follows:

User	Access Level	Roles	Additional Privileges
Default	Author		Create documents Delete Documents
Anonymous	No Access		Read public documents
Configuration Manager	Author	[ConfigManager]	Create documents Delete Documents*
Database Administrators	Manager	[WorkflowManager]	Delete Documents*
Agent Signer	Author	[WorkflowManager]	
Server	Author	[WorkflowManager] [ConfigManager]	

* Optional setting

Users in the [ConfigManager] Role can create and modify all configuration documents.

Users in the [WorkflowManager] Role can view and modify all inFusion eForms documents.

4.3 Agents

Below is a list of the agents contained in the inFusion eForms Client Database. Workflow functionality is

Agent Name	Agent Trigger	Description
Cleanup	On Schedule Daily at 12:30 AM	Deletes AuditTrail and unsaved documents. A workflow document is considered unsaved when a user launches a new document, but closes the browser or clicks the back button instead of selecting an option from the selection list. Unsaved documents are deleted only if they are more than 6 hours old.
Compute Total Lines	On Schedule Never	Computes the total number of records available in the current view. Used when navigating a view over the web.

4.4 Configuration Documents

The Forms Library contains three types of configuration documents. All of the configuration documents can be managed via the web or the Notes Client

4.4.1 General Configuration Document

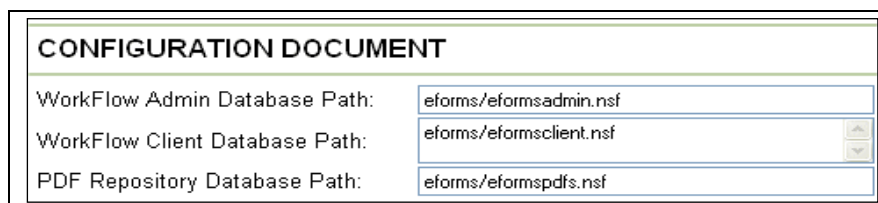
The general configuration Document allows the inFusion eForms Client database to communicate with the other inFusion eForms databases. No more than one general configuration should be created in a Database. Creating multiple documents may cause the workflow application to function incorrectly.

To create a new General configuration document, in a browser, select Configuration from the Administrator Views and click New Document. In the Notes Client, select the Configurations link under Administration, and Click the New General Config button.

inFusion eForms Admin Database Path: The file path of the Admin database.

inFusion eForms Client Database Path: The file path of the Client database. If multiple client databases will be uses, enter each file path separated by commas.

Form Repository Database Path: The file path of the Forms Library database.



The screenshot shows a web form titled "CONFIGURATION DOCUMENT". It contains three input fields, each with a label and a value:

Label	Value
WorkFlow Admin Database Path:	eforms/eformsadmin.nsf
WorkFlow Client Database Path:	eforms/eformsclient.nsf
PDF Repository Database Path:	eforms/eformspdfs.nsf

Figure 20: General Configuration

4.4.2 View Data Document

View data documents are used to control which views are available to users using the web interface.

Key: The view group that this document corresponds to. If this view has at least one sorting option, this value will not be unique.

SubKey: Used with the Key value to create a unique identifier for programmatic references of this form.

Selection List Value: The text value to appear in the selection list.

View Title: The title that appears at the top of the view.

View Name: The name of the associated Domino view.

Search View: The name of the Domino view to use when the basic searching feature is used. If blank, the current view is used.

Sort By Options: Values listed in the Sort by Selection List.

Use XML based View: Specifies whether the view contents are formatted HTML or XML.

Formatting XSL: If the view is an XML view, specifies the XSL file to use to transform the view for presentation to the user.

Use Single Category: Specifies whether the whole view should be displayed or whether the view should be restricted to a single category from the first sorted column.

Show Single Category: If the view is to be used as a single category view, enter the formula language that will compute to a single value. If the value is a non-computed value, surround the value with quotes.

Enable View for Portal: Allow the view to be presented in WebSphere Portal

XSL to use for Portal: XSL to use in a WebSphere portal environment. (Not currently in use)

Include in Selection List: If checked, a link for this view will appear in the appropriate selection List.

Type of View: Indicates which selection list the view should be accessible from.

Include View Buttons: Which, if any buttons to include in the view. This option is usually used for configuration documents.

New Document Button Form: If the New Document option is checked, this is the name of the Domino form to create when the New Document link is selected.

Include Subform: The name of the Domino subform, if any, to be displayed for this view. The subform will appear between the View title and the view Navigation controls.

Restrict View Access to: The group(s) and/or username(s) that have access to use this view. If no value is entered, all users will have access.

Key (Name)	<input type="text" value="Waiting"/>
SubKey (Sort By)	<input type="text"/>
Selection List Value	<input type="text" value="- Awaiting Your Approval"/>
View Title	<input type="text" value="Forms Awaiting Your Approval"/>
View Name	<input type="text" value="xml\approver\waiting"/>
Search View	<input type="text" value="searchapprwaiting"/>
Sort By Options	<input type="text" value="Author Author; Date Created DC; Date Last Modified DLM;"/>
Use XML based view	<input checked="" type="radio"/> Yes <input type="radio"/> No
Formatting XSL	<input type="text" value="apprwaiting.xml"/>
Use Single Category	<input checked="" type="radio"/> Yes <input type="radio"/> No
Show Single Category	<input type="text" value="@Name([CN]; @UserName)"/>
Enable View for Portal	<input checked="" type="radio"/> Yes <input type="radio"/> No
XSL to use in Portal	<input type="text" value="PortalWaiting.xml"/>
Include in Selection List	<input checked="" type="radio"/> Yes <input type="radio"/> No
Type of View	<input type="radio"/> User View <input type="radio"/> New Form View <input checked="" type="radio"/> Approver View <input type="radio"/> Administrator View
Include View Buttons	<input type="checkbox"/> New Document <input type="checkbox"/> Copy Selected <input type="checkbox"/> Delete Selected
New Document Button Form	<input type="text"/>
Include Subform	<input type="text" value="BarCode Entry Field"/>
Restrict View Access to	<input type="text"/>

Figure 21: View Display Document

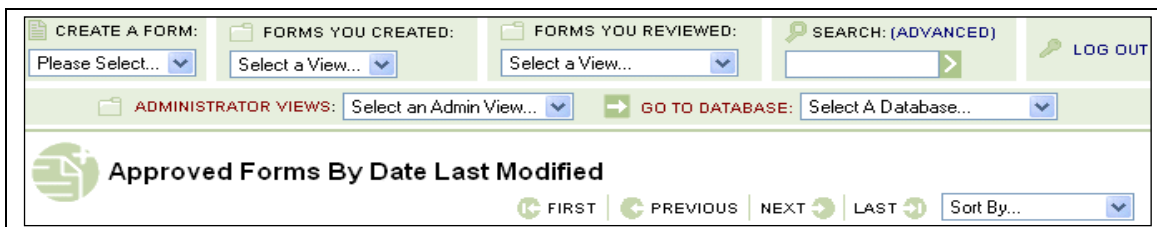


Figure 22: Standard Web Interface Header

4.4.3 View Sub-Data Document

View Sub-Data Documents are similar to View Data documents, and act as child documents to the View Data Documents. The Key value is used to relate the parent and child documents. Sub-data documents do not appear in the selection list but instead appear in the Sort By selection list of the parent view.

4.4.4 Workflow Profile Document

When a Workflow Profile document is created in the Administration database, a skeleton version of that document is copied into the appropriate client database. This document should not be directly modified.

Changes made to the Workflow Profile Document in the Administration database will be applied to the Workflow Profile document in the Client database.

5 Supplemental Database

5.1 Overview

The inFusion eForms Supplemental Database stores all delegation documents. This is the database that end-users will access to delegate their workflow forms to another users when they are out of the office.

5.2 Access Control List

Recommended access control list for the inFusion eForms Supplemental database should be as follows:

User	Access Level	Roles	Additional Privileges
Default	Author		Create documents Delete Documents
Anonymous	No Access		Read public documents
Database Administrators	Manager	[WorkflowManager]	Delete Documents*
Agent Signer	Author	[WorkflowManager]	
Server	Author	[WorkflowManager]	

* Optional setting

Users in the [WorkflowManager] Role can view and modify all inFusion eForms documents.

5.3 Agents

Below is a list of the agents contained in the inFusion eForms Client Database. Workflow functionality is

Agent Name	Agent Trigger	Description
AddNode	On Schedule Never	Used for dynamic pre-population of sections of forms. (unsupported).
AddOption	On Schedule Never	For pre-population of dropdowns in Lotus Forms. (unsupported).
Compute Total Lines	On Schedule Never	Computes the total number of records available in the current view. Used when navigating a view over the web.
(CheckForCircularDelegation)	On Schedule Never	Ensure that delegations are not circular. (i.e. that the form is not delegated back to the original user.)

5.4 Configuration Documents

5.4.1 General Configuration Document

The general configuration Document allows the inFusion eForms Client database to communicate with the other inFusion eForms databases. No more than one general configuration should be created in a Database. Creating multiple documents may cause the workflow application to function incorrectly.

To create a new General configuration document, in a browser, select Configuration from the Administrator Views and click New Document. In the Notes Client, select the Configurations link under Administration, and Click the New General Config button.

inFusion eForms Admin Database Path: The file path of the Admin database.

inFusion eForms Client Database Path: The file path of the Client database. If multiple client databases will be uses, enter each file path separated by commas.

Form Repository Database Path: The file path of the Forms Library database.

Supplemental Database Path: The file path of Supplemental database.

5.5 All Delegations

Delegate From: The user whose documents are being rerouted to another user.

Delegation To: The user who will get the documents being routed.

Delegation starts on date: The date to start routing the documents

Delegation ends on date: The date to stop routing the documents

Delegation Status: Turn on to start delegation, off to not delegate documents. Ignores the start and end dates.

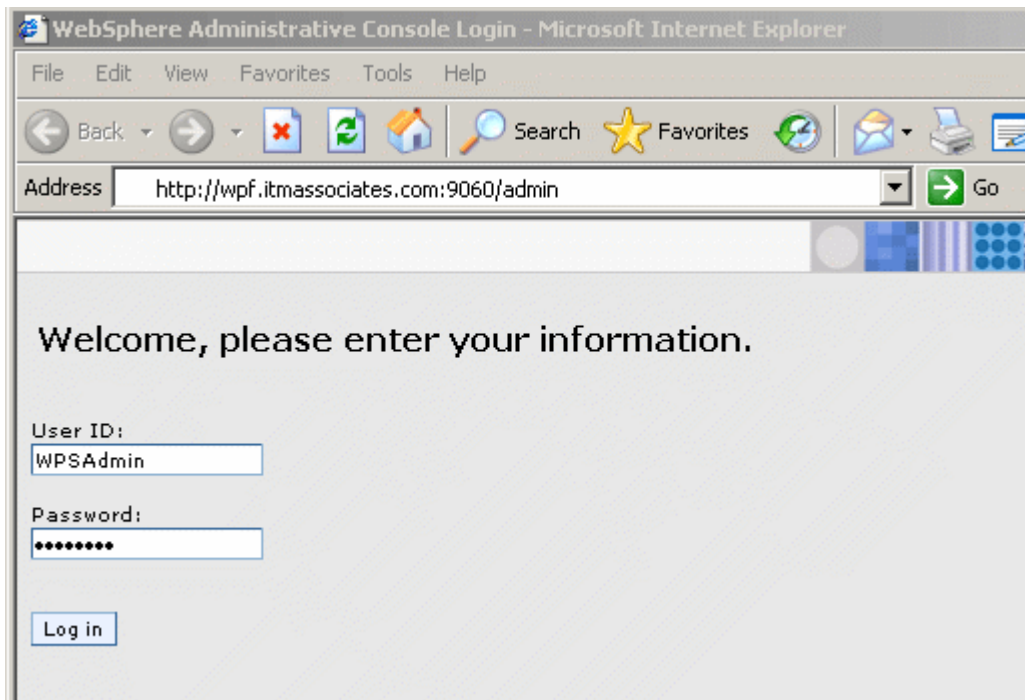
6 WebSphere Installation

6.1 Installation

1. Open up a web browser, and connect to the admin console for your WebSphere server. The URL syntax should be of the form <http://xxx.xxxxxxxx.xxx:9060/admin>



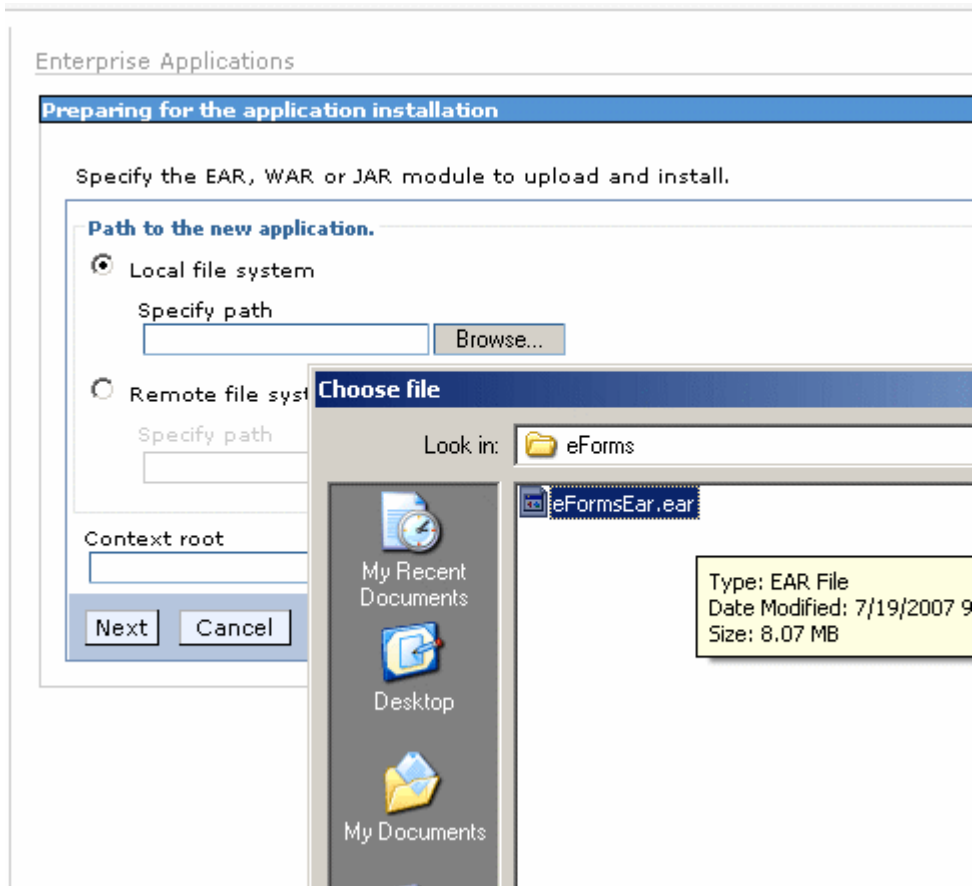
2. When the page loads, enter the User ID and Password for an account with Administrator access to Websphere, then click "Log in".



3. On the menu on the left hand side, expand the “Applications” tab and click on “Install New Application.”



4. Make sure "Local file system" is checked and then click "Browse" to browse your local file system for the .ear file you want to deploy



5. Back at the “Enterprise Applications” screen, click “Next”

Enterprise Applications

Preparing for the application installation ? -

Specify the EAR, WAR or JAR module to upload and install.

Path to the new application.


Local file system

Specify path

Remote file system

Specify path

Context root
 Used only for standalone Web modules (.war files)



- The next screen you will be at should say "Preparing for the application installation". Keep all the default settings and click "Next"

Enterprise Applications

Preparing for the application installation

Choose to generate default bindings and mappings.

Generate Default Bindings

Override:

Do not override existing bindings

Override existing bindings

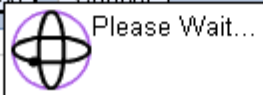
Virtual Host

Do not use default virtual host name for Web modules

Use default virtual host name for Web modules:

Host name

Specific bindings file



7. On the “Install New Application” at the “Step 1” screen click “Next”

Enterprise Applications

Specify options for installing enterprise applications and modules.

→ Step 1: Select installation options

[Step 2](#) Map modules to servers

[Step 3](#) Map virtual hosts for Web modules

[Step 4](#) Summary

Select installation options

Specify the various options that are available to prepare and install your application.

- Pre-compile JSP

Directory to install application

- Distribute application
- Use Binary Configuration
- Deploy enterprise beans

Application name

- Create MBeans for resources
- Enable class reloading

Reload interval in seconds

- Deploy Web services

Validate Input off/warn/fail

- Process embedded configuration

Next Cancel

Please Wait...

- On the “Step 2” screen click “Next”

Install New Application ?

Specify options for installing enterprise applications and modules.

[Step 1](#) Select installation options

→ [Step 2: Map modules to servers](#)

[Step 3](#) Map virtual hosts for Web modules

[Step 4](#) Summary

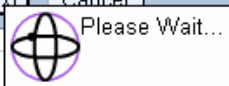
Map modules to servers

Specify targets such as application servers or clusters of application servers where you want to install the modules contained in your application. Modules can be installed on the same application server or dispersed among several application servers. Also, specify the Web servers as targets that will serve as routers for requests to this application. The plug-in configuration file (plugin-cfg.xml) for each Web server is generated based on the applications which are routed through it.

Clusters and Servers:

WebSphere:cell=your-4dacd0ea75Node01Cell,node=your-WPFNode01,server=server1
 WebSphere:cell=your-4dacd0ea75Node01Cell,node=your-WPFNode01,server=TranslatorServer

Select	Module	URI	Server
<input type="checkbox"/>	SpringForms	SpringForms.war,WEB-INF/web.xml	WebSphere:cell=your-4dacd0ea75Node01Cell,node=your-WPFNode01,server=server1



- On the “Step 3” screen click “Next”

Install New Application ?

Specify options for installing enterprise applications and modules.

[Step 1](#) Select installation options

[Step 2](#) Map modules to servers

→ [Step 3: Map virtual hosts for Web modules](#)


[Step 4](#) Summary

Map virtual hosts for Web modules

Specify the virtual host where you want to install the Web modules contained in your application. You can install Web modules on the same virtual host or disperse them among several hosts.

Apply Multiple Mappings

Select	Web module	Virtual host
<input type="checkbox"/>	SpringForms	default_host



10. On the “Step 4” screen click “Next”

Enterprise Applications

Install New Application

Specify options for installing enterprise applications and modules.

[Step 1](#) Select installation options

[Step 2](#) Map modules to servers

[Step 3](#) Map virtual hosts for Web modules

→ **Step 4: Summary**

Summary

Summary of installation options

Options	Values
Use Binary Configuration	No
Create MBeans for resources	Yes
Cell/Node/Server	Click here
Reload interval in seconds	
Enable class reloading	No
Process embedded configuration	Yes
Application name	eFormsEar
Validate Input off/warn/fail	warn
Directory to install application	
Distribute application	Yes
Deploy Web services	No
Pre-compile JSP	No
Deploy enterprise beans	No

Previous Finish Cancel

Please Wait...

11. On this screen you will see logging information relating to the .ear you just deployed. It should look similar to the screenshot below. The key thing to note is the line that says your application was successfully installed. If you see this message, then click on the link that says "Save to Master Configuration"

process as it occurs.

ADMA5016I: Installation of eFormsEar started.

ADMA5067I: Resource validation for application eFormsEar completed successfully.

ADMA5058I: Application and module versions validated with versions of deployment targets.

ADMA5005I: The application eFormsEar is configured in the WebSphere Application Server repository.

ADMA5053I: The library references for the installed optional package are created.

ADMA5005I: The application eFormsEar is configured in the WebSphere Application Server repository.

ADMA5001I: The application binaries are saved in C:\IBM\WebSphere\AppServer\profiles\AppSrv01\wstemp\93180844\workspace\cells\your-4dacad0ea75Node01 Cell\applications\efFormsEar.ear\efFormsEar.ear

ADMA5005I: The application eFormsEar is configured in the WebSphere Application Server repository.

SECJ0400I: Successfully updated the application eFormsEar with the appContextIDForSecurity information.

ADMA5011I: The cleanup of the temp directory for application eFormsEar is complete.

ADMA5013I: Application eFormsEar installed successfully.

Application eFormsEar installed successfully.

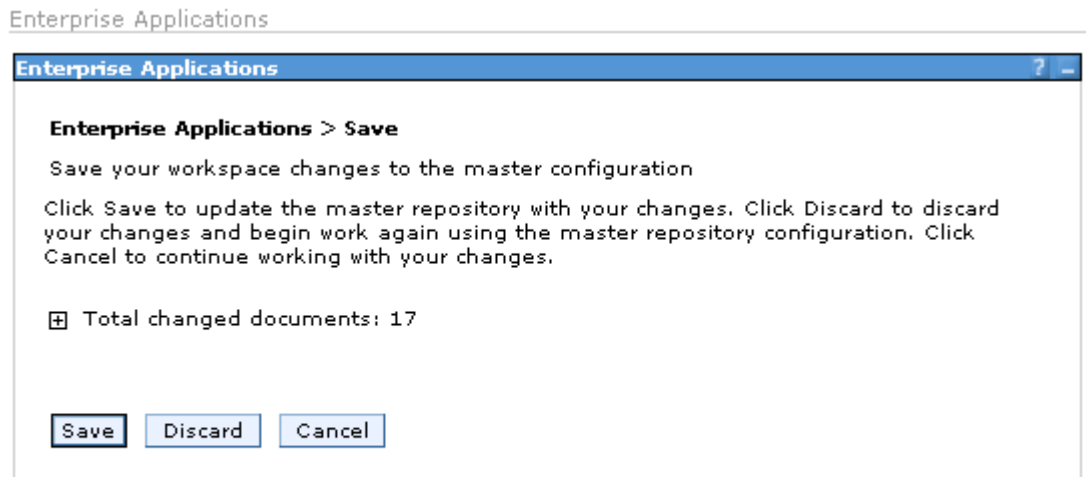
To start the application, first save changes to the master configuration.

[Save to Master Configuration](#)

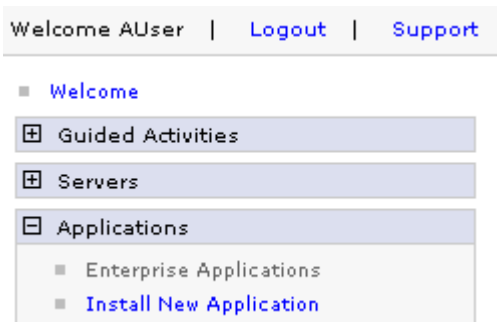
To work with installed applications, click the "Manage Applications" button.

[Manage Applications](#)

12. The next screen you come to is for saving the changes that you have just made to the backend. Click “Save” at this screen.



13. To verify and start your application, on the left hand side of the administrator console, expand “Applications” and click on “Enterprise Applications”



14. Verify that your application appears in the “Enterprise Applications” list

Enterprise Applications

Lists installed applications. A single application can be deployed onto multiple servers.

⊞ Preferences

Start Stop Install Uninstall Update Rollout Update Remove File Export Export DDL

⊞ ⊞ ⊞ ⊞

Select	Name	Status
<input type="checkbox"/>	DefaultApplication	➔
<input type="checkbox"/>	PlantsByWebSphere	➔
<input type="checkbox"/>	SamplesGallery	➔
<input type="checkbox"/>	TranslatorApp	✖
<input type="checkbox"/>	WebformSampleApp	✖
<input type="checkbox"/>	eFormsEar	✖
<input type="checkbox"/>	eForms_war	➔
<input type="checkbox"/>	ivtApp	➔
<input type="checkbox"/>	query	➔

Total 9

15. Check off the box next to your application and click “Start”

Select	Name	Status
<input type="checkbox"/>	DefaultApplication	➔
<input type="checkbox"/>	PlantsByWebSphere	➔
<input type="checkbox"/>	SamplesGallery	➔
<input type="checkbox"/>	TranslatorApp	✖
<input type="checkbox"/>	WebformSampleApp	✖
<input checked="" type="checkbox"/>	eFormsEar	✖
<input type="checkbox"/>	eForms_war	➔
<input type="checkbox"/>	ivtApp	➔
<input type="checkbox"/>	query	➔

Total 9

16. If everything deployed successfully the red X in the “Status” column should turn into a green arrow

<input type="checkbox"/>	eFormsEar	➔
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7 Troubleshooting

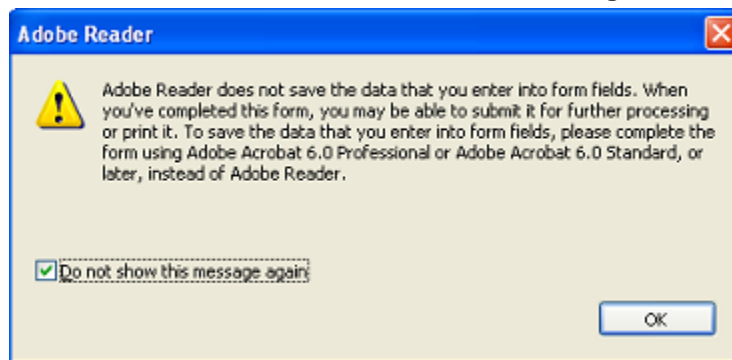
7.1 Troubleshooting

- ❖ **Delay in opening a PDF form in inFusion eForms. The browser will “hang” with a white screen trying to open the PDF.**

If Acrobat or Adobe Reader has been newly installed make sure users have opened the application before trying to open inFusion eForms.

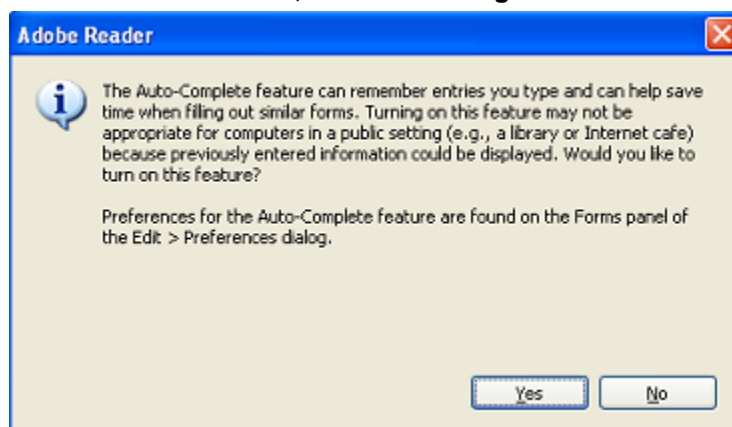
This may also happen if Acrobat or Reader has checking for updates set to automatic. The dialog may then open in the background, which will hold up opening a PDF form in inFusion eForms. To turn off automatic updates go to Edit > Preferences > Updates, set the “Check for Updates” to manually.

- ❖ **Using Adobe Reader 6.0 and inFusion eForms, receive a message:**



InFusion eForms provides the functionality to save the data. Choose “Do not show this message again”, and click “OK”.

- ❖ **Using Adobe Acrobat 6.0 or Reader 6.0, receive a dialog:**



InFusion eForms does not require the Auto-Complete feature. Users can choose Yes or No to enable or disable the feature.

- ❖ **The PDF does not open within the browser using Netscape. Trying to open a PDF in inFusion eForms with Netscape may display an error or open the PDF in the native Acrobat or Reader application.**

Please refer to this link <http://www.adobe.com/support/techdocs/78c6.htm> from Adobe's support site to configure Netscape properly.

- ❖ **Using Acrobat 5.0, receive a dialog:**



You should check with the form creator to see if any Acrobat 6 specific features have been used. In most cases click OK, and the form will be accessible.

- ❖ **Opening an inFusion eForms link from an Email does not open the PDF.**

Make sure Lotus Notes is set to open the link with Netscape or IE Browser Window.

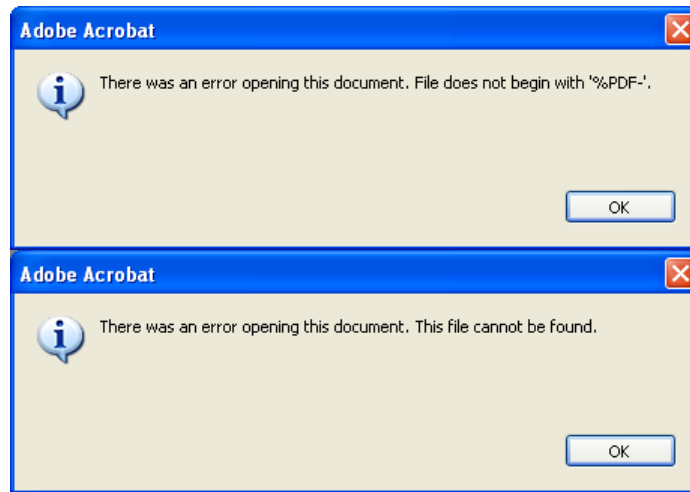
- ❖ **Keep getting a login prompt when trying to view a PDF.**

Make sure the signer of the agents is in the ACL with at least Editor access.

- ❖ **Notes/Domino Fields not displaying in a PDF Form.**

Although Lotus Notes field names are not case sensitive, Adobe Acrobat Form field names are case sensitive. Ensure that you have consistent field names and try the function again.

- ❖ When opening an inFusion eForms form you receive the one or both of the following errors.



InFusion eForms requires the PDFs to be opened within a browser window. This setting can be selected under the following.

Acrobat 5.x:

- Open Acrobat, go to Edit > Preferences > General >Options, make sure the "Display PDF in Browser" is checked.

Acrobat 6.x:

- Open Acrobat, go to Edit > Preferences > Internet, make sure the "Display PDF in Browser" is checked.

8 Support

8.1 Support

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

- If your inFusion eForms was purchased from an inFusion eForms 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 PDFiSupport@itmproducts.com.

ITM will provide timely responses to support questions from inFusion eForms users that have purchased a Maintenance Agreement.

For the latest information on ITM's products and services, please visit www.itmassociates.com.

9 Glossary

❖ **Automatic Workflow**

A type of workflow process specified in the Workflow Profile, in which the Workflow Administrator defines the entire workflow process. When appropriate, workflow performs the predefined lookups to determine the next reviewer and their available options.

❖ **Data Document**

A document in a database which stores the values from a form and stores the necessary values to maintain the form through a workflow process. When a form in a workflow process is opened it reads the fields and values from the data document and populates the form.

❖ **Data Source Document**

A document in the Administration database used to define how to resolve user names, populate data on a form, and handle delegation.

❖ **eForms Configuration Document**

A document in the Administration database used by inFusion eForms to configure the agents which control the data population of a form and the storage of the field values.

❖ **Fill & Print**

A type of workflow process specified in the Workflow Profile, which does not have a workflow process associated to it. Useful when forms are to be added to a workflow application, but a workflow process has not yet been defined.

❖ **Manual By Requestor Workflow**

A type of workflow process specified in the Workflow Profile, in which the document author defines the workflow process when the form is submitted. Each subsequent reviewer/approver will then be prompted with the next reviewer/approver defaulted with the option the requestor selected. Useful when a business process is too vague to use an automatic workflow, but the document author will know who each of the reviewer should be.

❖ **Manual Workflow**

A type of workflow process specified in the Workflow Profile, which does not require review levels preset in Workflow Profile. A workflow using this type of process will prompt the users to select the next reviewer/approver and options after each step in process. This process will not end until a reviewer/approver chooses "Complete", "Disapprove", "Process" or "Cancel". Useful when a business process is too vague to use an automatic workflow, and the current reviewer will always know who the next reviewer should be.

❖ **PDF Form**

A PDF with fields added to it.

❖ **inFusion eForms**

The product providing the code and agents which runs InFusion eForms. inFusion eForms controls the population of a form from a Data Document and the storage of the field values from a form to a Data Document.

❖ **InFusion eForms Signature Fields**

An option, in the inFusion JavaScript tool, which creates workflow signature fields on a form. The fields are used as a visible tool for users of the application to see who signed and reviewed the form.

❖ **Person Document**

The data stored for the individual users of the inFusion eForms application. The document stores user information used for lookups and data which can pre-populate fields on a form.

❖ **Workflow Profile**

A document, in the Administration database, that defines the workflow process for a form.