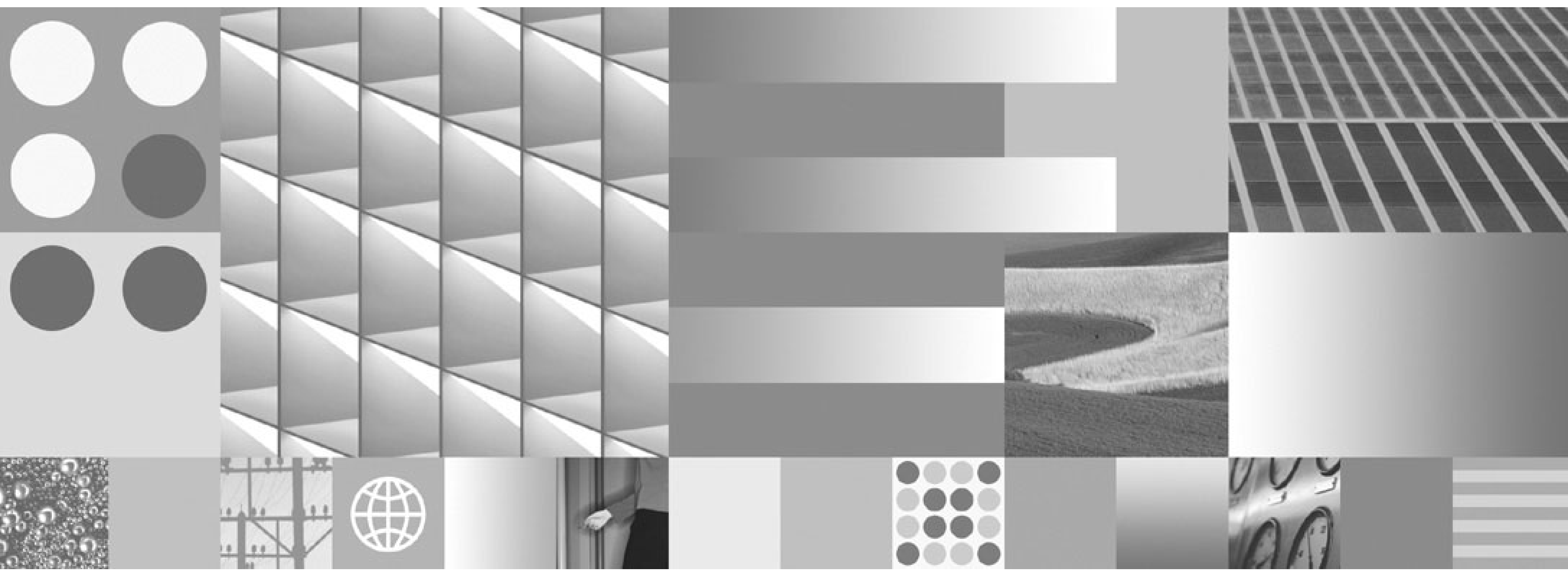
IBM FileNet Forms Manager

Version 5.0

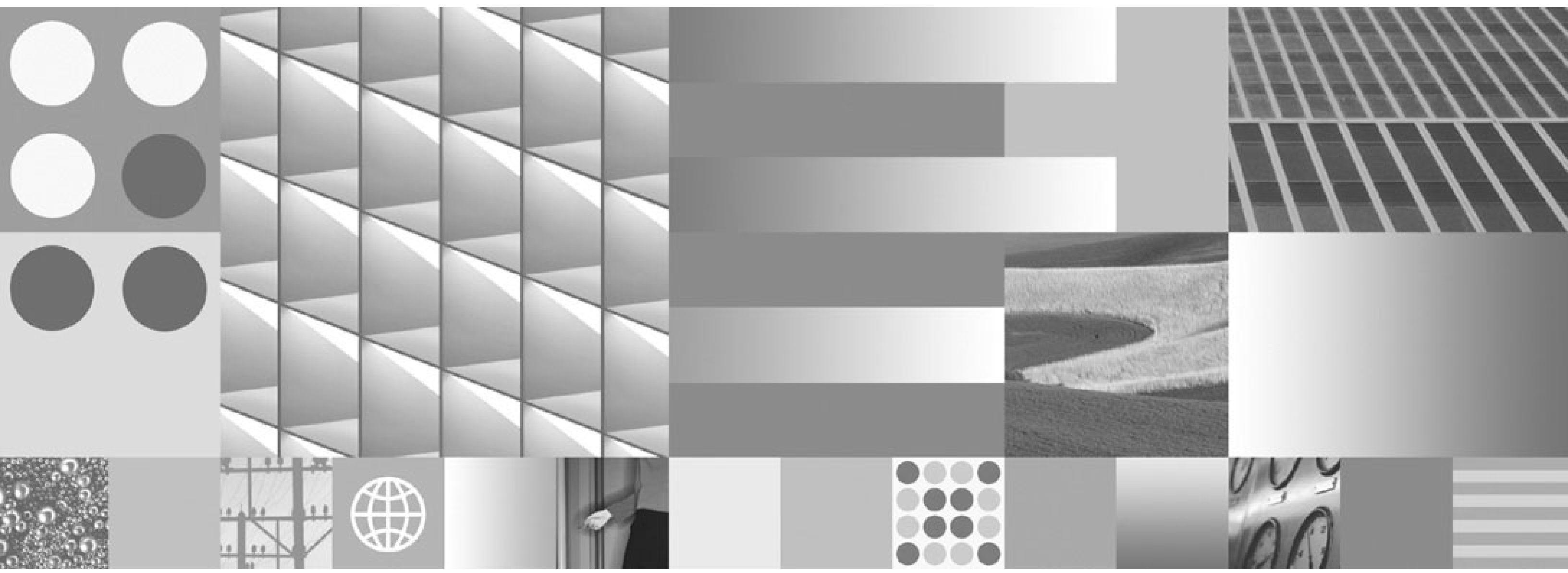


Installation Guide

GC31-5497-00

IBM FileNet Forms Manager

Version 5.0



Installation Guide

GC31-5497-00

Note

Before using this information and the product it supports, read the information in "Notices" on page 55.

This edition applies to version 5.0.0-007 of IBM FileNet Forms Manager (product number 5724-R89) and to all subsequent releases and modifications until otherwise indicated in new editions.

Typographical Conventions

Where applicable, this document uses the conventions in the following table to distinguish elements of text.

Convention	Usage
UPPERCASE	Environment variables, status codes, utility names.
Bold	Paths and file names, program names, clickable user-interface elements (such as buttons), and selected terms such as command parameters or environment variables that require emphasis.
Italic	User-supplied variables and new terms introduced in text.
<*italic*>	User-supplied variables that replace everything between and including the angle bracket delimiters (< and >).
`Monospace`	Code samples, examples, display text, and error messages.

Table of Contents

About the Installation Guide

In this guide, you'll find the following information and instructions:

- A planning section with prerequisites and links to the system requirements.
- Instructions for pre-installation tasks.
- Instructions for refreshing the documentation on the application server.
- Instructions for installing FileNet® Forms Manager
- Instructions for uninstalling FileNet Forms Manager.

NOTES

- Send documentation feedback. Your feedback helps FileNet to provide quality information. Please send any comments that you have about this publication or other FileNet P8 Platform documentation by email to comments@us.ibm.com. Be sure to include the name of the product, and the name and part number of the book, if applicable. If you are commenting on specific text, please include the location of the text, for example, chapter and section title, or help topic title.
- Installation by a FileNet Certified Professional (FCP) Recommended. For more information on the FCP program, refer to the FileNet Web site (http://filenet.com), Customer Center > Global Learning Services > Certification Programs.

Documentation Format

Hypertext links in this guide are identified with blue text. Most links will take you to a topic in this guide. In some cases, clicking a link will take you to an outside site such as the FileNet Worldwide Customer Support web site. To continue to view this *Installation Guide*, switch your active application back to Adobe Acrobat Reader.

Installation Planning and Procedures

This installation section contains the following major topics:

What is FileNet Forms Manager?

A server-based product, FileNet Forms Manager is designed to streamline the elements of eForms management. FileNet Forms Manager has four components:

- Forms Manager Server
- eForms Central library
- Forms Manager eForms

Forms Manager Server

Forms Manager Server is comprised of the files that are stored on the web server and the services behind the eForms Central library. Services can include auto-incrementing of numbers on forms created from templates, document tracking, and database lookups (e.g., country codes, industry or company-specific data such as part numbers).

FileNet Forms Manager eForms Central Library

FileNet Forms Manager eForms Central library is a repository of electronic forms that are available from your organization’s web server. Your eForms Central library can store ITX Form Templates and Desktop Form Templates.

The library can also store a variety of other document types. These include Microsoft® Word® and Microsoft Excel® files, among others.

Forms Manager eForms

Forms Manager eForms is the component that allows users to fill out forms in a browser window. Users can open a form by clicking an ITX Form Template icon in the eForms Central library. When users save this type of form, a Form Data document is created and it is stored on the My Forms page in the library.

Products That Can Be Used With Forms Manager

The following products can be used with Forms Manager:

- eForms Designer
- Desktop eForms

Installers and related files for eForms Designer are provided on the FileNet eForms Designer Windows® and FileNet eForms Designer Macintosh CDs. Installers and related files for Desktop eForms are provided on the FileNet Desktop eForms Windows and FileNet Desktop eForms Macintosh CDs. Manuals and Help files are also included on the CDs.

For Desktop eForms, users can also download the application from the Software page in the eForms Central library.

eForms Designer

eForms Designer gives you the tools to create and deploy professional-looking templates. Since you store the templates electronically, it’s easy to keep them up-to-date. With eForms Designer’s tools and functions, you can have forms automatically calculate, format, look up, and check information for the user. eForms Designer is a standalone application that is run from your desktop.

Desktop eForms

Desktop eForms allows users to fill out forms on their desktop.

When users click a Desktop Form Template icon in the eForms Central library, a blank form opens in Desktop eForms and a copy of the template is stored in their local Templates folder. When users save this type of form, a Desktop Form Data document is created and is stored on their local computer.

Desktop Form Templates can be accessed offline, and new Desktop Form Data documents can be created using Desktop eForms without going to the eForms Central library. However, when a Desktop Form Template is revised and the new version is added to the eForms Central library, the user is notified the next time he or she attempts to create a new Desktop Form Data document from the template on their local computer.

Related Documentation

The following documentation is located on the FileNet Forms Manager CD in the Documentation folder:

- *readme.htm:* Describes the files that are contained on the Forms Manager CD*.*
- *doc_readme.htm:* Describes the contents of the Documentation folder on the Forms Manager CD and where to find additional documentation and updates.
- *eForms Pre-installation Guide:* Explains how to create and install a server certificate for users who will be signing forms using the I-Sign signature service.
- *Forms Manager Installation Guide*: Contains instructions for installing FileNet Forms Manager and configuring the eForms Central library.
- *Forms Manager Server Migration Guide:* Explains how to migrate from Informed Quadra Server 4.1.1x or earlier or Forms Manager Server 4.2.0 or later to Forms Manager Server 5.0.0.

The following documentation is located on the Help Page of the eForms Central library

- *Forms Manager User Help*: Explains how general users work with forms in the eForms Central library.
- Forms Manager Administrator Help: Explains how account administrators can create and manage user accounts in the eForms Central library. Also explains how users with Templates permissions manage folders, templates, and other documents in the library.
- *Forms Manager eForms Central Tutorial*: Teaches form authors and eForms Central account administrators how to manage user accounts in a library. Also explains how users with Templates permissions manage folders, templates, and other documents in a library. Exercises, step-by-step instructions, sample templates, and other documents are provided.

Plan the Installation

Before you install FileNet Forms Manager:

- If you are upgrading from Informed Quadra Server 4.1.1x or earlier or Forms Manager Server 4.2.0 or later to Forms Manager Server 5.0.0, please follow the instructions in the *FileNet Forms Manager Migration Utility Guide*. If you migrate your data, you will not need to configure the library as described in configuration tasks 3 to 9 on page 21 to page 36. However, you should refer to the other configuration tasks described in the guide.
- If users will be signing forms using the I-Sign signature service, create and install a server certificate by following the instructions in the *eForms Pre-installation Guide*.
- For users to sign forms using Microsoft CSP, they must have the CapiCom.dll version 2.0 installed. Client machines that are running Windows XP have this dll. Users running other Windows operating systems must install this dll on their workstations. Users can go to www.microsoft.com, search for "capicom.dll," and download the file.
- Retrieve the following from the FileNet Worldwide Customer Support web site:
  - FileNet Forms Manager 5.0.0 Hardware and Software Requirements
  - FileNet Forms Manager 5.0.0 Release Notes

  NOTE You can obtain updates to the FileNet Forms Manager documentation from the Product Documentation folder on the FileNet Worldwide Customer Support web site.
- Determine your server settings so you can enter the following information during the installation:
  - Server name
  - HTTP port
  - HTTPS port
  - Whether or not you are using HTTPS for all requests.
  - Whether or not you are using 128 bit encryption.

Installation Tasks

To Install Forms Manager

1. Review FileNet Forms Manager Server Requirements. Do Task 1 on page 15.
2. Install Forms Manager Server. Do Task 2 on page 15.

Task 1: Review FileNet Forms Manager Server Requirements

Review the FileNet Forms Manager 5.0.0 Hardware and Software Requirements document on the FileNet Worldwide Customer Support web site for the required versions, service packs, and fixes for third-party software. Also, see the FileNet Forms Manager 5.0.0 Release Notes document for information about what's new and known issues for this release of the product.

Task 2: Install Forms Manager Server

Important notes:

- The Forms Manager Server setup file (**setup.exe**) is on the FileNet Forms Manager eForms Central Windows CD.
- Before you start the installation, please **close all open applications**. You must be logged in as an system administrator. After installation, you must restart your computer. Ensure that IIS can be stopped and re-started during the Forms Manager installation. No services should be running that will automatically restart IIS.
- The installation wizard leads you through a series of pages. The user name, company name, and the path to the location where the files are to be installed are pre-filled. You can change this information.
- Microsoft .NET Framework 1.1 must be installed prior to installing Forms Manager 5.0.0.

To install Forms Manager Server

1. On the CD, double-click **setup.exe**.
2. The Setup program leads you through the installation process. Follow the instructions on the screen.

Upgrade Forms Manager Server

Run the fix pack installer to upgrade the software to the newer version.

To upgrade your existing libraries

When you install Forms Manager fix packs, the installer will not upgrade existing libraries. The migration tool, for this purpose, can only upgrade between major version releases and not fix packs. To upgrade existing libraries to the latest fix pack:

1. Delete the **library.config** and **web.config** files from the image directory.
2. Stop Internet Information Services (ISS).
3. Copy the contents of the image directory, except the **Config** subdirectory, to the library directory you want to upgrade.
4. Repeat step 3 for each existing, configured library.
5. Start ISS.

Uninstall Forms Manager Server

Important note:

- To fully uninstall Forms Manager Server, the server administrator must first remove all the existing eForms Central libraries using the eForms Central Manager application. For instructions, see "Remove an eForms Central Library" on page 54.
- It is recommended that you back up your eForms Central files before removing any libraries.

To uninstall Forms Manager Server

1. Choose Settings > Control Panel > Add/Remove Programs.
2. Select **Forms Manager** in the list.
3. Click **Remove**.
4. Click **Yes** to start the uninstall.

Configuration Planning and Procedures

This configuration section contains the following major topics:

Plan the Configuration

For each eForms Central library that you add to the server, you must make decisions about the following configuration questions. These topics are described in the “Configuration Tasks” section that follows.

- Which authentication method does your organization need?
- If user accounts are required, what permissions will they have?
- What type of database will you have and where will you store it?
- Which mail authentication type does your organization need?
- Will users require Desktop eForms? If so, will they install it themselves from a link?
- Do you want error logs to be generated automatically?

Configuration Tasks

To configure and customize an eForms Central library

1. Configure an eForms Central library. Do Task 3 on page 21.
2. Set up the General Page. Do Task 4 on page 22.
3. Set up Authentication. Do one of the following:
   - Task 5a on page 23 (Built-in)
   - Task 5b on page 25 (Active Directory)
   - Task 5c on page 29 (Windows Login)
   - Task 5d on page 30 (Headers)
4. Set up the Database. Do one of the following:
   - Task 6a on page 33 (SQL Server)
   - Task 6b on page 33 (Other server)
5. Set up Mail. Do Task 7 on page 34.
6. Set up Form Options. Do Task 8 on page 35.
7. Set up Library Options. Do Task 9 on page 36.
8. Set up Desktop Clients. Do Task 10 on page 37.
9. Set up Error Handling. Do Task 11 on page 38.
10. Set Security. Do Task 13 on page 40.
11. View the New Library. Do Task 14 on page 41.
12. Customize the Library Interface. Do any of the following:
    - Task 15a on page 43 (Customize the Banner)
    - Task 15b on page 44 (Customize the Home Page)
    - Task 15c on page 45 (Set the Start Page)
    - Task 15d on page 46 (Customize Links on the Sidebar and Banner)
    - Task 15e on page 47 (Configure Columns on List Pages)
    - Task 15f on page 48 (Point to a Custom Style sheet)
    - Task 15g on page 49 (Modify the Personal Information Template)
13. Task 16 on page 50 (Set up Administrators)
14. Task 17 on page 51 (Download Distribution Center Profiles)

Task 3: Configure an eForms Central Library

To configure an eForms Central library

1. Launch the eForms Central Manager by clicking the shortcut on the Start menu or by choosing Program Files > FileNet > Forms Manager > eForms Central Manager**.**

   When eForms Central Manager opens you'll see the following buttons on the first page:

Option	Description
Add	Adds a new eForms Central library.
Edit	Opens an existing eForms Central library for editing.
Remove	Deletes the selected eForms Central library.
Exit	Closes the eForms Central Manager.

2. Click **Add** to configure a new eForms Central library.
3. See Task 4 - Task 11 for information about how to fill out each tab.
4. When you finish configuring the eForms Central library, click **Finish** to close the eForms Central Manager.

   If you selected Built-in Authentication, the Select Anonymous Account dialog box appears. Select "IUSR_[server name]" from the list. Then close the dialog box.

   NOTE If the information in a field is required, or if you have entered invalid information in a field, a blinking information symbol appears next to the field when you attempt to move to the next tab. A text message appears when you move your pointer over the symbol.

The fields on each tab of the eForms Central Manager are described next.

Task 4: Set up General Page

Enter the appropriate information in the following fields:

Field	Description
Folder Name	The internal name of an eForms Central library. This name is used for the folder that contains eForms Central library files. You'll see this name in **\\ ... FileNet\Forms Manager\Libraries** on your local computer.
Company	The name of the company or organization for which you are configuring an eForms Central library. This name appears on the Home page.
Library Name	The name of the eForms Central library. This name is displayed on the Home, Help, and Software pages. The name of the eForms Central library can have up to 32 characters. If you are upgrading from Informed Quadra Server, the library name **must be the same** as your Informed Quadra Server name. See your *Forms Manager Server Migration Guide* for more information.
Library Description	A description of the contents or purpose of an eForms Central library (optional).
Use HTTPS	Use to select the HTTPS protocol for requests. If you do not select the **Use HTTPS** checkbox, HTTP is automatically used for all requests and I-Sign signatures. If you choose to use HTTPS, the following options are available: **Port:** Enter your HTTPS port number or accept the default number, 443. **For all requests:** Select if you want to use HTTPS for all requests. **Only for I-Sign Signatures:** Select if you want HTTPS to be used only when users are signing forms using the I-Sign signature service. **Use 128 bit encryption:** Select if you want 128 bit encryption to be used for HTTPS requests. This checkbox must be selected if you want to use the I-Sign signature service.

Set up Authentication

Four authentication methods are available:

- Built-in (Task 5a on page 23).
- Active Directory (Task 5b on page 25).
- Windows Login (Task 5c on page 29).
- Headers (Task 5d on page 30).

Task 5a: Set up Built-in Authentication

If you are using the Built-in authentication method, please read the following user account information before you configure the library.

Without User Accounts

If you don't select the **Account Required** option, a user can browse the eForms Central library as a guest. Use this authentication method if internal and outside users will access the eForms Central library or if your browser does not support Windows authentication using the NTLM (NT LAN Manager) protocol. Users who do not have an eForms Central library user account cannot sign forms that open in a browser window; however, they can sign forms that open in Desktop eForms.

Users without user accounts can browse only the Blank Forms page.

With User Accounts

If you select the **Account Required** option, three links appear on the Welcome page of the eForms Central library allowing users to log into their user accounts, create a new user account, or request help for a forgotten password. Users can create their own accounts or you can create accounts for them. See the *Forms Manager Administrator Help* for details about creating accounts for users.

NOTE Support is not provided for generating accounts automatically. To generate accounts automatically, you must write the appropriate code and prepare the associated tables.

Allow Account Administration

With Allow Account Administration selected, users can change the values in the Update Account Info dialog box (First name, Last name, Email, User name, New password, and Confirm password). If you also select Allow Personal Info Administration (See “Allow Personal Information Administration” on page 36), changes that users make in the Update Account Info dialog box are reflected automatically in the Personal Information form. The reverse is also true: changes that users make in the Personal Information form are reflected automatically in the Update Account Info dialog box.

If you do not allow users to update their account information, they can change only the password in the Update Account Info dialog box. Although they can edit any of the fields in the Personal Information form, these changes are not reflected in the Update Account Info dialog box.

Field	Description
Account Required	Specifies that a user must have an account to use an eForms Central library.
Allow Account Administration	Allows users with Accounts privileges to manage user accounts in the eForms Central library.
Forgot Password Sender	The address of the email account that is used to send an email message in response to a Forgotten Password request.
Maximum Number of User Accounts displayed while browsing	The maximum number of user accounts that can be displayed per page in the browser. The default is 30.

Task 5b: Set up Active Directory Authentication

This method authenticates according to user groups set up in Active Directory. Internet Explorer is required. When creating an Active Directory schema, it is recommended that you use Domain Global Security groups or Domain Global Distribution groups in the configuration instead of Domain Local groups.

NOTE Active Directory Authentication is not supported with Netscape browsers.

Set up the following user groups in Active Directory:

- General Users
- Templates
- Shared Inboxes

These groups can be named according to your naming standards. In addition to existing as a group on its own, users with Templates permissions must be part of General Users. You can have multiple groups of General Users and Templates.

For Active Directory authentication to work, the Active Directory user property for “E-mail” must be set with the user’s email address. In most cases, the user property will pre-populate from your organization’s email service. If necessary, you can set the ‘E-mail’ property manually for each user using the Active Directory Users and Computers administrative tool. In the Properties dialog box for each user, click the General tab and enter the user’s email address in the ‘E-mail’ field.

NOTE Forms Manager Server stores security IDs (GUID) in its database. Up to 6 SubAuthority values are supported for each GUID. For more information about Active Directory and GUIDs, see the Microsoft documentation.

User names and passwords are encrypted. FileNet recommends that you also use SSL to encrypt the HTML pages. The extra encryption may result in slower service.

Field	Description
Supported Domains	Click to select the domains that can be used by the Forms Manager Server to authenticate eForms Central users. 1. In the Domain Entry dialog box, select a domain from the **Domain** drop-down list. Or If you have credentials for a domain that is not in the list, enter the domain name in the **Domain** drop-down list. 2. Enter the user name and password of the person who is authorized to access this domain. This person must be able to access the “memberOf” attribute. 3. Click **OK**. The Select Supported Domains dialog box appears, and the domain that you entered appears in the **Supported Domains** list. Click **Add** to add a domain. Click **Edit** to edit the properties of a domain. Click **Remove** to remove a domain. 4. Click **Done**.

Field	**Description**
General Users	Click **General Users** to create groups with General User permissions. 1. In the Select General Users Group dialog box, select a group and click **OK**. The Select General Groups dialog box displays. The complete LDAP path of the group you selected is shown in the General Groups window. 2. If you want to add another group, click **Add**. When you're finished creating groups, click **Done**. The number of groups that you selected is displayed below the **General Users** button.
Templates	Click **Templates** to create groups with Form Templates permissions. 1. In the Select Group with Templates Permission dialog box, select a group and click OK. The Select Groups with Templates Permission dialog box displays. The complete LDAP path of the group you selected is shown in the Groups with Templates window. 2. If you want to add another group, click **Add**. When you're finished creating groups, click **Done**. The number of groups that you selected is displayed below the **Templates** button.
Shared Inboxes	Click **Shared Inboxes** to create groups with Shared Inboxes permissions. 1. In the Select Group with Shared Inbox Permission dialog box, select a group and click **OK**. The Select Groups with Shared Inbox Permission dialog box displays. The complete LDAP path is shown in the Groups with Shared Inbox window. 2. If you want to add another group, click **Add**. When you're finished creating groups, click **Done**. The number of groups that you selected is displayed below the **Shared Inboxes** button.

Property Mapping Table

The Property Mapping table can be used to map Active Directory user properties to cell names on an ITX Form Template. When a user clicks the ITX Form Template's icon in the library, the form opens in the browser window with the contents of these cells pre-filled.

The properties that are available for mapping depend on how the Active Directory is set up in your organization. Before you enter values in the Property Mapping table, you need to know the following:

- The cell names that the form author intends to use on the ITX Form Templates.
- The names of the user properties that are supported in your organization's Active Directory (e.g., "ln" for last name).

NOTE You can use ADSI Edit (available on the Windows 2000 installation CD) to find out the names of Active Directory properties.

Field	**Description**
Cell Names	An entry in the Cell Names column identifies a cell that can be pre-filled with the contents of the corresponding entry in the Active Directory Property column. The template must have a cell with the same name as the cell name in this table.
Active Directory Property	The contents of an entry in this column pre-fill a cell on a template.
Add	Click to add a cell name and Active Directory property.
Edit	Click to edit a cell name and Active Directory property.
Remove	Click to remove a cell name and Active Directory property.

Task 5c: Set up Windows Login Authentication

For Windows 2000 or later, this method authenticates according to user groups set up in Windows.

Field	Description
Allow Account Administration	Allows users to manage their accounts in an eForms Central library. The Update Account Info dialog box is displayed when the user clicks **Account Info** on the banner.
Administrator Account	The domain and user name of the user who sets up the accounts.
Maximum Number of User Accounts displayed while browsing	The maximum number of user accounts that can be displayed per page in the browser. The default is 30.

If users will be signing forms using the I-Sign signature service, and you configure the library with Windows Login authentication, you must configure the ASPNET user to “act as part of the operating stem.”

To configure an ASPNET user

1. Choose Start > Settings > Control Panel > Administrative Tools. For Windows 2003, choose Start > Control Panel > Administrative Tools.
2. Double-click the **Local Security Policy** folder.
3. Expand the **Local Policies** folder.
4. Select **User Rights Assignment**.
5. Double-click **Act as part of the operating system**.
6. Select the **ASPNET** user from the list and click **Add**.
7. Click **OK**.
8. Close all the dialog boxes; then restart the server.

Task 5d: Set up Headers Authentication

If you are using the Headers authentication method, please read the following information before you configure the library.

With the Headers authentication method, your organization may use a third-party, single sign-on authentication system. This system must include the following headers in each Forms Manager request to establish the identity of the current user.

Type	Header Name	Description
Authentication	EForms-UserName	A unique username for the user. This value matches the user's personal information record in the Forms Manager database. A new record is automatically created if there is no match found.
Authentication	EForms-FirstName	The user's first name.
Authentication	EForms-LastName	The user's last name.
Authentication	EForms-Email	The user's email address.
Authorization	EForms-Roles	The user's role. The user can belong to the “design” group for form authors, otherwise if this value is left blank or if the header is missing, the user is assigned to the general user's group.

For lookup, submit, or auto-increment requests, all headers with the prefix “EForms-” are passed through to the page handling the request. If more information about the user is needed, you can pass additional headers. These must be specified with the prefix “EForms-”.

Browser Integration

When connecting from a web browser, all requests must pass the header values (as shown in the table above). After the third party product checks for the user-agent (for example, Internet Explorer), it checks for the headers. If the headers are missing, the user is prompted for login information.

eForms Designer/Desktop eForms Integration

The eForms Designer and Desktop eForms applications pass a user-agent header value of "Informed/1.0" to any web server. If the third party product does not receive the expected header value based on its detection of eForms Designer/Desktop eForms, an application status code response must be sent (for example, "Error 401 - Unauthorized”) which indicates that user authentication is required. The status code appears with a "WWW-Authenticate:" response header (for example, “WWW-Authenticate: Basic realm="<website_name>"“, where Basic refers to the authentication method and the realm parameter displays the website name). Other authentication methods are "NTLM" (Windows) and “IDes” (eForms Designer).

For IDes authentication, a dialog box appears that prompts for a username and password in order to access the website realm. The username and password are entered in a Forms Manager dialog box prompt and then passed along with an Authorization header (for example, “Authorization: IDes *jnelson:password*”, where *jnelson:password* is encoded as Base64). If the request cannot be made with HTTPS, the Basic authentication should be used instead.

If the login is unsuccessful, the 401 status code will cause the login dialog box to reappear. If the login is successful, a standard session cookie is created and will be passed along for future requests.

I-Sign Signature Authentication

When creating an I-Sign signature, the user is prompted for a user name and password. Note that the user name entered may not be that of the logged in user. To authenticate the username and password provided by the user, you must provide a custom authentication page. This page is called directly by the server-side code and must satisfy the following requirements:

- To protect the user name and password, the page must be secured by SSL.
- The user name and password are passed as query string parameters in the following format:

  http://<*server_name*>/<*page_name*>.aspx?user=<*user_name*>&pwd=<*password*>

If the credentials are valid, the page should return the “200 OK” status code and message and the standard “EForms-” headers described above. The identity of the signer is established from these credentials.

If the credentials are invalid, the page should return the “600 Invalid login credentials” status code and message.

On the Authentication tab, for Headers authentication, enter information in the following field:

Option	Description
Authentication URL	The web browser address to the customer-provided page, secured by SSL, that validates the user name and password that are used to sign a form.

Set up the Database

The eForms Central library requires the Forms Manager database. This database contains all the Forms Manager-related data. There are two options for your database:

- SQL Server (Task 6a on page 33).
- Other (Task 6b on page 33).

The name of the database should be unique for each library.

On a single server, you can create multiple libraries, each with its own database. If you want multiple libraries to access the same information, and if the libraries are configured with the same authentication method, you can create a single database.

NOTE If you set up a single database for multiple libraries that use different authentication methods, you cannot prevent users from being able to view each other’s data.

Task 6a: SQL Server

This option specifies that an SQL Server database will be used. For performance reasons, this option is preferred over the connection string method. The eForms Central Manager uses this information to create a SQL database and a SQL script file. The script can be used to re-create your database.

The authentication method for the SQL Server must be “SQL Server and Windows.” If you don’t set the authentication method during installation of SQL Server, you can set it using the SQL Server Enterprise Manager. In the SQL Server Properties dialog box, on the Security tab, select the **SQL Server and Windows** option for Authentication.

Field	Description
Server Name	The DSN or IP address of the machine that is running SQL Server. **NOTE** If you will be using ODBC lookups and auto-increments on forms, you must enter a system DSN, not a user DSN.
Database	The database on the server that an eForms Central library connects to.
User Name	The name of the account used to access the database.
Password	The password of the account used to access the database (optional).

Task 6b: Other

This option specifies that an OLE DB.Net provider for a database system will be used (e.g., Access).

Field	Description
Connection String	The connection string to the database.

Task 7: Set up Mail

If your eForms Central library is configured for Active Directory and Windows Login authentication, Windows (NTLM) authentication is applied. For Built-in authentication and Headers authentication, anonymous authentication is applied.

Field	Description
SMTP Server	The name (address) of the SMTP Server used to send links to forms.
Port	The port that the SMTP Server listens to. The default is 25.
Relay Messages	When selected, this option indicates that the server will relay messages sent by library users. The SMTP server must be set up to allow relaying of messages for this to work. Default.
Send from this Address	When selected, this option instructs the Forms Manager Server to send user mail from the address entered in the associated field. This address is used for all the mail that a user sends.
Max Recipient Matches	The maximum number of potential matches that can be returned when a user enters part of a name in the ‘To’ field of an email message. The default is 100.

Task 8: Set up Form Options

On the Form Options tab, you can specify the location of the form toolbar, enable attachments for forms, and enable signature deletion with authentication.

Field	Description
Toolbar Location	The location of the toolbar can set to Top, Bottom, or both Top and Bottom. By default, the toolbar is placed in the Top location.
Must Authenticate to Delete Form Signatures	When selected, this option ensures that the user must log in before deleting a signature. **NOTE** After signing a form, users will not be able to delete a signature if the user account they signed with is deleted for some reason. If this situation occurs, the "Must Authenticate to Delete Form Signature" feature must be turned off before the signature can be deleted.
Allow Attachments on Forms	When selected, this option places an Attachments button on the form toolbar.

Task 9: Set up Library Options

On the Library Options tab, you can specify whether or not users can save form data, send forms to users without accounts, and use custom profiles. If you enable **Allow Custom Profiles** or **Allow Personal Information Administration**, you must also configure the settings for the Personal Info form (Form Template ID and the Cell Mapping fields).

Allow Personal Information Administration

With **Allow Personal Information Administration** selected, users can maintain their personal and employee information (or personal profile) using the Personal Information form. The primary purpose of this form is to prefill forms that open in a browser window with the user's information. The cells on the Personal Information form are mapped to identically named cells on other ITX Form Templates (.itx) in the library. See the *eForms Designer Help* for more information about the Personal Information template and template IDs.

Custom Profiles

The Custom Profiles feature allows users to select different Personal Information forms (or custom profiles) to prefill forms. In this way, users can fill out forms on someone else's behalf.

Field	Description
Allow Saving of Form Data	Allows users to save forms to their My Forms page in the eForms Central library.
Allow Sending to Unregistered Users	Allows users to send forms to users who do not have registered accounts in the eForms Central library. Use this feature only if you are using Built-in or Windows Login authentication and you allow users to create their own accounts.
No. of Days to Keep Unregistered Accounts	The maximum number of days that an unregistered account remains in the Forms Manager database before it is automatically removed.
Allow Custom Profiles	Allows users to fill out additional Personal Information forms to create and manage custom user profiles.
Allow Personal Information Administration	Allows users to create and edit their personal profile (for example, first name, last name, and email address) using the Personal Information form.
Form Template ID	Create a template ID for the Personal Information form template.
First Name Cell	The name of the cell that stores the user's first name exactly as it appears on the Personal Information form template.
Last Name Cell	The name of the cell that stores the user's last name exactly as it appears on the Personal Information form template.
Email Cell	The name of the cell that stores the user's email address exactly as it appears on the Personal Information form template.

Task 10: Set up Desktop Clients

Enter information on this tab only if the eForms Central library users will be filling out forms with Desktop eForms. If you are using custom installers, place them in the **Forms Manager\Libraries\[Library name]\ Config** folder and change the links in the fields accordingly.

Field	Description
Windows Installer URL	Displays the default URL to the Windows installer for Desktop eForms. Modify this field if you are using a custom installer. If you do not want to include a link to the Windows Desktop eForms installer, delete the default path in the **Windows Installer URL** field.
Macintosh Installer URL	Displays the default URL to the Macintosh installer for Desktop eForms. Modify this field if you are using a custom installer. If you do not want to include a link to the Macintosh Desktop eForms installer, delete the default path in the **Macintosh Installer URL** field.
Add links to Installers on Software page	Adds links to the installers on the Software page. Users who must install their own copy of Desktop eForms need the Windows or Macintosh link.
Add link to Distribution Center Profile on Software page	Adds link to Distribution Center Profile on Software page. Form authors need this link. Users who have Desktop eForms installed but do not have a distribution center profile also need this link.

If Forms Manager was installed on Microsoft Windows 2003 Server with Microsoft Internet Information Server IIS 6 and if users will need to use the link to the Macintosh installer, you must manually register the MIME type for the Macintosh installer.

To register the Macintosh installer MIME type

1. In IIS Manager, get the properties on the virtual directory for the library.
2. In the dialog box, click the **HTTP Headers** tab and locate the MIME Map section.
3. Click **File Types...** .
4. In the next dialog box, click **New Type...** .
5. In the next dialog box, enter “DMG” in the **Associated Extension** field and "application/binary" in the **Content type (MIME)** field.
6. Click **OK** until the dialog boxes are closed.

Task 11: Set up Error Handling

On the Error Handling tab, select or deselect the following checkboxes:

Checkbox	Description
Add Debugging information to Error Messages	Specifies that debugging information will be added to error messages.
Record Errors in Event Log	Specifies that errors will be recorded in a log file.

Task 12: Set up Email for Service Alerts

To enable the service to send alerts to users, you must specify an email address in the **FormsManagerService.exe.config** file. The value you specify in the config file is shown in the **From** field when a user receives an email alert from the service.

FormsManagerService.exe.config is a global file. Changes you make to this config file affect all libraries.

To set up email for service alerts

1. Open the FormsManagerService.exe.config file located in the **Forms Manager** folder.
2. In the tag <add key="service_email" value="" />, enter an email address between the quotation marks after “value=”.
3. Save and close the file.

Task 13: Set Security

When you've finished creating a library, you must set security permissions on the Library folder.

To set security permissions for the library

1. On the Configure Library dialog box, click **Finish**. A status message appears while files are copied from the Image folder to the Library folder. When the files have finished copying, The Library Folder Security dialog box appears.
2. Click **Yes** to open a new Windows Explorer window. The Library folder is selected.

   NOTE If you click **No**, you can set the security permissions later. The eForms Central library will not function until these permissions are set.
3. Right-click the Library folder and choose Properties. On the Security panel, set the security permissions on the Library folder.

Task 14: View the New Library

To view the new library

1. Launch your browser.
2. In the address field, enter http://*[server name]*/*[Library name]* or https://*[server name]*/*[Library name]*. If you changed the port from the default of 80 or 443, the port number must be added to the address field.

Customize the Library Interface

The library user interface can be customized by modifying certain installed files. Changes to these files may affect the banner, Home Page, and Personal Information template. You can also show or hide the Home Page; add custom links to the sidebar and banner; add, delete, and change the order of the columns; and point to an alternate style sheet.

NOTE Once a library has been configured, if you later re-configure it using the eForm Central Manager application, changes you made in the Library.config file are preserved. For example, if you set a different home page or point to an alternate style sheet, these customizations are not overwritten. These customizations are also preserved when you upgrade.

To Customize the Library Interface

- Customize the Banner (Task 15a on page 43).
- Customize the Home Page (Task 15b on page 44).
- Set the Start Page (Task 15c on page 45).
- Customize links on the Sidebar and Banner (Task 15d on page 46).
- Configure columns on List Pages (Task 15e on page 47).
- Point to a custom style sheet (Task 15f on page 48).
- Modify the Personal Information Template (Task 15g on page 49).

Task 15a: Customize the Banner

The banner spans the top of the eForms Central library window and appears below the browser toolbar. It typically includes the name you've chosen for the eForms Central library (e.g., Sales eForms Central library), a logo, and a background image.

Images used in the banner must be in a format that is supported by your browser (e.g., JPG, GIF).

NOTE If you want to change the banner background, font, color, logo, etc., use a custom stylesheet as described in Task 15f Point to a Custom Style Sheet on page 48. If you want to create your own code to customize the banner, follow the instructions below:

To customize the banner

1. Open the existing **Banner.inc** file in the **Forms Manager\Libraries*[Library name]*\Config\Inc** folder.
2. Edit the HTML file by adding your own code.
3. Save the file in the **Forms Manager\Libraries*[Library name]*\Config\Inc** folder.

To add links to the sidebar or banner, see Task 15d Customize Links on the Sidebar and Banner on page 46.

Task 15b: Customize the Home Page

The home page opens by default when users access a library. Your home page can include any information that your company wants to provide for the eForms Central library users. You may want to briefly describe the contents of the eForms Central library and the work processes for electronic forms and their associated documents.

To customize the home page

1. Open the existing **Home.inc** file in the **Forms Manager\Libraries*[Library name]*\Config\Inc** folder.
2. Edit the HTML file by adding your own code.
3. Save the file in the **Forms Manager\Libraries*[Library name]*\Config\Inc** folder.

To hide the home page

1. Open the existing **Forms Manager\Libraries*[Library name]*\Library.config** file.
2. In the display tag <display startPage="home" showHomePage="True"> replace "True" with "False."
3. Edit the file.
4. Save the **Library.Config** file in the **Forms Manager\Libraries*[Library name]*** folder.

Task 15c: Set the Start Page

The home page is the default start page. You can set the start page to display the Help, Software, Blank Forms, My Forms, Inbox, or Sent Forms page.

To change the default start page

1. Open the existing **Forms Manager\Libraries*[Library name]*\Library.config** file.
2. In the display tag: <display startPage="home" showHomePage="True"> replace "home" with "help," "software," "blankForms," "myForms," "inbox," or "Sent Forms."
3. Save the **Library.Config** file in the **Forms Manager\Libraries*[Library name]*** folder.

Task 15d: Customize Links on the Sidebar and Banner

You can add customized links to the sidebar and to the banner. You may want to include links to websites that your company uses or to an intranet site. You can create a link for each language that is required, but all links point to the same IP address.

To add links to the sidebar and banner

1. Open the existing **Forms Manager\Libraries*[Library name]*\Library.config** file.

   If you want a link to display in the sidebar (left side of frame), add a sidebar link tag. If you want a link to display in the banner (top of frame), add a banner tag. If you want a link to display in both locations, enter the link information in the sidebar and the banner tags.

2. Create a sidebar or banner tag below the <sidebarWidth> tag. To open the tag, type “<sidebar>” or “<banner>.”

3. On the next line, type “<link type=>” and enter “frame,” “window,” or “popup.” If you select “popup” as your link type, you can change the width and height of the popup. The default settings are “width=800” and “height=600.”

4. In the sidebar or banner tag, type “href=” and enter the path to your link.

5. In the sidebar or banner tag, type “text language=” and enter the language you want your link to appear in. For example, enter "en-US" for US English.

6. In the sidebar or banner tag, type “label=” and enter the display name for the link. For example, enter “NBA” as the display name for www.nba.com.

7. In the sidebar or banner tag, type “toolTip=” and enter the tool tip you want to display when the mouse pointer is hovered over the link.

8. To close the tag, type </sidebar> or </banner>. To check your code, view the examples below:

   Example for adding a popup link in the sidebar.

```
<sidebar>
    <link type="popup" href="http://www.nba.com" width="800" height="600">
            <text language="en-US" label="NBA" toolTip="NBA Home Page"/>

    </link>
</sidebar>
```

   Example for adding a frame and window link to the banner.

```
<banner>
    <link type="frame" href="http://www.Google.com">
        <text language="en-US" label="FileNet" toolTip="Google Home Page"/>
    <link>
    <link type="window" href="http://www.filenet.com">
        <text language="en-US" label="FileNet" toolTip="FileNet Home Page"/>
    </link>
</banner>
```

9. Save the **Library.config** file to the **Forms Manager\Libraries*[Library name]*** folder.

Task 15e: Configure Columns on List Pages

By changing the configuration of the columns on list pages, you can change how the information is displayed to users. You can add and delete column headings, but the columns widths must add up to 100% so they fit in the frame. You can also change the order, titles, and number of column headings that appear on the following pages in a library: the Blank Forms, My Forms, Inbox, Sent Forms, Accounts, and Tracking.

To change the order of columns on a list page

1. Open the existing **Forms Manager\Libraries*[Library name]*\Library.config file.**
2. In the <listColumns> tag, modify the column names for the appropriate pages in the library.

   For example, the default code for the general Blank Forms page is as follows:

```
<blankFormsGeneral>
    <column name="Title" width="34%"/>
    <column name="Type" width="33%"/>
    <column name="TemplateID" width="33%"/>
</blankFormsGeneral>
```

   In the following example, “Title” was changed to “Name” and the widths of the columns are resized.

```
<blankFormsGeneral>
    <column name="Name" width="45%"/>
    <column name="Type" width="35%"/>
    <column name="TemplateID" width="20%"/>
</blankFormsGeneral>
```

3. Save the **Library.config** file to the **Forms Manager\Libraries*[Library name]*** folder.

Task 15f: Point to a Custom Style Sheet

If you want to change the font styles, sizes, or colors used throughout the library, you can point to a custom style sheet. Use the style sheet to override only the settings you want to change.

To point to your own style sheet

1. Create a style sheet and save it in the **Forms Manager\Libraries*[Library name]*\Config** folder or create a css folder in the Config folder and save the style sheet in the css folder. You may want to save your style sheet to a different location, so it can be accessed by multiple libraries.

   NOTE Do not replace or modify the default style sheet (**Forms Manager\Files\Server\css\Library.css)**. If you save your style sheet here, it will be overwritten when you apply a Forms Manager upgrade. However, you can view the tags in the existing style sheet to see what styles can be changed in the library.

2. Open the **Forms Manager\Libraries\[Library name]\Library.config** file. In the display tag, type “customStylesheet=” and type the path to your custom style sheet.

   Example

   <display startPage="home" showHomePage="True" customStylesheet="http://localhost/test/library.css">

3. Save the **Library.config** file to the **Forms Manager\Libraries*[Library name]*** folder.

Task 15g: Modify the Personal Information Template

A default Personal Information template is provided on the FileNet Forms Manager eForms Central Windows CD (in the Personal Info Template folder), but you may want to use eForms Designer to modify the default template or create a customized form. This would allow you to collect the kind of information required by your department or company. For more information see "About the Personal Information Template," in the e*Forms Designer Help*.

Task 16: Set up Administrators

Important notes:

- For Built-in authentication (with accounts), a default account administrator account is created when Forms Manager is installed. The account administrator modifies this account and sets up all users to use the eForms Central library. The first time the account administrator logs into the eForms Central library, he or she must use the account that was created during the installation.
- For Windows Login authentication, the default account administrator is specified in eForms Central Manager on the Authentication tab in the **Administrator Account** field.
- If the Built-in authentication (with accounts) or Windows Login method is being used for the library, the account administrator may create the user accounts. An alternative is to allow general users to create their own accounts when they log in for the first time.

Administrator Login with Built-in Authentication

To log in the first time

1. In the **User Name** field, enter “Administrator.”
2. In the **Password** field, enter “password.”
3. Click **OK**.
4. On the banner, click **Account Info**.
5. In the Account Information dialog box, change the user name (optional) and the password to prevent access by users who are not authorized.
6. In the **Email** field, enter your email address.
7. Click **OK**.

Administrator Login with Windows Login Authentication

The account administrator whose account was specified on the Authentication tab for Windows Login authentication does not need to log into the eForms Central library. As long as the account administrator is logged into Windows, he or she can access the library without logging in.

Task 17: Download Distribution Center Profiles

Form authors must download eForms Central distribution center profiles whether they are designing templates for use in a web browser or on the desktop.

To download the distribution center profile

1. Enter **http://*[Server name]*/*[Workplace name]*/GetProfile.aspx** in the browser **Address** field and press **Enter**.

   Or

2. Log into the eForms Central library.
3. Click the **Software** button.
4. Click the link to download the distribution center profile.

General Users

General users can follow the above steps to download the distribution center profile. They also need instructions about whether they will create their own accounts or use accounts created for them.

Task 18: Configure Maximum File Upload Size

By default, files that are larger than 4 megabytes are not uploaded to Forms Manager. If you want to allow file or attachment uploads larger than 4 megabytes, you can configure a maximum file upload size in the Web.config file.

To configure a maximum file upload size

1. In any text editor, open the Web.config file, located in the **Forms Manager\Libraries*[Library name]*** folder.
2. Below the <system.web> tag, add the following:

   <httpRuntime maxRequestLength="<*number of bytes*>" />

   where <*number of bytes*> is equal to the desired number of megabytes x 1024. The following example specifies a maximum file upload size of 8 megabytes:

   <httpRuntime maxRequestLength="8192" />
3. Save and close the Web.config file.

After You Install

Task 19: Edit the Personal Information Template

If you have upgraded from Informed Quadra 4.1.1x or earlier or Forms Manager Server 4.2.0 or later to Forms Manager Server 5.0.0, run the eForms Central Manager application and edit the following eForms Central library settings after the installation is complete:

1. On the Library Options page, enter the template ID for the Personal Information template.
2. On the Desktop Clients page, ensure that the path to the Desktop eForms installer is correct.

Finally, deploy an ITX Form Template version of the Personal Information template to the upgraded eForms Central library.

Remove an eForms Central Library

To remove an eForms Central library

1. Start eForms Central Manager.
2. In the Existing eForms Central library field, select the library you want to remove.
3. Click **Remove**. A confirmation message appears.
4. Click **OK** to continue.

NOTE You must restart IIS to delete any bindings to any files when you delete the virtual webshare.

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106-0032, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
J46A/G4
555 Bailey Avenue
San Jose, CA 95141-1003
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs.

Trademarks

IBM is a registered trademark of International Business Machines Corporation in the United States, other countries, or both.

FileNet is a registered trademark of FileNet Corporation, in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, product, and service names may be trademarks or service marks of others.

Index

Program Number: 5724-R89

Printed in USA

GC31-5497-00