Unit 4.   Securing Content

Unit Overview

This unit contains these lessons.

Lessons

Lesson 4.1 - Security concepts, page 4-3

Lesson 4.2 - Configure security on content, page 4-11

Lesson 4.3 - Configure security on content data structures, page 4-23

Lesson 4.4 - Configure security policies, page 4-39

Lesson 4.5 - Configure security inheritance, page 4-51

Skill levels

Select one of these skill levels to perform the activities:

- Challenge: Minimal guidance
- Walkthrough: More guidance, with step-by-step directions

Unit dependencies

The activities in this unit must be performed in the given order.

This unit is dependent upon completing the following units:

- Introduction to IBM FileNet Content Manager
- Content Storage
- Content Data Structures

Requirements

The activities in this unit assume that you have access to the student system configured for these activities.

Lesson 4.1.   Security concepts

Why is this lesson important to you?

You are going to implement and maintain the security on your IBM FileNet P8 business solution. You need to be familiar with the basic security concepts.

Activities

- Examine existing group memberships: Challenge, page 4-5
- **Examine existing group memberships: Walkthrough, page 4-7**

Examine existing group memberships: Challenge

Challenge

Use the Active Directory Users and Computers Tool to verify the members of each of the groups listed in the following data table.

Data

Group	Members
Finance Admins	adam, allison, steve
Finance Clerks	carol, charles
Finance Managers	mark, may
Finance Reviewers	richard, roberta

Lesson 4.2.   Configure security on content

Why is this lesson important to you?

Your solution designer has identified aspects of your business solution that require changes to existing content security. You must make the required security changes.

Activities

User accounts

Group	User ID	Password
P8Admins	filenetadmin	IBMFileNetP8
Finance Managers	mark	IBMFileNetP8
Finance Reviewers	roberta	IBMFileNetP8

Modify direct security on existing objects: Challenge

Challenge

Modify the ACL of a document using Enterprise Manager and also using Workplace XT. Modify the ACL of a folder using Enterprise Manager and also using Workplace XT. Ensure that the security modification produces expected results.

Verification

Remove a group from the ACL of a document, and then log in to Workplace XT as a member of that group. Confirm that the document is not visible when you are logged in as that user. Perform a similar test on a folder.

Introduction

This lesson gives you the opportunity to change the permissions on different objects and observe the effects that your actions have on user access.

Procedures

Procedure 1, Modify security settings on a document, page 4-15

Procedure 2, Make additional security changes to the document, page 4-18

Procedure 3, Modify and test folder security, page 4-19

Procedure 1: Modify security settings on a document

1. Verify initial security setting on a document.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

      - User name: `mark` (a member of the Finance Managers group).
      - Password: `IBMFileNetP8`

   c. Browse to Test Folder in the Shared object store.

   d. In the right pane, select the document named Test.txt.

   e. Click Actions > More Information > Security.

   The Information page opens to show the security settings of the document.

2. Try to modify the security settings of the document.

   Observe the result of having insufficient permission to change the security on an object.

   a. Click the Finance Managers link to view the security permission settings for users for this document.

Permission	Allow	Deny	System Notes
Owner Control			Implicit Deny
Promote Version			Implicit Deny
Modify Content			Implicit Deny
Modify Properties			Implicit Deny
View Content	**x**		
View Properties	**x**		
Publish			Implicit Deny

b. Verify that you cannot change the state of the check boxes for the permissions in either the Allow or Deny columns.

c. Click Close to close the Security - Settings window.

d. Click Cancel to close the Information page.

e. Log out of Workplace XT.

3. Modify the security settings of a document using Enterprise Manager.

Use the following steps to modify the direct security on the document to prevent general users from viewing the document, to allow managers to modify permissions, and to allow reviewers to view document properties.

a. Start Enterprise Manager.

   i. Click Start > Programs > IBM FileNet P8 Platform > FileNet Enterprise Manager Administration Tool.

   ii. If necessary, connect to the FileNet P8domain.

   - Username: `filenetadmin`
   - Password: `IBMFileNetP8`

b. Under the Object Stores node, browse to Shared > Root Folder > Test Folder and select the document Test.txt.

c. Click Action > Properties.

d. Select the Security tab.

e. Select the P8Users row and then click Remove.

f. Give the Finance Reviewers group access to view the document properties.

   i. Click Add to open the Select Users and Groups window.

   ii. Type `fin` in the Search Criteria panel and then click Find.

   iii. Select the Finance Reviewers group in the returned list and then click OK.

   iv. In the Level panel, select *View properties*.

   v. Click Apply.

g. Add the Finance Managers group to the document.

i. Click Add.

Type `fin` in the Search Criteria panel and then click Find.

iii. Select the Finance Managers group and then click OK.

h. Change the access level for the Finance Managers group.

   i.   Under Rights, select the *Modify permissions* check box.

   Tip: You must scroll down to see this item.

   Leave the other check boxes selected.

   Note that the Level setting changes to Custom.

i.   Click OK to save the changes. The Properties page

closes.

j.   Minimize Enterprise Manager.

4. Verify that a Finance Reviewer can see a document listed, but does not have access to the contents.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

   - User name: `roberta` (a member of the Finance Reviewers group).
   - Password: `IBMFileNetP8`

   c. Go to Shared > Test Folder.

   d. Select the Test.txt document in the right pane and click Actions > View.

   Verify that you are not allowed to view the contents.

   The Finance Reviewers group has only *View properties* access.

   e. Click the Close Window link.

   f.   Log out of Workplace XT.

Procedure 2: Make additional security changes to the document

Earlier, mark was unable to modify the security settings of this document. As an administrator, you granted the Finance Managers group (which includes the user mark) the right to modify security.

Now you are going to log in to Workplace XT as mark to further modify security on this document.

1. Modify access to the Test.txt document.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

      • User name: `mark` (a member of the Finance Managers group).
      • Password: `IBMFileNetP8`

   c.   Go to Shared > Test Folder and select the Test.txt

   document.

   d. Click Actions > More Information > Security.

   e. Click the Finance Reviewers link.

   f.   Select the View Content check box in the Allow column.

      Note that View Properties is already selected.

      Do **not** change any of the other security settings.

   g. Save the changes.

      i. Click Accept to save the changes made to the Finance Reviewers group security access.

      ii. Click OK to apply the changes to the document.

   h. Log out of Workplace XT.

2. Verify that mark's changes allow Finance Reviewers to view the content of the document.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

      • User name: `roberta` (a member of the Finance Reviewers group).
      • Password: `IBMFileNetP8`

   c. Go to Shared > Test Folder and select the Text.txt document. d.

   Click Actions > View.

      A text document is opened in a new browser window, demonstrating that members of the Finance Reviewers group have View Content access to the document.

   e. Close the browser window for that document and then log out of Workplace XT.

3. Use Enterprise Manager to block access to Test Folder for general domain users (#AUTHENTICATED-USERS) and give folder access to the Finance Reviewers and Finance Managers groups.

   a. Restore Enterprise Manager.

   You are logged in as filenetadmin.

   b. Select Shared > Root Folder > Test Folder.

   c. Click Action > Properties.

   The Test Folder Properties window opens.

      i.   Select the Security tab.

      ii. Select #AUTHENTICATED-USERS and then click Remove.

   d. Add the Finance Reviewers group to the folder:

      i.   Click Add.

      ii. Type `fin` in the Search Criteria panel and then click Find.

      iii. Select the Finance Reviewers group and then click OK.

      iv. In the Level panel, accept the default *View properties* option.

   e. Add the Finance Managers group to the folder:

      i.   Click Add.

      ii. Type `fin` in the Search Criteria panel and then click Find.

      iii. Select the Finance Managers group and click OK.

      iv. In the Level panel, select *Full Control*.

   f.   Click OK to save these security

   changes.

4. Minimize Enterprise Manager.

Procedure 3: Modify and test folder security

1. Modify the security of the folder using a Finance Managers account.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

      • User name: `mark` (a member of the Finance Managers group).
      • Password: `IBMFileNetP8`

   c. Browse to the Shared object store and select Test Folder.

   d.   Right-click Test Folder and click More Information > Security.

The Object Properties window opens with the Security page displayed.

e. Select the *Remove* check box for Finance Reviewers and then click OK.

f.   Log out of Workplace XT.

2. Verify that Finance Reviewers can no longer view the folder.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

   • User name: `roberta` (a member of the Finance Reviewers group).
   • Password: `IBMFileNetP8`

   c. Expand the Shared object store node and verify that you cannot see the folder Test Folder.

Although the folder security has been changed to prevent access, you can still search for and view the document. The following steps demonstrate that restricting access by modifying folder security does not control the direct security of a document filed in that folder.

3. Search for a document in a blocked folder.

   a. In Workplace XT (still logged in as the user `roberta`), click the Search 🔍 button.

   b. Select Shared from the Object Store selection list.

   c. In the *Name starts with* field, type `Test` and then click Search.

   d. Verify that you see the Test document in the search results pane, and verify that it was modified by the user `mark`.

   e. Select the document and click Actions > View to view its contents.

   f. Close the text file window and then log out of Workplace XT.

4. Restore access to the Test Folder for reviewers.

   a. Restore Enterprise Manager.

      You are logged in as filenetadmin.

   b. In Enterprise Manager, select Shared > Root Folder > Test Folder.

   c. Click Action > Properties.

   d. Give the Finance Reviewers group access to the folder:

      1. Select the security tab

    ii. Click Add.

    iii. Search for and select the Finance Reviewers group, and click OK to add it to the Access Control List (ACL).

  e. Accept the default access for the group:

    i.   Verify that View properties is selected in the Level

  panel.

    ii. Click OK.

  f.   Minimize Enterprise Manager.

5. Verify the effects of the security change by browsing for the Test Folder as a member of the Finance Reviewers group.

  a. Run Workplace XT.

  b. Enter the following account information and click *Log in*.

- User name: `roberta` (a member of the Finance Reviewers group).
- Password: `IBMFileNetP8`

  c.   Open the Shared object store and verify that the Test Folde

  is listed

  d. Log out of Workplace XT.

Lesson 4.3.   Configure security on content data structures

Why is this lesson important to you?

Your IBM FileNet P8 solution design identifies specific security requirements for the content data structures used in the business solution. As the solution builder, you must implement these security requirements.

Activities

- Activity: Configure security on content data structures, page 4-25

User accounts

Group	User ID	Password
P8Admins	filenetadmin	IBMFileNetP8
Finance Managers	mark	IBMFileNetP8
Finance Clerks	carol	IBMFileNetP8
Coordinators	conrad	IBMFileNetP8
Finance Admins	adam	IBMFileNetP8

Activity: Configure security on content data structures

Introduction

This activity allows you to practice creating an object store and setting its security so that the different user groups have the appropriate access.

Procedures

Procedure 1: Create an object store and set initial security

Use Enterprise Manager to create a new object store with the initial security and configuration specified in the following table. To save you time, the necessary database and data sources have already been created for you.

1. Start Enterprise Manager.

   a. Click Start > Programs > IBM FileNet P8 Platform > FileNet Enterprise Manager Administration Tool.

   b. If necessary, connect to the FileNet P8domain.

      • Username: `filenetadmin`
      • Password: `IBMFileNetP8`

2. Run the *Create an Object Store* wizard.

   a. Select the Object Stores node.

   b. Click Action > New Object Store.

      The Create an Object Store wizard opens.

c. Complete the wizard using the following data.

Item	Value
Display name	Finance
JNDI Data Source Name	FinanceDS
JNDI XA Data Source Name	FinanceDSXA
Default content store	Database Storage Area
Object store administrators	Groups: Finance Admins, p8admins
Initial user groups	Finance Clerks Finance Managers Finance Reviewers Managers QualityAssurance

d. Accept any default settings if the values are not specified in the table.

e. After the object store is successfully created, close the wizard and minimize Enterprise Manager.

Note

Because you specified some groups as initial users, the #AUTHENTICATED-USERS group was not added as a set of users to the object store. This omission means that users must belong to one of the specified groups to be able to see the object store.

3. Verify that only users that belong to the appropriate groups can see the new object store.

a. Run Workplace XT.

b. Enter the following account information and click *Log in*.

- User name: carol (a member of the Finance Clerks group).
- Password: IBMFileNetP8

c. Verify that the new Finance object store is listed on the Browse page.

d. Log out of Workplace XT, and enter the following account information and click *Log in*.

- User name: conrad (Not a member of any group that has user access.).
- Password: IBMFileNetP8

e. Verify that the new Finance object store is **not** listed.

f.   Log out of Workplace XT.

Log in to Workplace XT as one member of each of the other user groups listed in the *User accounts* table at the beginning of this lesson, and verify that you can see the object store Finance object store.

Procedure 2: Modify Root Folder security

Modify the security on the Root Folder using the following procedure.

1. Modify security on the Root Folder for the groups with nonadministrative access on the object store.

    a. Restore Enterprise Manager.

       You are logged in as filenetadmin.

    b. Select Object Stores > Finance > Root Folder.

    c. Click Action > Properties.

       The Root Folder Properties window opens.

    d. Select the Security tab.

    e. Modify the access levels (in the Level panel) of the groups specified using the data in the following table.

Name	Level
Finance Clerks	View properties <Default>
Finance Managers	View properties <Default>
Finance Reviewers	View properties <Default>
Managers	View properties <Default>
QualityAssurance	View properties <Default>

Note

Do **not** modify or delete any of the other ACEs (access control entries).

    f.   Click OK to close the window.

2. Create a root-level folder in the Finance object store that allows only Finance Managers to add subfolders to it.

    a. Select Object Stores > Finance > Root Folder.

    b. Click Action > New Sub Folder.

The Create New Folder Wizard opens.

   c. Type `Invoices` in the Folder Name field and click Create.

   d. Verify that the Root Folder of the Finance object store contains the following two subfolders:

- CodeModules
- Invoices

3. Grant Finance Managers *Modify properties* access for the folder.

   a. Verify that the Invoices subfolder is selected.

   b. Click Action > Properties.
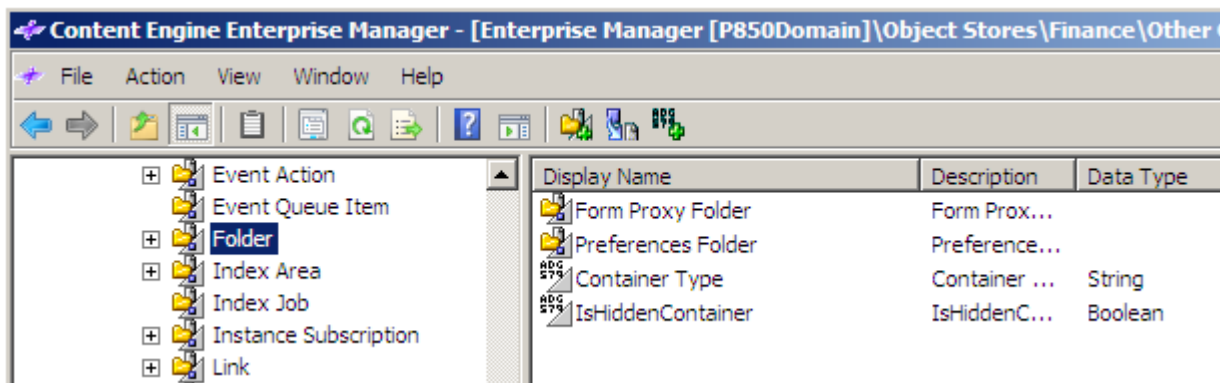
      The Invoices Properties window opens.

   c. Select the Security tab.

   d. Select the Finance Managers row in the ACL table.

   e. Select *Modify properties* in the Level panel.

   f. Click OK to save the changes.

Procedure 3: Create a new folder class and set default security

Use the following procedure to add a new folder class and specify the default instance security for this folder class. The default instance security affects the ACL of every new folder of that class.

1. Create an InvoiceFolder class.

   a. In Enterprise Manager, select Finance > Other Classes > Folder.

   b. Click Action > New Class.

      The *Create a Class Wizard* opens.

   c. Name the new folder class `InvoiceFolder`.

   d. Complete the wizard, accepting default values.

2. Modify the default instance security for the new folder class to grant Finance Clerks *Add to Folder* access and to grant Finance Managers *Modify properties* access.

   a. Select the InvoiceFolder class that you created.

   b. Click Action > Properties.

   The *InvoiceFolder Class Properties* window opens.

   c. Select the *Default Instance Security* tab.

   d. Select the Finance Clerks row in the ACL table.

   e. Select *Add to Folder* in the Level panel.

   f.   Select the Finance Managers row in the ACL

   table. g. Select *Modify properties* in the Level panel.

   h. Click OK to close the Properties window.

   The Apply Changes window opens.

   i.   Click Yes to refresh the class metadata.

3. Add a new instance of the InvoiceFolder class to test the changes that you made to the default instance security configuration.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

      • User name: `mark` (a member of the Finance Managers group).
      • Password: `IBMFileNetP8`

   c. Select the Invoices folder in the Finance object store.

   d. Click Actions > Add Folder.

   The Add Folder window opens.

   e. Click Class.

   f.   Select the InvoiceFolder class and click OK.

   g. Under Properties, type `Current Year` in the Folder Name field.

   h. Click Add, and then click OK.

4. View the access control list for the new folder to verify that the security is correct.

   a. From Finance > Invoices, select the Current Year folder and then click Actions > More Information > Security.

   b. Verify that the following security settings are in place:

      - The Finance Admins group has Owner Control permission. This group was given *object store administrator* access when you created the object store.

      - The Finance Clerks group has *File In Folder* permission. You set the default instance security on the InvoiceFolder class to this access level.

      - The Finance Managers group has *Modify Props* permission. You set the default instance security to this access level.

      - The Finance Reviewers, Managers, and QualityAssurance groups have only *View Properties* permission. This security is set by the default instance security settings on the InvoiceFolder class.

5. Click OK and then log out of Workplace XT.

Procedure 4: Create a new document class and set default security

1. Create a new document class called *Invoice* that includes four new custom properties.

   a. Restore Enterprise Manager.

      You are logged in as filenetadmin.

   b. Select Finance > Document Class.

   c. Click Action > New Class.

      The *Create a Class Wizard* opens.

   d. Click Next.

   e. Type `Invoice` in the Name field and then click Next.

   f. On the Select Properties page, click New to create each custom property.

      The *Create a Property Template* wizard opens.

   g. Use skills learned previously to complete the Create a Property Template wizard for each of the four properties in the following table.

Name	Data type	Single or multi value
InvoiceAmount	Float	Single
InvoiceDate	DateTime	Single
InvoiceNumber	String (no choice list)	Single
InvoiceApproved	Boolean	Single

   Tip: Remember to click New to add each property to the class.

h. Complete the *Create a Class* wizard, accepting the default values on the remaining pages of the wizard.

2. Configure the default instance security on the new Invoice class.

   a. In Enterprise Manager, select Finance > Document Class > Invoice.

   b. Click Action > Properties.

      The *Invoice Class Properties* window opens.

   c. Select the *Default Instance Security* tab.

   d. Modify the default instance security using the data provided in the following table.

Name	Level
#CREATOR-OWNER	Major versioning
Finance Clerks	Modify properties
Finance Managers	Full Control

   e. Click OK to close the window.

      The Apply Changes window opens.

   f. Click Yes to refresh the class

metadata. g. Minimize Enterprise Manager.

3. Add a new Invoice document to verify default instance security for the Invoice class.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

     • User name: `carol` (a member of the Finance Clerks group).
     • Password: `IBMFileNetP8`

   c. Browse to Finance > Invoices > Current Year.

   d. Click Actions > Add Document.

      The Add Document wizard opens.

   e. Browse to C:\Labs\P8Administration\SecuringContent.

   f. Select the Test Invoice.pdf file to use for the document content and click

Next.

   g. Change the document class to Invoice.

h. Complete the wizard using the following data.

Properties	Value
Document Title	Test Invoice 1.pdf
InvoiceAmount	123.45
InvoiceDate	*<Use today's date.>*
InvoiceNumber	001
InvoiceApproved	False

4. View the security of the new Invoice document.

   a. In Workplace XT, select the Test Invoice 1.pdf document. b.

   Click Actions > More Information > Security.

   The Security information window opens.

   c. Verify that the user carol (the creator of the document) does **not** have Owner Control access on the document.

   d. Verify that the ACE for the user carol allows more access than the ACE for the Finance Clerks group that carol is a member of.

   i | **Information**

   Although Carol created the document, she does not have *Owner Control* access because you set the #CREATOR-OWNER default instance security ACE to allow only *Major versioning* access.

   You set the default instance security ACE for the Finance Clerks group to *Modify properties* access.

   e. Click Cancel to close the Security information window.

5. Verify that the user carol **can** modify the InvoiceApproved property.

   a. Select the Test Invoice 1.pdf document.

   b. Click Actions > Properties.

   c. Verify that the InvoiceApproved field is editable. You change this behavior in the next procedure.

   d. Click Cancel to close the Properties window.

6. Log out of Workplace XT.

Procedure 5: Change default ownership for new invoices

Use the following steps to assign a different group to take ownership of Invoice documents. You also grant to the Finance Clerks group *Major versioning* access to allow the group to add documents without #CREATOR-OWNER access.

1. Modify default instance security for Invoice documents.

    a. Restore Enterprise Manager.

        You are logged in as filenetadmin.

    b. Select Finance > Document Class > Invoice.

    c. Click Action > Properties.

    d. Click the Default Instance Security tab.

    e. Select the #CREATOR-OWNER row and click Remove.

    f.   Select the Finance Clerks row, select the *Major versioning* level, and then click Apply.

        The Apply Changes window opens.

    g. Click Yes to refresh the class metadata.

2. Change the default owner to Finance Admins.

    a. Click Owner (the button near the lower right corner of the Security tab).

        The *Access Control Settings for Invoice* window opens.

    b. Select the option *Change default owner to*.

    c. Click Find and then find and select the Finance Admins group.

    d. Click OK.

    e. Click OK to close the Properties page.

    f.   If the Apply Changes window opens, click

    Yes.

    g. Click File > Exit to close Enterprise Manager.

> **!** **Important**
>
> Make sure that you close Enterprise Manager. You are going to log in as a different user the next time you use Enterprise Manager.

3. Add an Invoice document to confirm that you have successfully changed the ownership in the default instance security settings of the Invoice document class.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

      - User name: `carol` (a member of the Finance Clerks group).
      - Password: `IBMFileNetP8`

   c. Select Finance > Invoices > Current Year.

   d. Click Actions > Add Document.

      The Add Document window opens.

   e. Browse to C:\Labs\P8Administration\SecuringContent.

   f.   Select the Test Invoice.pdf file to use for the document content and click

   Next. g.   Change the Class to Invoice and click OK.

   h. Complete the wizard using the following data.

Properties	Value
Document Title	Test Invoice 2.pdf
InvoiceAmount	345.67
InvoiceDate	*<Use today's date.>*
InvoiceNumber	002
InvoiceApproved	False

4. Verify the ownership of the new Invoice document.

   a. Select the Test Invoice 2.pdf document.

   b. Click Actions > More Information > Security.

   c. The Security information window opens.

   d. Verify that the user `carol` is not listed in the ACL, although she added the invoice.

   e. Verify that the Finance Admins group has Owner Control access.

   f.   Click Cancel.

   g. Log out of Workplace XT.

   Note

The test invoices have different security settings because the default instance security affects only new documents. To change security on existing documents, you need to edit their direct security. You can do this by editing each one manually, by using the Content Engine Query Builder to perform a bulk operation, or by using a script.

Procedure 6: Verify object store access for Finance Admins

Recall that when the Finance object store was created, the Finance Admins group was given object store administrator access. The user adam is a member of the Finance Admins group.

1. Start Enterprise Manager:

   a. Click Start > Programs > IBM FileNet P8 Platform > FileNet Enterprise Manager Administration Tool.

   ! Important

   Make sure that you log into Enterprise Manager as the user `adam` in the next step.

   b. Connect to the FileNet P8domain as the user `adam`.

      - Username: `adam` (a member of the Finance Admins group)
      - Password: `IBMFileNetP8`

2. Test access by the Finance Admins group to different object stores.

   a. Expand the Object Stores node.

   b. Expand the Finance object store node.

      Note that Adam has access to any object or folder in the Finance object store.

   c. `Access to Shared object store is denied as Finance Admins are not allowed to access this store.`

   d. Click OK to close the error message window.

3. Click the Finance object store node and minimize Enterprise Manager.

Activity: Configure security policies

Introduction

In this activity, you create a new security policy that changes the security on contracts when the version status changes to Released.

Procedures

Procedure 1: Create a Contract document class

Use the following steps to create a new Contract document class with two custom properties and configure the default instance security. Later, you associate this document class with a security policy.

1. Restore Enterprise Manager.

Note

You are logged in as the user `adam`.

2. Create a new Contract document class with two new custom properties.

   a. In the left pane of Enterprise Manager, select Finance > Document Class.

   b. Click Action > New Class.

      The *Create a Class* wizard opens.

   c. Click Next.

   d. Type `Contract` for the class name and then click Next.

e. Use skills learned previously to complete the *Create a Property Template* wizard for the two properties specified in the following table. Create them in the order listed.

Name	Data type	Single or multi value
ContractNum	String (no choice list)	Single
ContractDate	DateTime	Single

f. Complete the *Create a Class* wizard, accepting the default values on the remaining pages of the wizard.

3. Configure the default instance security on the new Contract class.

a. Select Finance > Document Class > Contract.

b. Click Action > Properties.

The *Contract Class Properties* window opens.

c. Click the *Default Instance Security* tab.

d. Modify the default instance security using the data in the following table.

Name	Level
Finance Clerks	Major versioning
Finance Managers	Full Control
Managers	Remove (no access)
QualityAssurance	Remove (no access)
Finance Reviewers	Remove (no access)

Important

Do **not** modify the ACEs for the other security principals.

e. Click OK to save your changes.

f. Click Yes to refresh the class metadata.

Note

Because the Finance Reviewers group is removed from the default instance security, members of that group cannot see contracts when they are first created as minor version documents. You add a security policy later that changes contract security as the state changes to Released, which allows members of the Finance Reviewers group to see the documents.

Procedure 2: Create a root-level folder and a subfolder

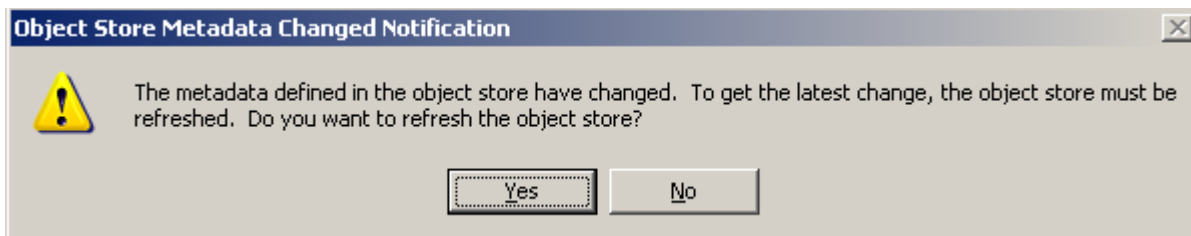Use the following procedure to create two folders for holding Contract documents.

1. Create a new root-level folder using Enterprise Manager.

   a. Select the Root Folder node of the Finance object store.

   b. Click Action > New Sub Folder.

![Note icon] **Note**

If you have to refresh the object store metadata, you need to do step 1 again.

   c. Type `Contracts` for the folder name and click Create.

2. Change the security on this folder.

   a. Open the Properties page of the Contracts folder and then go to the Security tab.

   b. Set the Finance Managers group ACE to the *Modify properties* access level.

   c. Click OK to save your changes.

3. Use skills learned previously to create and configure a new subfolder under the Contracts folder.

   a. Name the folder `New Contracts`.

   b. Modify the security of the new folder to give the Finance Managers group Full Control.

   c. Give Finance Clerks the *Add to Folder* access level.

4. Minimize Enterprise Manager.

5. Add a new document to the folder that you created.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

      - User name: `may` (a member of the Finance Managers group).
      - Password: `IBMFileNetP8`

   c. Browse to Finance > Contracts > New Contracts.

d. Click Actions > Add Document.

   The Add Document wizard opens.

e. Browse to C:\Labs\P8Administration\SecuringContent.

f.   Select the Contract.doc file to use for the document content and click Next.

g. Complete the wizard using the data in the following table. Be sure to change the document class and the *Major version* setting as indicated.

Property	Value
Document class	Contract
Major version	No *(clear the check box)*
Document Title	Contract1.doc
ContractNum	001
ContractDate	*<Use today's date.>*

6. Verify that the Finance Reviewers group does not have access.

   a. Select the Contract1.doc document.

   b. Click Actions > More Information > Security.

   c. Verify that the group Finance Reviewers is **not** listed.

      You removed the Finance Reviewers group from the default instance security on the document class.

7. Promote the document from a minor version to a major version in order to verify that the security does **not** change when the version status changes.

   a. Note the version number near the top of the page is listed as `0.1` and the status is `In Process`.

   b. In the Actions pane of the Information page, click Promote Version.

   c. Click Accept.

      The version number changes to `1.0`, and the status is `Released`.

   d. Go to the Security page and verify that the Finance Reviewers group is still not listed in the ACL for the document.

e. Click OK and log out of Workplace XT.

Procedure 3: Create a security policy

Security policies can be created and configured using either Workplace XT or Enterprise Manager. The interfaces and the amount of control over the configuration differ slightly between the two tools. Use the following procedure to create a new security policy using Enterprise Manager.

1. Run the *Create a Security Policy* wizard.

    a. Restore Enterprise Manager.

    Note

    You are logged in as adam.

    b. Select Finance > Security Policies.

    c. Click Action > New Security Policy.

    The *Create a Security Policy* wizard opens.

2. Complete the *Create a Security Policy* wizard.

    a. Click Next.

    b. Type the security policy Name and Description using the values in the following table.

Property	Value
Name	SP Contract Release
Description	Reviewers can view upon release

    c. Click Next.

    d. Click Add to add the security templates to the policy.

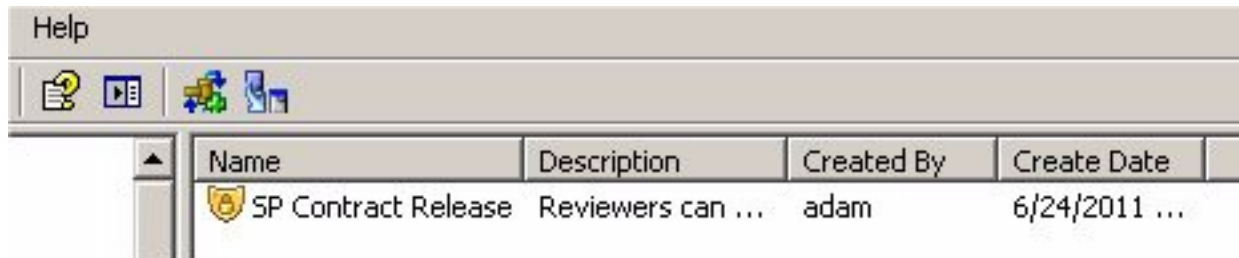   e. Select the Released template to add to the policy and click OK. f.

    Select the Released template and click Modify.

    The Released Properties window opens.

    g. Click the Template Security tab.

    h. Use skills learned previously to add an ACE for the Finance Reviewers group with the default *View content* access level and click OK.

    i. Complete the *Create a Security Policy* wizard.

3. Verify that the new security policy is listed in the right pane of Enterprise Manager.

   You might need to increase the width of the Name column to see the entire name of the security policy.

Procedure 4: Apply a default security policy to a document class

Use the following steps to configure a document class to have a default security policy so that new Contract documents are automatically given the security policy when they are created.

1. Configure the Contract document class to use your new security policy:

   a. In Enterprise Manager, select Finance > Document Class > Contract.

   b. Click Action > Properties to open the *Contract Class Properties* window.

   c. Go to the Security Policy tab.

   d. Select *SP Contract Release* from the Default Security Policy list.

   e. Click OK to save the change.

   f.   Click Yes to refresh the class

   metadata.

   g. Minimize Enterprise Manager.

2. Add a Contract document as a minor version.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

      • User name: `mark` (a member of the Finance Managers group).
      • Password: `IBMFileNetP8`

   c. Browse to Finance > Contracts > New Contracts.

   d. Click Actions > Add Document.

e. Complete the Add Document wizard using the data in the following table.

Property	Value
Local File	C:\Labs\P8Administration\ SecuringContent\Contract.doc
Document class	Contract
Major version	No *(clear the check box)*
Document Title	Contract2.doc
ContractNum	002
ContractDate	*<Use today's date.>*

3. View the Contract2 document security configuration.

   a. Select Contract2.doc.

   b. Click Actions > More Information > Security.

   c. Verify the following:

   - The *SP Contract Release* security policy is assigned to this document.

   - The Finance Reviewers group is not listed in the ACL.

   d. Leave the Security page open for the next step.

4. Promote the Contract2 document and observe the change in security based on the security policy.

   a. On the Information page of Contract2.doc, click Promote Version.

   b. Click Accept.

   c. Click Security near the upper left corner to view the Security page.

   d. Verify that the Finance Reviewers group is listed in the ACL.

   e. Notice that the *From security policy* icon next to Finance Reviewers indicates that this ACE is included because of a security policy.

   f.   Click OK, and log out of Workplace XT.

5. Test the security configuration for Finance Reviewers.

   a. Run Workplace XT.

   b. Enter the following account information and click *Log in*.

   - User name: `richard` (a member of the Finance Reviewers group).
   - Password: `IBMFileNetP8`

   c. Browse to Finance > Contracts > New Contracts.

   d.   Verify that Contract2.doc is listed and that Contract1.doc is **not** listed.
   di.

6. Log out of Workplace XT.

Procedure 5: Remove the default security policy from the class

Use the following procedure to remove the default security policy from the Contract document class.

1. Remove the security policy from the Contract document class.

   a. Restore Enterprise Manager.

   b. In the left pane, select Finance > Document Class > Contract.

   c. Click Action > Properties.

   d. Select the Security Policy tab.

   e. Select <none> from the *Default Security Policy* list to remove the security policy.

   f.   Click OK to save the change.

   g. Click Yes to refresh the class metadata.

   h. Minimize Enterprise Manager.

2. Add another Contract document and verify that the security policy is no longer associated with the Contract class definition.

Hint

Log out of Workplace XT if you are still signed in as mark to ensure that you receive updated information.

a. Run Workplace XT.

b. Enter the following account information and click *Log in*.

- User name: `mark` (a member of the Finance Managers group).
- Password: `IBMFileNetP8`

c. Browse to Finance > Contracts > New Contracts.

d. Add a new Contract document using the data in the following table.

Property	Value
Local File	*C:\Labs\P8Administration\ SecuringContent\Contract.doc*
Document class	Contract
Major version	Yes *(select the check box)*
Document Title	Contract3.doc
ContractNum	003
ContractDate	*<Use today's date.>*

e. Use skills learned previously to view the security information for the Contract3.doc document and verify that it does **not** have a security policy assigned.

f. Click Cancel to close the Security page.

3. Log out of Workplace XT.

Lesson 4.5.   Configure security inheritance

Why is this lesson important to you?

The design for your business solution calls for some documents to have their security determined by the security of a folder or another object. As the solution builder, you must use security inheritance features to implement this functionality.

Activities

- Configure a document to inherit security from a folder: Challenge, page 4-53
- Configure a document to inherit security from a folder: Walkthrough, page 4-55
- Configure and use a security proxy: Challenge, page 4-61
- Configure and use a security proxy: Walkthrough, page 4-63

User accounts

Group	User ID	Password
Finance Admins	adam	IBMFileNetP8
Finance Clerks	charles	IBMFileNetP8
Finance Reviewers	roberta	IBMFileNetP8
Managers	mary	IBMFileNetP8
QualityAssurance	quincy	IBMFileNetP8

Configure a document to inherit security from a folder: Challenge

Challenge

- Create a new folder in your Finance object store to use as a Security Folder. Configure the folder security to grant the Finance Reviewers group View content permissions for this object and immediate children.
- On an existing document that does not currently allow the Finance Reviewers group any access, set the Security Folder property so that the document uses the new folder as an inherited security source.
- Observe the change in security on the document.

Verification

- After you assign the folder as the Security Folder for the document, Finance Reviewers are able to see the document.
- Ensure that you can see the inherited security icon next to Finance Reviewers in the document ACL in Workplace XT.

Configure and use a security proxy: Challenge

Challenge

- Create a document to use as a security proxy. Configure the document to grant the Managers group View content permission for this object and immediate children.
- Add a custom property to a document class so that new documents of that class can hold a reference to the new security proxy document object in that property.
- On a new document, use the object reference from the security proxy object as the value for the new document class property so that the new document gets inherited security from the security proxy.
- Observe the change in security.

Verification

- After you assign the security proxy document as the inherited security source to the new document, members of the Managers group are able to see the new document.
- Ensure that you can see the inherited security icon next to Managers in the new document ACL.

Optional

- Define an ACE on a parent folder so that it is inherited by a child folder that is in turn used as the inherited security source for a document.
- Configure a document to inherit security from both a Security Folder and a security proxy object.
- Configure a folder to inherit security from a security proxy and make it inheritable by its security children.

Configure and use a security proxy: Walkthrough

Introduction

In the previous activity, you used a folder to provide inherited security access for documents. In this activity, you use a document as a security proxy to provide inherited security for other documents.

Procedures

Procedure 1, Create a security proxy object, page 4-63

Procedure 2, Add a custom property to a class for inherited security source information, page 4-64

Procedure 3, Assign a security proxy as the security source for a document, page 4-66

Procedure 4, Verify that security inheritance has been applied from the security proxy, page 4-67

Procedure 5, Change the security proxy document security and verify the update to the inheriting document., page 4-67

Procedure 6, Use Workplace XT to add a document with a security proxy, page 4-69

Procedure 1: Create a security proxy object

Use the following procedure to create a document to act as a security proxy, which allows its security to be used by other objects. Note that, except for its name, no indication is available that this document is used for security inheritance.

1. If necessary, start Enterprise Manager.

    a. Click Start > Programs > IBM FileNet P8 Platform > FileNet Enterprise Manager Administration Tool.

    Note

    Connect to the FileNet P8domain as the user `adam`.

    - Username: `adam` (a member of the Finance Admins group)
    - Password: `IBMFileNetP8`

2. Create a document to use as a security proxy.

b. In the left pane, expand Finance > Root Folder > Contracts and select the folder *Security Folder for Contracts* that you created in the previous activity.

---

c. Click Action > New Document to open the Create New Document Wizard.

📝 Note

If you have to refresh the object store metadata, you need to do steps 1b and 1c again.

d. Type `Contract Auditor Security Source` in the Document Title field.

e. Select the *Without content* option and click Create.

3. Change the security on the document to make it usable as an inherited security source.

a. Select the new document and then click Action > Properties.

b. Go to the Security tab and change the ACL to match the data in the following table.

Security principal	Access level
P8Admins	Full Control
Finance Admins	Full Control
adam	Full Control
Managers	View content <Default>
	Select *This object and all children* from the *Apply To* list

c. Remove the ACEs for any security principals that are not listed in the preceding table.

📝 Note

Only the four ACEs in the table must be listed after you complete step 2c.

d. Click OK to save your changes.

Procedure 2: Add a custom property to a class for inherited security source information

Use the following procedure to add a custom property to a document class so that new documents of that class can be set to use the security proxy as an inherited security source.

1. In Enterprise Manager, select the Finance > Property Templates node in the left pane and then click Action > *New Property Template*.

2. Use the *Create a Property Template* wizard to create a new object-valued property template.

   a. On the second page of the wizard, type `Inherited Security Source A` as the name of the new property template and click Next.

   b. Select the *Object* data type and click Next.

   c. On the *Single or Multi-Value* page of the wizard, click the More button.

   d. On the More tab, select *Inherited* from the *Security Proxy Type* list and then click OK.

   e. Click Next and complete the wizard.

3. Add the new property template to the Contract document class definition and configure it for security inheritance.

   a. Expand the Document Class node for the Finance object store and then click the Contract class.

   b. Click Action > Add Properties to Class to open the *Add Properties to a Class* wizard.

   c. On the Select Properties page of the wizard, select the Show Object Type check box.

   d. Select Inherited Security Source A in the Available panel property list and then click the double right arrow button ⟩⟩ to move the new property to the Selected panel property list.

Available			Selected	
☑ Show Object Type			☐ Show Inherited ☐ Show System	
Property	**Data T..** ▲		**Property**	**Data T...**
Input Formats	String	⟩⟩	Inherited Security Source A	Object
InvoiceAmount	Float		ContractNum	String
InvoiceApproved	Boolean	≪	ContractDate	DateTime
InvoiceDate	DateTim			
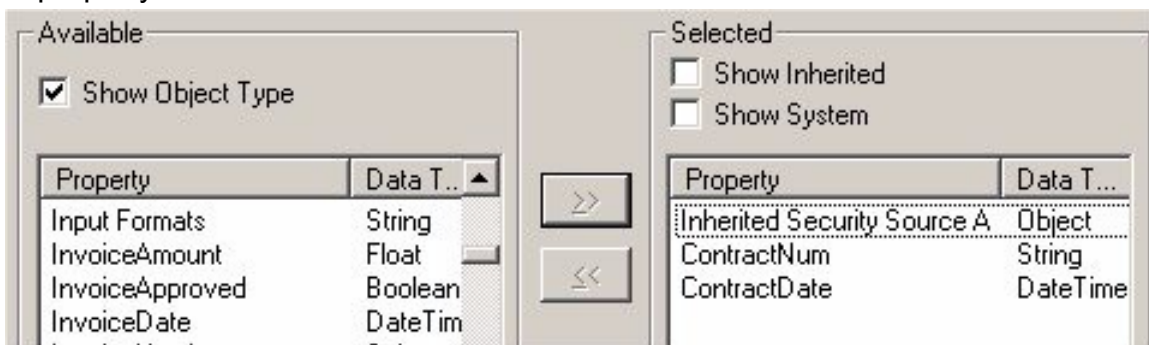
   e. Click Next.

   f. On the Select Property Attributes page, select the Inherited Security Source A property from the list and then click More to open the Properties window.

   g. Click the More tab, select Document from the Required Class list, and then click OK.

   h. Click Next and complete the wizard.

Note

All new instances of the Contract document class include this property that can hold the security proxy information.

4. Refresh the Finance object store.

   a. Select the Finance object store node.

   b. Click Action > Refresh.

Procedure 3: Assign a security proxy as the security source for a document

Use the following procedure to create a new document using the revised Contract document class. This document inherits security from the security proxy document that you created in Procedure 1.

1. Use Enterprise Manager to copy the object reference for the Contract Auditor Security Source security proxy document.

   a. Go to Finance > Root Folder > Contracts > Security Folder for Contracts.

   b. Select the Contract Auditor Security Source document and click Action > Copy Object Reference.

      A copy of the object reference of the security proxy document is placed in the Windows paste buffer.

2. Add a new document to this folder that uses your security proxy as a security source.

   a. Select the Finance > Root Folder > Contracts > New Contracts folder.

   b. Click Action > New Document.

   c. Type `Contract5.doc` in the Document Title field and click Next.

   d. Click Browse/Add and navigate to C:\Labs\P8Administration\SecuringContent and select the Contract.doc file to use for the new document content.

   e. Click Next.

   f.   On the *Class and Properties* page, select Contract from the Class list.

   g. Scroll down to find *Inherited Security Source A* in the Property Name column.

      Tip: The property is one of the last items in the list.

   h. Right-click in the Property Value column for the Inherited Security Source A property and click Paste Object.

      The *Select Object from Paste Buffer* window opens.

   i. Verify that the Contract Auditor Security Source document is selected in the upper pane and click OK.

   j. Verify that the Property Value column for the Inherited Security Source A property contains the value `[Object (Contract Auditor Security Source)]` and click Next.

      k. Complete the wizard using the default values on the remaining pages.

l.   Minimize Enterprise Manager.

Procedure 4: Verify that security inheritance has been applied from the security proxy

Use the following steps to verify that Contract5.doc inherits security from the security proxy document.

1. Run Workplace XT.

   a. Enter the following account information and click *Log in*.

      - User name: `mary` (a member of the Managers group).
      - Password: `IBMFileNetP8`

2. Verify that the new contract is visible to the Managers group because of inherited security from the security proxy.

   a. Browse to Finance > Contracts > New Contracts and verify that Contract5.doc is the only document visible.

      Four other documents are filed in that folder, which the user mary cannot see.

   b. Select Contract5.doc and then click Actions > More Information > Security to open the Security page for the document.

   c. Verify that there is an inherited ACE for the Managers group.

      The inherited ACE is what enables Mary to see the document listed.

   d. Verify that there is no ACE for the QualityAssurance group on the document.

   e. Click Cancel to close the Security page for Contract5.doc.

   f.   Log out of Workplace XT.

Procedure 5: Change the security proxy document security and verify the update to the inheriting document.

Use the following procedure to change the inheritable security on the security proxy and observe the corresponding change to the access rights on Contract5.doc.

1. Remove the access for the Managers group from the security proxy document ACL.

   a. Restore Enterprise Manager.

Note

You are logged in as adam.

   b. Expand Finance > Root folder > Contracts > Security Folder for Contracts.
   c. Select the Contract Auditor Security Source document and then click Action > Properties.

     d. Open the Security tab, select the Managers ACE, and then click Remove.

2. Add access for the QualityAssurance group to the ACL.

     a. Click Add, and then find and add the group QualityAssurance on the *Select Users and Groups* window.

     b. Set the inheritable depth on the ACE for the QualityAssurance group to *This object and all children*.

     c. Click OK to save the security changes.

     d. Close Enterprise Manager.

3. Verify that Managers cannot see the Contract5.doc.

     a. Run Workplace XT.

     b. Enter the following account information and click *Log in*.

- User name: `mary` (a member of the Managers group).
- Password: `IBMFileNetP8`

     c. Verify that you do not see Contract5.doc listed in the Finance > Contracts > New Contracts folder.

     d. Log out of Workplace XT.

4. Verify that Contract5.doc has the new access right that allows the QualityAssurance group to see the document.

     a. Run Workplace XT.

     b. Enter the following account information and click *Log in*.

- User name: `quincy` (a member of the QualityAssurance group).
- Password: `IBMFileNetP8`

     c. Browse to Finance > Contracts > New Contracts and verify that Contract5.doc is listed.

     d. View the Security page for Contract5.doc and verify that there is an inherited ACE for the QualityAssurance group.

     e. Click Cancel to close the Information > Security page for Contract5.doc.

     f.   Log out of Workplace XT.

Procedure 6: Use Workplace XT to add a document with a security proxy

Because you added a custom object-valued property to the Contracts document class that takes a document as a value, users can select a security proxy document from the Add document wizard in Workplace XT. Use the following procedure to add a document that uses the Contract Auditor Security Source document as a security proxy.

1. Use Workplace XT to add a document that uses a security proxy to the New Contracts folder.

    a. Run Workplace XT.

    b. Enter the following account information and click *Log in*.

    - User name: `adam` (a member of the Finance Admins group).
    - Password: `IBMFileNetP8`

    c. Browse to Finance > Contracts > New Contracts.

    d. Add a new Contract document using the data in the following table. Accept the default settings for any values not specified in the table.

    Note that the Inherited Security Source A property value can be specified by the user because it is a document type property.

Property	Value
Local File	*C:\Labs\P8Administration\ SecuringContent\Contract.doc*
Document class	Contract
Major version	Yes
Document Title	Contract7.doc
Inherited Security Source A	Finance > Contracts > Security folder for Contracts > Contract Auditor Security Source
	Click *Select Current Version*
ContractNum	007
ContractDate	*<Use today's date.>*

    Note

    Only folders that the user has View access to can be seen when browsing for the security proxy document.

    e. Log out of Workplace XT.

2. Verify that the new document uses the security proxy document that allows the QualityAssurance group to see the document but does not explicitly allow the Managers group to see it.

    a. Run Workplace XT.

    b. Enter the following account information and click *Log in*.

        • User name: `mary` (a member of the Managers group).
        • Password: `IBMFileNetP8`

    a. Browse to Finance > Contracts > New Contracts and verify that Contract7.doc is **not** listed.

    b. Log out of Workplace XT, then enter the following account information and click *Log in*.

        • User name: `quincy` (a member of the Quality Assurance group).
        • Password: `IBMFileNetP8`

    c. Browse to Finance > Contracts > New Contracts and verify that Contract7.doc is listed.

Note

As you have seen, object properties can be set manually using Enterprise Manager, but the process can be time consuming. It must be done by a user with access to Enterprise Manager and is subject to human error. If the object property is a document, it can be specified through Workplace XT, but entry of the security proxy is also subject to human error.

If your business scenario requires that many documents of a particular class have the same security proxy, you might choose to set the default property value for the security object property on the document class so that all new documents of that class automatically have the object property set. You can set the property to Hidden to prevent users from changing the value later.