

Course Guide

IBM Case Manager: Solution Deployment from Design to Production (V5.3.2)

Course code F2930G ERC 1.0



May 2018

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Course overview

Preface overview

This course is designed to show you how to migrate and deploy Case Manager solutions from development to preproduction and production. Participants use a system with two instances of IBM Case Manager to practice the skills that are required by solution builders and administrators to migrate and deploy solutions from one environment to another.

Intended audience

This course is for administrators, and solution builders who are involved in Case Manager solution deployment from one environment to another.

Topics covered

Topics covered in this course include:

- Solution deployment process overview
- Migrate and deploy basic solutions
- Introduction to FileNet Deployment Manager
- Migrate and deploy advanced solutions

Course prerequisites

Participants should have:

- Experience processing cases in Case Client or F2900 IBM Case Manager Essentials (V5.3.2)
- Experience building solutions with Case Builder or F2910 Build a Case Manager Solution (V5.3.2)
- Experience applying security to solutions or F2920 Case Manager Security (V5.3.2)
- Experience configuring IBM Content Navigator desktops or F270G IBM Content Navigator 2.0.3.6: Introduction

Document conventions

Conventions used in this guide follow Microsoft Windows application standards, where applicable. As well, the following conventions are observed:

- Bold: Bold style is used in demonstration and exercise step-by-step solutions to indicate a user interface element that is actively selected or text that must be typed by the participant.
- Italic: Used to reference book titles.
- CAPITALIZATION: All file names, table names, column names, and folder names appear in this guide exactly as they appear in the application.

 To keep capitalization consistent with this guide, type text exactly as shown.

Exercises

Exercise format

Exercises are designed to allow you to work according to your own pace. Content contained in an exercise is not fully scripted out to provide an additional challenge. Refer back to demonstrations if you need assistance with a particular task. The exercises are structured as follows:

The business question section

This section presents a business-type question followed by a series of tasks. These tasks provide additional information to help guide you through the exercise. Within each task, there may be numbered questions relating to the task. Complete the tasks by using the skills you learned in the unit. If you need more assistance, you can refer to the Task and Results section for more detailed instruction.

The task and results section

This section provides a task based set of instructions that presents the question as a series of numbered tasks to be accomplished. The information in the tasks expands on the business case, providing more details on how to accomplish a task. Screen captures are also provided at the end of some tasks and at the end of the exercise to show the expected results.

Additional training resources

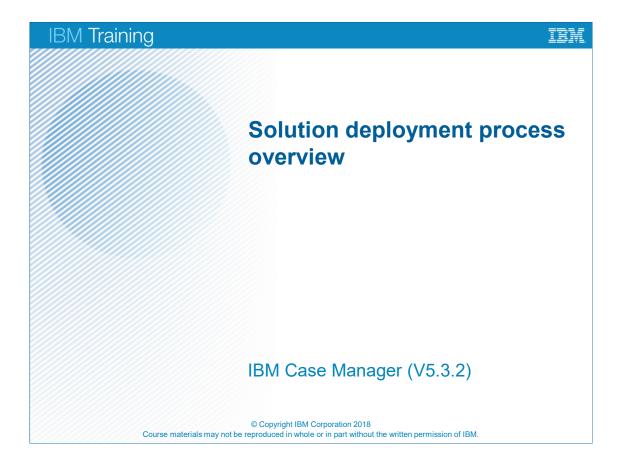
Visit the IBM Skills Gateway (www.ibm.com/training/) for details on:

- Instructor-led training in a classroom or online
- Self-paced training that fits your needs and schedule
- Comprehensive curricula, learning journeys, and training paths that help you identify the courses that are right for you
- IBM Professional Certification Program (http://www-03.ibm.com/certify/)
- For other resources that will enhance your success, bookmark the IBM Analytics Skills Gateway (https://www-03.ibm.com/services/learning/ites.wss/zzen?pageType=page&c=C067650S63836C42)
- For other resources that will enhance your success, bookmark the IBM Cloud Skills Gateway (https://www-03.ibm.com/services/learning/ites.wss/zzen?pageType=page&c=O602980X82373O75)
- Find the IBM Case Manager videos and information in the IBM Case Manager on Cloud Learning Center (http://ibmtvdemo.edgesuite.net/software/ analytics/learning-centers/case-manager-cloud/index.html)

IBM product help

Help type	When to use	Location
Task- oriented	You are working in the product and you need specific task-oriented help.	IBM Product - Help link
Books for Printing (.pdf)	You want to use search engines to find information. You can then print out selected pages, a section, or the whole book.	Start/Programs/IBM Product/Documentation
	Use Step-by-Step online books (.pdf) if you want to know how to complete a task but prefer to read about it in a book.	
	The Step-by-Step online books contain the same information as the online help, but the method of presentation is different.	
IBM on the Web	You want to access any of the following:	
	IBM Skills Gateway	https://www-03.ibm.com/ services/learning/ites.wss/zz- en?pageType=page&c=a0011023
	Online support	https://www.ibm.com/support/ home/
	IBM Web site	http://www.ibm.com

Unit 1 Solution deployment process overview



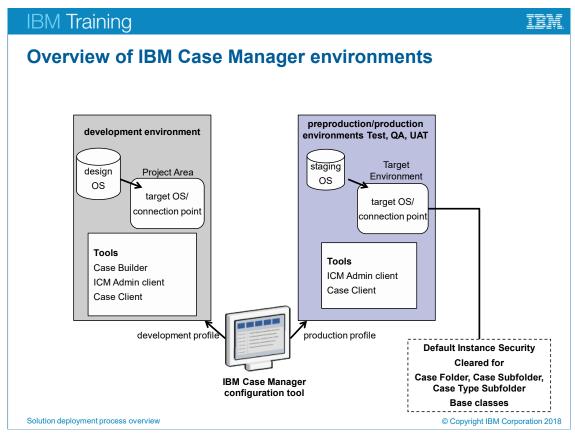
Unit objectives

- Overview of IBM Case Manager environments
- Migrating and deploying basic solutions
- Migrating and deploying advanced solution applications
- What are the phases of solution deployment?

Solution deployment process overview

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Unit objectives



Overview of IBM Case Manager environments

With the IBM Case Manager configuration tool, you can configure two types of environments;

- development
- preproduction/production

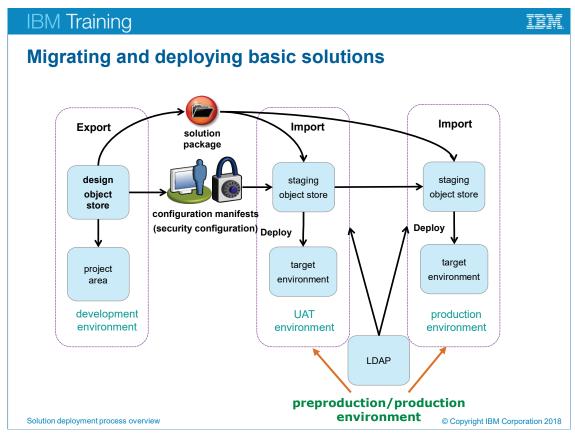
Both types of environments are similar. Both environments contain:

- At least two object stores, one to store the solution definitions and one or more to store the deployed solutions.
- The tools, Case Client, and IBM Case Manager administration client, abbreviated as ICM Admin client in the diagram.

The biggest difference between a development environment and a preproduction/production environment is that the development environment includes the solution design tool, Case Builder. Solution design occurs in the development environment which is why the development environment has a design object store, while preproduction/production has a staging object store. The other main difference is more of a terminology difference. In the development environment you define project areas which are comprised of a target object store and a workflow system connection point. In a preproduction/production environment the term target environment is used, which is also comprised of a target object store and a workflow system connection point.

Examples of preproduction/production environments:

- Test
- Quality Assurance
- User Acceptance Test
- Production



Migrating and deploying basic solutions

This diagram outlines the basic IBM Case Manager solution migration and deployment process.

IBM Case Manager uses a one source approach. The development environment manages the solution definition. All other environments contain migrated versions.

A solution builder designs, develops, and tests an IBM Case Manager solution in a development environment.

When the solution is ready, the solution needs to be migrated to Test, Quality Assurance, or User Acceptance Test environments for further testing, before the solution is ready to migrate to Production. Any changes that are necessary, are made in the development environment, then the changes are migrated to preproduction and eventually to production. This process allows you to develop a repeatable migration process.

The diagram shows two preproduction/production environments, UAT and Production. Ideally both environments are identical and share a common LDAP. In UAT you do production level testing and apply and test the security that is used in Production.

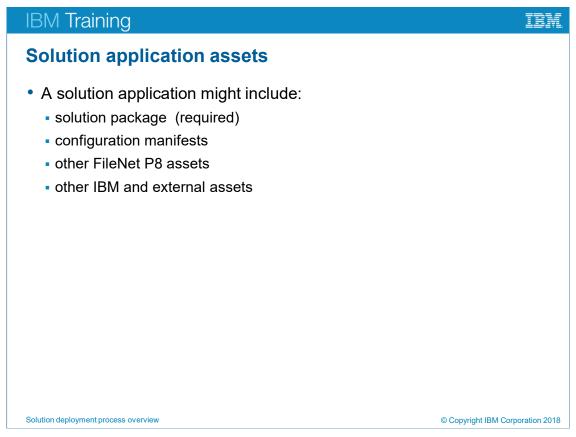
To migrate the solution from development to UAT, you follow these steps:

- 1. Export the solution package from the design object store of the development environment.
- Import the solution package into the staging object store of the UAT environment.
- 3. Deploy the solution to the target environment of the UAT environment.
- 4. Import and apply the security configuration for the UAT environment.
- 5. Test the solution in the UAT environment.

You follow the same steps to migrate a solution from development to Production.

To summarize, the migration path for solutions is Development > UAT, Development > Production. The exception to this migration path is the way security configurations are applied. Initial design occurs in the development environment. Modifications might be made in preproduction environments. The migration path for security configurations might be Dev > UAT > PROD. For example,

- Security in a development environment is usually less tight.
- Preproduction environments usually have their own security. At least one
 preproduction environment should have the same security as production. You
 need to carefully plan how to handle security configuration migration so that by
 the time you migrate to production, you are just repeating a migration that you
 already tested.



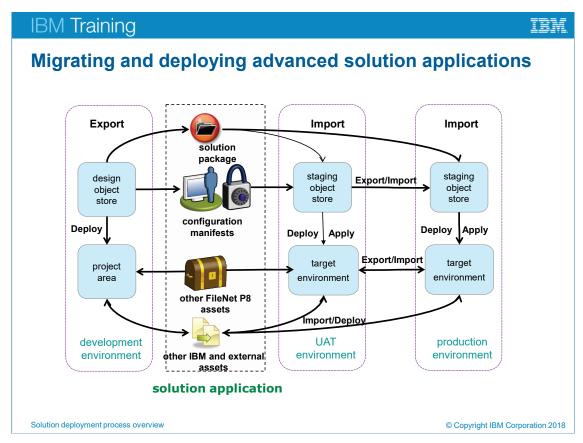
Solution application assets

Solution application is a term used to identify all the pieces of a Case Manager solution, including assets that are not developed in Case Builder. All solution applications must include a solution package at a minimum.

It is not uncommon for a solution package to include other FileNet P8 assets, such as documents, document classes, or property templates, which are stored in a FileNet Content Manager repository or external FileNet workflows that handle business processes.

A solution package might also include other IBM assets, such as IBM Content Navigator desktops or external assets such as a web service.

All of the assets that make up the solution package need to be identified and stored in a folder to facilitate migrating all the solution assets to the necessary environments, like UAT or Production.



Migrating and deploying advanced solution applications

This diagram outlines the migration and deployment process for advanced solutions.

The second rectangle, with dashed lines, represents a solution application. The migration and deployment process is the same for the basic solution assets, solution package and configuration manifests. The migration process differs for the other FileNet P8 assets and the other IBM and external assets, which could be part of an advanced solution application.

For other FileNet P8 assets, you use the FileNet Deployment Manager tool to export and import the assets to the appropriate target environment. Depending on the assets, there might be dependencies. For example, it might be that some FileNet P8 assets must be imported into a target environment before the solution is deployed.

For other IBM and external assets, you use the external tool that supports the asset. For example for an IBM Content Navigator desktop, you would use the IBM Content Navigator administration tool to export and import the asset.

The other FileNet P8 assets and the other IBM and external assets follow more of a traditional migration process. In other words, modifications can be made in other environments besides the development environment and then exported and imported into the next environment. For example, Development > UAT > Production.

What are the phases of solution migration and deployment?

- Preparing for solution migration
- Migrating solutions
- Deploying migrated solutions
- Configuring the target environment after solution deployment
- · Verifying solution deployment

Solution deployment process overview

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What are the phases of solution deployment?

Solution migration and deployment is grouped into five phases. Depending on the complexity of the solution, each phase can include different tasks that must be completed.

For a basic solution, the phases include the following:

- Preparing for solution deployment:
 - Identify and document all the assets that are to be migrated.
 - Create a comprehensive set of migration instructions that are tailored for your environment.
- Migrating solutions:
 - Export the solution.
 - Copy the solution package to the destination environment.
 - Import the solution into the destination environment.
- Deploying migrated solutions:
 - Deploy the solution to the target environment.

- Configuring the target environment after solution deployment
 - Import security configuration.
 - Import auditing configuration.
 - Configure IBM Content Navigator desktops.

Apply your knowledge

Use the questions in this section to test your knowledge of the course material. For each question, indicate the correct answer or the best answer.

Question 1: Which tool is included in a development environment but not a production environment?

- A. Case Client
- B. Case Builder
- C. Case Manager administration client
- D. IBM Content Navigator administration tool

Question 2: What are the order of steps that you follow to move a solution from a development environment to a preproduction environment?

- A. Export the solution from the development environment and deploy the solution to the preproduction environment.
- B. Deploy the solution from the development environment to the preproduction target environment.
- C. Export the solution from the development environment and import the solution into the preproduction environment
- D. Export the solution from the development environment, import the solution into the preproduction environment, and deploy the solution.

Question 3: All of the Case Manager assets in a solution application follow the same migration path where all changes are made in the development environment and then migrated to the target environment (True or False)?

Question 4: Which solution migration and deployment phase includes importing the solution into the destination environment?

- A. Deploying migrated solutions
- B. Migrating solutions
- C. Configuring the target environment
- D. Preparing for solution migration

Question 5: Security configuration manifests can be edited and applied in either a development environment or a preproduction environment (True or False)?

Answers to questions

Answer 1: B. Case Builder

Answer 2: D. Export the solution from the development environment, import the solution into the preproduction environment, and deploy the solution

Answer 3: False

Answer 4: B. Migrating solutions

Answer 5: True

Unit summary

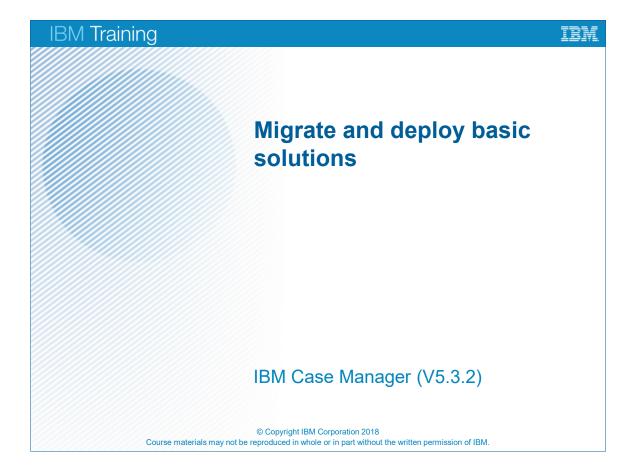
- Overview of IBM Case Manager environments
- · Migrating and deploying basic solutions
- Migrating and deploying advanced solution applications
- What are the phases of solution deployment?

Solution deployment process overview

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Unit summary

Unit 2 Migrate and deploy basic solutions



Unit objectives

- Prepare to migrate and deploy a basic solution
- Migrate a basic solution
- Stage and import a basic solution
- Deploy a migrated basic solution
- Post-deployment configuration
- · Verify the solution deployment

Migrate and deploy basic solutions

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Unit objectives

Preparing to migrate and deploy a basic solution

- Identify the basic solution assets:
 - solution package
 - security configuration manifest
- Plan the migration strategy
 - What environments do you need to migrate to?
 - DEV, Test, UAT, Prod
 - How is Change Control implemented?
- Prepare customized migration and deployment instructions.

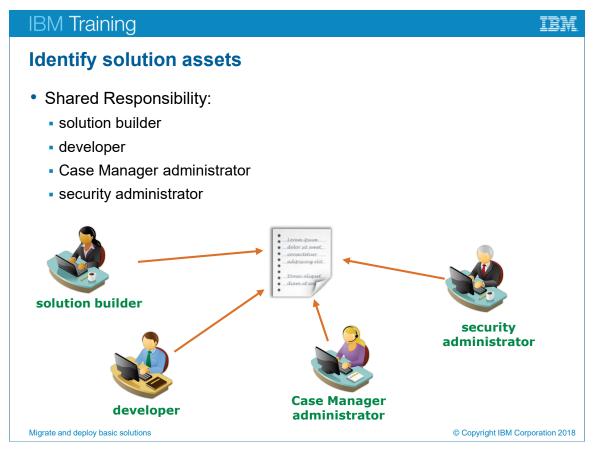
Migrate and deploy basic solutions

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Preparing to migrate and deploy a basic solution

The first phase in migrating and deploying a basic solution is to prepare for the solution migration and deployment. To complete the preparation phase, you must:

- Identify all the solution assets that make up the basic solution. In the case of a
 basic solution, the solution assets will probably consist of the name of the
 solution and any configuration manifests, such as security and auditing.
- Decide what environments you will need to migrate to from the development environment.
- Create detailed migration and deployment instructions that are tailed for your environment.



Identify solution assets

The first step that is required to prepare for solution migration is to identify all the assets that comprise the solution.

This step requires the collaboration of various people:

- solution builder
- developer
- Case Manager administrator
- security administrator

A Case Manager administrator should not have to guess what parts make up a solution.

At a minimum the solution builder/developer should provide documentation that includes:

- A high-level description of the solution and what it does.
- A list of all the assets that make up the solution, including any security configuration manifests and auditing configuration manifests.
- Instructions for how to import and deploy the assets into the destination environment, including roles and security.
- Instructions for how to test the solution after deployment.

Plan the migration strategy • What environments do you need to migrate to? • For example, DEV, Test, UAT, Prod • How will change control be implemented?

Plan the migration strategy

When you plan the migration strategy you need to determine what other environments you will need to migrate and deploy the solution to. Do you need to build the environments or do they already exist. If the environments do not already exist, you must identify the installation and configuration requirements for the environments and plan carefully so that the environments are ready when you are ready to migrate and deploy your solutions.

The different environments will probably have different security needs with different directory servers configured. You should have at least one preproduction environment that mimics your production environment including the security.

You should plan how change control will be implemented. Different assets of the solution might need to be modified at different times and on different systems. For example, during User Acceptance Testing (UAT) you find that changes are required in the solution definition, those changes will need to be made in the development environment with the Case Builder tool. The modified solution will then need to be migrated and deployed again to the various environments defined in the migration plan. Changes to the security configuration manifests are made as needed on each environment.

Migrate a basic solution

- The tasks for migrating a basic solution are:
 - Export the solution and security configuration from the source environment.
 - Stage the exported solution on the destination environment.
 - Import the solution package into the design/staging object store of the destination environment.

Migrate and deploy basic solutions

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Migrate a basic solution

Phase 2 of solution deployment is migrating a basic solution.

Export a basic solution Use the IBM Case Manager administration client to: export a solution. export a security configuration. export an auditing configuration.

Export a basic solution

When you export a solution, the solution definition is saved as a solution package. The solution package is a compressed file that contains all the solution assets that are defined with Case Builder.

When you export a security configuration, the security configuration is saved as a security manifest compressed file.

When you export an auditing configuration, the auditing configuration is saved as an auditing manifest compressed file.

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Stage and import a basic solution Stage the solution assets in the destination environment. Use the IBM Case Manager administration client to: import the solution package to the appropriate object store.

Stage and import a basic solution

Migrate and deploy basic solutions

When you stage the solution assets in the destination environment you copy them to a folder that can be accessed by the Case Manager administration client of the destination environment.

Prepare your environment

Start IBM Case Manager components

The environment that is provided with this course requires that you start the IBM WebSphere Application servers that host the IBM Case Manager components. The WebSphere Admin folder, found on the desktop, includes the scripts that you need to run to start the components.

Application server name	Components hosted	
server1	Content Platform Engine 5.5.0	
ICNserver	IBM Case Manager development environment:	
	IBM Content Navigator (ICN)	
	IBM Case Manager (ICM)	
UATserver	IBM Case Manager UAT environment:	
	• 2 nd instance of ICN	
	• 2 nd instance of ICM	

If you just started the image, make sure that the WebSphere deployment manager and node agent are running.

- 1. From the Windows system tray, open the Windows Services console.
- 2. Verify that the following services are running:
 - IBM WebSphere Application Server V9.0 Dmgr01
 - IBM WebSphere Application Server V9.0 Node01

If the status is not Running, wait until the services finish starting. Do not start the components until both services are running. Minimize the Windows Services console.

To start the IBM Case Manager components, complete the following steps:

- 3. On the desktop, open the **WebSphere Admin** folder.
- 4. Right-click **_1 Start server1.bat**, and then select **Run as administrator**. Wait for the command window to close.
- 5. Right-click **_2 Start ICNserver.bat**, and then select **Run as administrator**. Wait for the command window to close.

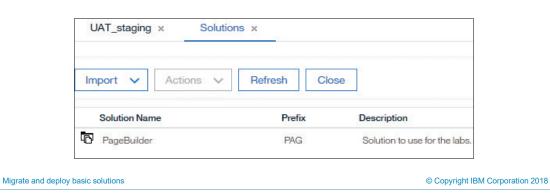
- 6. Verify that the IBM Case Manager development environment is operational.
 - Open a Mozilla Firefox browser window.
 - On the Course Portal Links page, under System Health, click Case Manager Ping.
 - Log in as p8admin/FileNet1.
 - The **IBM Case Manager Context (Ping Page)** is displayed. You see a two-column table with information like: Product name, Case Management Build, and Operating System.
 - Close the browser window.
- 7. To start the IBM Case Manager UAT environment, maximize the Windows Services console and start the IBM WebSphere Application Server V9.0 UATNode01 service:

Wait until the service starts. Wait another minute after the service starts. It can take the application server a few minutes to completely start.

- 8. Verify that the IBM Case Manager UAT environment is operational.
 - Open a Mozilla Firefox browser window.
 - On the Course Portal Links page, under IBM Case Manager UAT environment, click UAT Case Manager Ping.
 - Log in as p8admin/FileNet1.
 - The IBM Case Manager Context (Ping Page) is displayed, with URL http://vclassbase:9082/CaseManager_UAT/CASEREST/v1/info.
 - Close the browser window.

Demonstration 1: Migrate a basic solution

- Use the IBM Case Manager administration client to export the PageBuilder solution.
- Use the IBM Case Manager administration client to export the security configuration.
- Stage the PageBuilder solution package on the UAT environment.
- Use the IBM Case Manager administration client to import the PageBuilder solution into UAT.



Demonstration 1: Migrate a basic solution

Demonstration 1: Migrate a basic solution

Purpose:

You are a Case Manager administrator who is responsible for migrating and deploying solutions to other Case Manager environments. You need to migrate and deploy the PageBuilder solution from development to UAT. The second phase in the solution deployment process is Migrate, which includes exporting and importing the solution.

IBM Case Manager administration client
Case Admin Course Product Link
URL: http://vclassbase:9081/navigator/?desktop=icmadmin

Before you do the demonstrations in this course, you need to ensure that the IBM Case Manager components are started on the image. To start the components, follow the steps in the **Prepare your environment** section.

Task 1. Export a basic solution.

- To open IBM Case Manager administration client for the development environment, complete the following steps:
 - Open a Mozilla Firefox window.
 - In the **Course Product Links**, under IBM Case Manager development environment, click **Case Admin**.
- 2. Login as **p8admin/FileNet1**.
- 3. On the left, expand **Object Stores > DEV_design**.
- 4. Click **Solutions**.
- 5. Select PageBuilder and then click Actions > Export > Solution.
- 6. In the window that displays, accept the default name for the **solution package filename**.
- Click Next.
- 8. Click Finish.
- 9. When the export completes, click **Download and Close**, then select **Save File**, and then click **OK**.
 - Firefox is configured to download files to the **Downloads** folder.
- 10. Use Windows Explorer to open **This PC\Downloads** folder and verify that the **PageBuilder_solution.zip** file was created.

Task 2. Export the security configuration.

- 1. Switch back to IBM Case Manager administration client.
- Make sure that PageBuilder is selected, then click Actions > Export > Security Configuration.
- 3. Under **Available configurations**, select **PageBuilder_Security**, and then click **Finish**.
- 4. When the export completes, click **Download and Close**, then select **Save File**, and then click **OK**.
- 5. Use Windows Explorer to open **This PC\Downloads** and verify that the **PageBuilder_securityManifest.zip** file was created.
- 6. Log out of IBM Case Manager administration client and close the browser window.

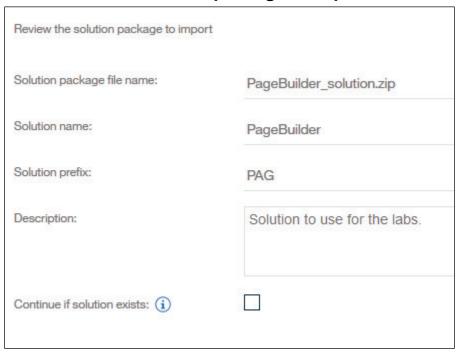
Task 3. Stage and import a basic solution into UAT.

To stage the solution assets, you need to copy them to the destination system that hosts the Case Manager UAT environment. In this image, since both environments exist on the same system, no copy is necessary, the UAT environment can access the exported solution assets from the location that they were exported to.

- 1. Open the IBM Case Manager administration client.
- 2. Login as p8admin/FileNet1.
- 3. Navigate to **Object Stores > UAT_staging**.
- 4. Click Solutions.
- 5. On the right, click Import > Import Solution > From Solution Package.
- 6. Click **Browse**, and browse to the **Downloads** folder, and then select **PageBuilder_solution.zip**.

7. Click **Open**, and then click **Next**.

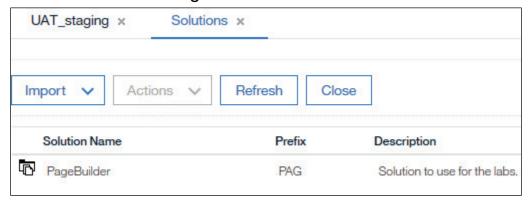
The Review the solution package to import window displays,



If **Continue if solution exists** option is selected, you can overwrite an existing solution.

- 8. Click Next.
- 9. In the **Map object stores** window, make sure that **Target Name** is set to **UAT_staging**.
- 10. Click Finish.

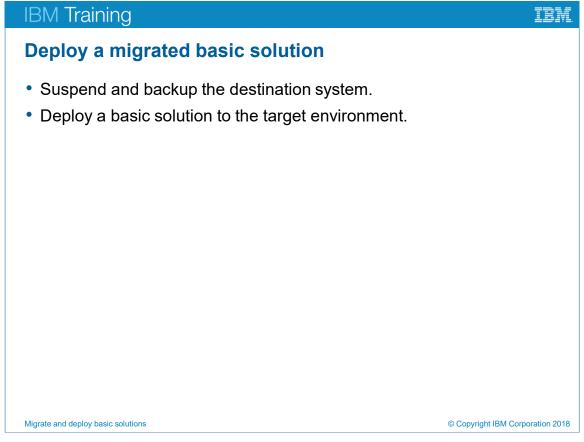
11. Ensure that the solution imports successfully, and then click **Close**. You should see the PageBuilder solution listed as shown below.



12. Leave IBM Case Manager administration client open for the next demonstration.

Results:

As the Case Manager administrator you exported the basic solution, PageBuilder, and its security configuration from the IBM Case Manager development environment and imported the PageBuilder solution into the UAT environment.



Deploy a migrated basic solution

Before any system modification, it is prudent to back-up the portions of the system impacted by the changes. Backing up the system is outside of the scope of this course.

After the solution package is imported, you must deploy the solution to the target environment. Deploying the solution creates a runnable instance, of the solution definition, in the target environment.

In a preproduction/production environment, you use the IBM Case Manager administration client to deploy the solution to the target environment. In a development environment, you use Case Builder to deploy the solution to the target project area.

Demonstration 2: Deploy a basic solution to UAT

- Use the IBM Case Manager administration client to deploy the PageBuilder solution.
- The PageBuilder.log file ends with:

FNRPA0108I The PageBuilder solution was deployed.

Migrate and deploy basic solutions

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Demonstration 2: Deploy a basic solution to UAT

Demonstration 2: Deploy a basic solution to UAT

Purpose:

You are a Case Manager administrator who is responsible for migrating and deploying solutions to other Case Manager environments. You need to migrate and deploy the PageBuilder solution from development to UAT. The third phase in the solution deployment process is Deploy, which includes deploying the solution to the UAT target environment.

- 1. Navigate to **Object Stores > UAT_staging >Solutions**.
- 2. Select PageBuilder.
- 3. Click **Actions > Deploy**.
 - For the Target environment name, select UAT_target_env.
 - Click Finish.

Wait until you see, **Solution deployed successfully**. The solution deployment takes about 1 minute.

4. Click View Log, click Save File and then click OK.

The file is saved to the Downloads folder.

- 5. Using Windows Explorer, open the **PageBuilder.log** file using Notepad++.
- 6. Review the log. At the end of the log, you should see, **The PageBuilder** solution was deployed.
- 7. Close the log file.
- 8. In IBM Case Manager administration client, on the open tab, click Close.
- 9. Log out of the IBM Case Manager administration client and close the browser window.

Results:

As the Case Manager administrator you deployed the PageBuilder solution to the UAT target environment.

Configure the target environment

- Post-deployment configuration steps might be required.
- For example:
 - import, edit, and apply the security configuration.
 - import, edit, and apply the audit configuration.
 - configure server-level tasks, such as:
 - setup up printers that might be used by case workers.
 - create file system folders used by custom widgets called by the solution.
 - install additional software components integrated with the solution, such as an eMail server, or IBM Operational Decision Manager.

Migrate and deploy basic solutions

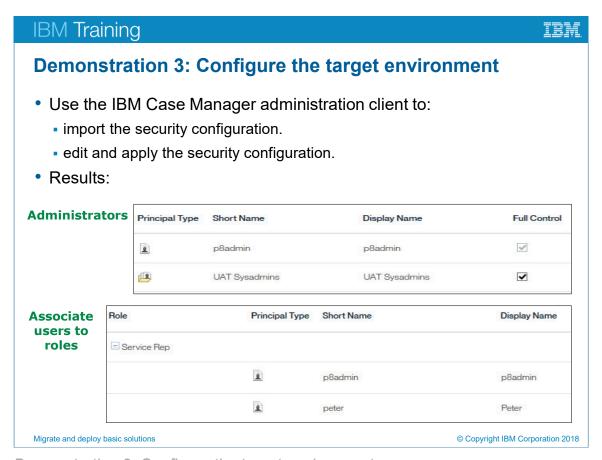
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Configure the target environment

When a solution is deployed to a system for the first time, steps beyond those outlined in the phases, migrate and deploy, may be required to configure it in the new environment. When a solution is redeployed, system configuration information may be overwritten during the redeployment process and may need re-specification. However most configuration steps should not need repeating.

Some of this configuration is performed directly on the server that hosts the destination environment using system tools. The solution deployment instructions documentation created in the prepare phase should include what additional configuration is needed when a solution is first deployed or subsequently redeployed.

The security configuration is optional but generally a good practice to define in the development environment. The roles and privileges generally remain the same as the solution is migrated between environments. The users and groups that are assigned to the roles is what differs between environments. A security configuration manifest facilitates assigning the correct users and groups to the defined roles and privileges for the solution.



Demonstration 3: Configure the target environment

Demonstration 3: Configure the destination target environment

Purpose:

You are a Case Manager administrator who is responsible for migrating and deploying solutions to other Case Manager environments. You have migrated and deployed a basic solution from development to UAT. You have post-deployment configuration steps that you must complete for the solution to be fully operational.

Task 1. Stage and import the security configuration into UAT.

The security configuration manifest file is already accessible to the IBM Case Manager administration client for the UAT environment, therefore you do not need to stage it.

- Open IBM Case Manager administration client, and log on as P8admin/FileNet1.
- 2. Navigate to **UAT_staging > Solutions**.
- 3. Select the **PageBuilder** solution.
- 4. Click Import > Import Security Configuration.
- 5. Browse to the **PageBuilder_securityManifest.zip**, that you exported to the Downloads folder, and then click **Open**.
- Click Next.
- Click Finish.
- 8. Ensure that the security configuration imports successfully, and then click **Close**.
- 9. To verify the security configuration import, follow these steps:
 - Click Actions > Manage > Security Configuration.
 - Select Edit a security configuration.
 - You should see **PageBuilder_Security** listed.

Task 2. Edit and apply the security configuration.

- 1. Select the **PageBuilder_Security** security configuration, and then click **Next**. You can change the target environment, but leave it as UAT_target_env.
- Click Next.
 - At the Modify permissions for roles window, you can change what permissions the roles have or add more roles.
- 3. Review the permissions and when you are finished click **Next**.
- 4. At the **Define the administrators and assign privileges** window, click **Add**.
- 5. Select to search for **Groups**, type **UAT** and then click the **search** icon.
- 6. Move **UAT Sysadmins** to **Selected**, and then click **Add**.
- 7. Remove **p8admins**.
- 8. Click Next.
- 9. On the **Associate users and groups with roles** window, remove the current groups from the **Service Rep** role and add **Peter**.
 - The UAT target environment has a different group of users that have access to the object stores. Therefore you need to assign a user that is already configured to have the proper access to the object stores. The solution deployment instructions documentation should include which users and groups to configure.
- 10. Add **p8admin**.
- 11. Click Next.
- 12. On the **Apply the security configuration** window, select **Apply the security configuration**.
- 13. Click **Save**, and then click **Apply**.
- 14. Wait for the successful message, then click **Close**.
- 15. Log out of the IBM Case Manager administration client.
- 16. Close the browser window.

Results:

As the Case Manager administrator, you completed post-deployment steps. You imported the security configuration, edited it and applied the updated security configuration to the deployed PageBuilder solution in the UAT environment.

Verify the solution deployment

- Verify that the deployed solution is working correctly.
- Tests are specific to the solution and vary depending on the features of the solution.
- The deployment instructions documentation should include a plan for verifying the deployed solution.

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Verify the solution deployment

Verifying the deployed solution is the final phase of solution deployment. An administrator should not have to figure out how to test a solution, the detailed instructions for how to verify the solution should be provided by the solution builder as part of the solution deployment instructions documentation.

Verifying a deployed solution will likely involve using the Case Client to:

- Add a case.
- Open and complete a work item from an in-basket.
- Repeat tests using different user accounts that belong to different roles to confirm that the assigned permissions reflect the expected behavior for the roles.

Demonstration 4: Verify the solution deployment

- Use the Case Client to verify the deployed solution.
 - Test that the user Peter is assigned to the Service Rep role.
 - Add a case of type Service Claim and complete the Fill Out Form work item.

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Demonstration 4: Verify the solution deployment

Demonstration 4: Verify the solution deployment

Purpose:

You are a Case Manager administrator who is responsible for migrating and deploying solutions to other Case Manager environments. You have migrated and deployed the PageBuilder solution from development to the UAT. You need to verify the solution deployment, which is the final phase of solution deployment.

IBM Case Manager for UAT **UAT Case Client** Course Product Link URL: http://vclassbase:9082/UAT ICN/?desktop=icm

- From the Course Product Links, under IBM Case Manager UAT environment, click UAT Case Client and then log on as Peter/FileNet1.
 You should be in the PageBuilder solution, logged in as the Service Rep.
- 2. Add a case of type **Service Claim**.
- 3. Enter any values for **Age** and **Customer name**, and then click **Add**.
- 4. Click the **Work** tab.
- 5. You should see one work item with Fill Out Form as the step name.
- 6. Open the work item.
- 7. Click **Complete** to complete the case.
- 8. Log out of the UAT Case Client and close the browser window.

Results:

As the Case Manager administrator, you verified the PageBuilder solution after migrating and deploying the solution to the UAT environment.

Unit summary

- Prepare to migrate and deploy a basic solution
- Migrate a basic solution
- Stage and import a basic solution
- Deploy a migrated basic solution
- Post-deployment configuration
- Verify the solution deployment

Migrate and deploy basic solutions

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Unit summary

Exercise 1: Migrate and deploy the Credit Card Dispute solution from development to UAT

- Export the Credit Card Dispute solution from development.
- Export the security configuration of the Credit Card Dispute solution from development.
- Import the Credit Card Dispute solution into UAT.
- Deploy the Credit Card Dispute solution in UAT.
- Import the security configuration for the Credit Card Dispute solution in UAT and edit and apply the security following the deployment instructions.
- Verify the Credit Card Dispute solution in UAT.

Migrate and deploy basic solutions

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Exercise 1: Migrate and deploy the Credit Card Dispute solution from development to UAT

Exercise 1:

Migrate and deploy the Credit Card Dispute solution from development to UAT

The Solution Builder has completed developing and testing the Credit Card Dispute solution. The Solution Builder has provided the deployment instructions and has requested that you migrate and deploy the Credit Card Dispute solution to the UAT environment.

Credit Card Dispute Solution deployment instructions: C:\Training\F2930\Credit Card Dispute Solution deployment instructions.pdf

User ID\Password: p8admin/FileNet1

List of tasks that you must complete:

- Export the Credit Card Dispute solution from development.
- Export the security configuration of the Credit Card Dispute solution from development.
- Import the Credit Card Dispute solution into UAT.
- Deploy the Credit Card Dispute solution in UAT.
- Import the security configuration for the Credit Card Dispute solution in UAT and edit and apply the security following the deployment instructions
- Verify the Credit Card Dispute solution in UAT.

For more information about where to work and the exercise results, refer to the Tasks and Results section that follows. If you need more information to complete a task, refer to earlier demonstrations for detailed steps.

Exercise 1: Tasks and results

Task 1. Export the Credit Card Dispute.

- Log on to the IBM Case Manager Client as p8admin/FileNet1 to export the Credit Card Dispute solution from DEV_design.
- Save and download the solution package.

Task 2. Export the security configuration of the Credit Card Dispute solution.

- Use the IBM Case Manager Client to export the security configuration of the Credit Card Dispute solution from DEV_design.
- Save and download the solution package.

Task 3. Stage and import the Credit Card Dispute solution.

- You can skip the staging step. Since both environments are on the same system, there is no need to copy the solution assets.
- Import the Credit Card Dispute solution into the UAT staging object store.

Task 4. Deploy the Credit Card Dispute solution.

• Use the IBM Case Manager Client to deploy the Credit Card Dispute solution to UAT target env.

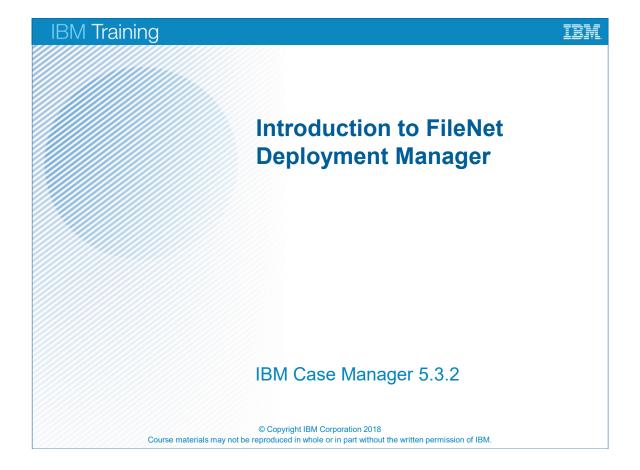
Task 5. Configure the target environment.

- Use the IBM Case Manager administration client to import the security configuration for the Credit Card Dispute solution on UAT_staging.
 If you get an error that your session expired, close the browser window. Open a new window and open IBM Case Manager administration client.
- Edit and apply the security configuration.
 - Use the security mapping included in the Credit Card Dispute Solution deployment instructions.pdf which is located in the C:\Training\F2930 folder.

Task 6. Verify the solution on the UAT environment.

- Using the UAT Case Client and the following the steps included in the deployment instructions, verify the solution.
- Make sure that you are the Customer Service Representative for the Credit Card Dispute solution.

Unit 3 Introduction to FileNet Deployment Manager



Unit 3	Introduction	for FileNet De	ployment Manager
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Unit objectives

- What is FileNet Deployment Manager?
- FileNet Deployment Manager basics
- Deploying assets with FileNet Deployment Manager

Introduction to FileNet Deployment Manager

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Unit objectives

What is FileNet Deployment Manager?

- FileNet Deployment Manager is:
 - used to migrate and deploy FileNet P8 assets between environments.
 - an IBM FileNet Content Manager thick client tool.
- FileNet Deployment Manager can:
 - export/import FileNet P8 assets from one environment to another and maintain security.
 - map assets between object stores.

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What is FileNet Deployment Manager?

FileNet Deployment Manager facilitates migrating and deploying FileNet P8 assets from one environment to another.

FileNet P8 assets are objects like class definitions, property templates, choice lists, FileNet workflow definitions, FileNet workflow configurations, and so on.

FileNet Deployment Manager basics

- FileNet Deployment Manager stores its information in a deployment tree.
- The deployment tree contains two nodes:
 - Environments
 - Source-Destination Pairs

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FileNet Deployment Manager basics

The deployment tree is a windows directory structure that can be viewed with FileNet Deployment Manager or Windows Explorer.

You can use the same deployment tree for all deployments or create distinct deployment trees for different groups of environments. You can delete a deployment tree if the configuration data it contains is no longer needed. You can copy folders from within a deployment tree to another, as long as you do not change the folder structure.

Environments

- Create environments under the Environments node.
- Each environment defines the:
 - connection to the Content Platform Engine
 - half maps
 - export manifests

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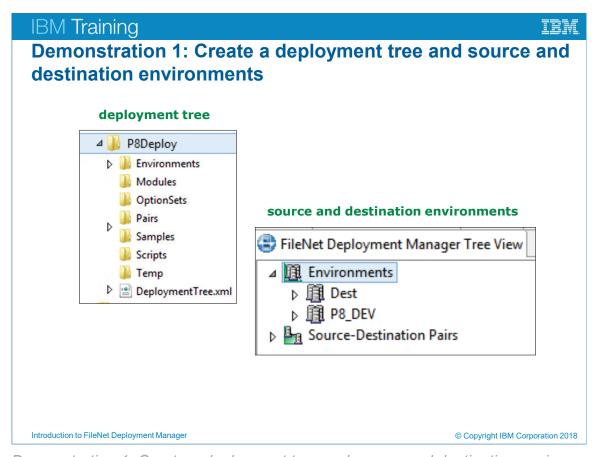
Environments

At a minimum you create two environments, a source and destination environment. However, a deployment tree can contain many environments.

An environment can be a source environment in one deployment and a destination environment in another. For example, imagine that you are deploying FileNet P8 assets from development to Testing, then later you deploy the assets from Testing to UAT.

For more information, see the IBM Knowledge Center.

(FileNet P8 Platform 5.5.0 > Migrating and deploying applications > Deploying assets with FileNet Deployment Manager > Defining the deployment environment)



Demonstration 1: Create a deployment tree and source and destination environments

Demonstration 1: Create a deployment tree and source and destination environments

Purpose:

You are a solution builder responsible for designing and packaging Case Manager solutions. You designed a Case Manager solution that needs FileNet P8 assets. You need to use FileNet Deployment Manager to package the FileNet P8 assets so that you can provide them to an administrator to migrate and deploy to the UAT environment.

Task 1. Create a deployment tree.

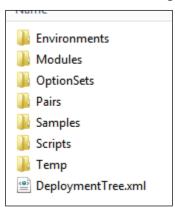
Open FileNet Deployment Manager by clicking the desktop icon,



It takes a few seconds for the tool to open.

- For the Deployment Tree type, C:\F2930\P8Deploy, and then click OK.
 The Welcome screen displays,
- Click Close Welcome.
- 4. If you get a security warning, click Yes.
 The IBM FileNet Deployment Manager tool opens. You see the deployment tree path on the top of the window and the nodes Environments and Source-Destination pairs on the left navigation pane.
- 5. To change the preferences to enable saving passwords, complete the following steps:
 - Click Window > Preferences.
 - Clear Enable FIPS 140-ready mode, and then click OK.

- 6. Complete the following steps to explore the directory structure that is created:
 - In Windows Explorer go to the deployment tree path that you created, C:\F2930\P8Deploy.
 - You see the following directory structure,



All the folders are empty. They will get populated as operations are completed in IBM FileNet Deployment Manager.

Minimize the Explorer window.

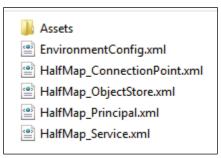
Task 2. Create source environment.

- 1. Right-click the **Environments** node and select **New > Environment**.
- 2. For the name type, **P8_DEV**, and then click **Finish**.
- 3. Expand the **P8_DEV** node.



4. Maximize the Explorer window for P8Deploy.

5. Drill down the **Environments** folder and the **P8_DEV** folder.

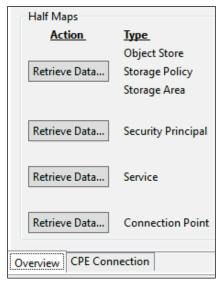


The Assets folder contains the ExportManifests folder and the data that you exported. The HalfMap files correspond to the 4 sub-nodes listed in the navigation pain. One HalfMap file for each sub-node.

- 6. Switch back to FileNet Deployment Manager and double-click the **P8_DEV** node to open it.
- 7. The environment opens to the **CPE Connection** tab. Use the following data to complete the CPE Connection screen:
 - Server: vclassbase
 - Username: **p8admin**
 - Select, Save the password.
 - Password: FileNet1
- 8. Click File > Save.
- 9. Click **Test Connection**.

If you don't see the **Test Connection** button, enlarge the window. If you get a connection failure, verify the values you entered and test the connection again.

10. Switch to the **Overview** tab.



The Overview page is used to create the half maps for the environment.

Task 3. Create the destination environment.

- 1. Create a new environment, for the name type **Dest**.
- 2. Use the same connection information that you used in Task 2, Step 7.



In Windows Explorer, explore the folders that are created.
 Leave FileNet Deployment Manager open for the next demonstration.

Results:

As the solution builder, you used FileNet Deployment Manager to create a deployment tree and the source and destination environments.

The purpose of half maps

- Half maps contain configuration information for a specific environment.
- Four types of half maps can be created to store the following data:
 - object store data
 - security principal data
 - service data
 - connection point data
 - Each environment contains its own sets of half maps.

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The purpose of half maps

To migrate and deploy FileNet P8 assets, you create half maps for a source and destination environment.

FileNet Deployment Manager uses the source and destination half maps to create conversion data maps to prepare the data for import into a destination environment. For example, you are migrating a Loan document class from Environment A to Environment B. The half map for Environment A, has the Loan document class stored in object store A. The half map for Environment B contains object store B. The data map will show the Loan document class with source object store A and destination object store B.

The purpose of export manifests

- The export manifest lists the FileNet P8 assets that you want to export.
- You can export assets from:
 - an object store (FileNet P8 metadata)
 - a workflow system (FileNet process workflows and configurations)
- FileNet Deployment Manager provides:
 - a browse feature to select assets for export.
 - an export manifest viewer.
- When you run the export operation, FileNet Deployment Manager uses the information in the export manifest and the include options set to create a deploy data set.

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The purpose of export manifests

You create the export manifest, and then you add assets to it. You can add and delete assets at any time. The export manifest is stored in xml form.

The name you give the export manifest will be the name of the xml file. The xml file is stored in the ExportManifests folder that is contained in the Assets folder of an environment.

The browse feature mimics browsing in the Administration Console for Content Platform Engine.

The export manifest viewer displays the assets in a spreadsheet that includes the following columns:

- Name: The display name of the asset.
- Category: The type of asset (ChoiceList, Document, Folder, or other assets).
- Object Store: The object store to which the asset belongs.
- ID: The object ID (GUID) of the asset.
- Include Options:

For more information, see the IBM Knowledge Center.

(FileNet P8 Platform 5.5.0 > Migrating and deploying applications > Deploying assets with FileNet Deployment Manager > Creating or updating an export manifest)

Include options for export manifests

- The include options control what associated assets to include in the export.
- Use the include options to include some, all, or none of the associated objects, that an asset depends on, in the export.
- The include options can have a cascading effect on the number of assets that are exported.
- Carefully consider what include options to use, these depend totally on the types of assets being exported.

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Include options for export manifests

For example, you have folder A that contains 3 documents and a subfolder. You want to export the folder and the 3 documents but not the subfolder. You can add folder A to the export manifest. In the include options under Folders and Contained Objects, you would set the include options as follows:

Include option	Set?	Comments
Include subfolder	No	If you set the option the subfolder would also be exported.
Include contents of folders	Yes	You want to export the 3 documents that are in folder A.
Include relationships to containing folders	Yes	You need to export the relationship between folder A and the 3 documents.
Include parent folders	No	You seldom export parent folders because this could propagate up to the default system folders, which already exist.

It is usually safe to start with the default import options. Focus on the section that applies to the type of asset that you are exporting and clear/set the options to obtain the desired results. When you run the export operation, it is important to review the deployment.log file and make sure that only the assets that you want are exported.

For more information about the include options and how they affect the export of objects, see the IBM Knowledge Center.

(FileNet P8 Platform 5.5.0 > Migrating and deploying applications > Deploying assets with FileNet Deployment Manager > Prepare data for deployment > Preparing the source environment > Creating or updating an export manifest > Adding assets to an export manifest by browsing > Specifying the include options of an asset.)

Verifying the export operation

- FileNet Deployment Manager creates a folder for each operation that it runs.
 - <deployment tree>\Temp\Run.<timestamp>
- The Run folder contains the:
 - deployment.log contains details of the operation that was run.
 - deploymentOperation.xml the script that runs the operation.

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Verifying the export operation

It is a good idea to review the deployment.log file when you run operations like export, convert or import. You might want to copy the deployment.log file to another folder to keep track of the key operations. Consider renaming the file so that the name reflects the operation that was run.

The deploymentOperation.xml file can be used in the FileNet Deployment Manager command line interface to script the deployment process. To distinguish the operations, you might want to copy and rename the xml file to clearly identify the operation.

What is a Deploy Package?

- A Deploy Package is a compressed file of deployable assets.
- Use FileNet Deployment Manager to create a Deploy Package.
- A Deploy Package contains:
 - source environment configuration information.
 - the source environments half maps.
 - a deploy data set with exported FileNet P8 assets.
- A Deploy Package can be:
 - checked in a change control system.
 - used by FileNet Deployment Manager to migrate the assets into a different environment.

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What is a Deploy Package?

A Deploy Package facilitates migrating FileNet P8 asset when you are using FileNet Deployment Manager in disconnected mode, where the source environment does not have network connectivity to the destination environment. If you are running FileNet Deployment manager in connected mode, you are not required to create a Deploy Package.

A Deploy Package does not include the export manifest that was used to export the assets. If you are creating a Deploy Package, it is a good idea to also provide the ExportManifests folder for the source environment. Providing this information will make it easier to identify what objects were exported.

Demonstration 2: Export FileNet P8 assets

- · Create an export manifest.
- · Add assets to the export manifest.
- Export the assets to a deploy data set.
- Retrieve data half maps.
- Create a Deploy Package

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Demonstration 2: Export FileNet P8 assets

Demonstration 2: Export FileNet P8 assets

Purpose:

You are a solution builder responsible for designing and packaging Case Manager solutions. You designed a Case Manager solution that needs FileNet P8 assets. You need to create a deploy package and provide it to an administrator to migrate and deploy to the UAT environment. The Deploy Package should include the source environment configuration and exported FileNet P8 assets.

Task 1. Create an export manifest.

- In FileNet Deployment Manager, select the P8_DEV environment, expand the node if it is not already expanded.
- Right-click Export Manifests and select New > Export manifest.
- 3. For the name type, **P8_assets**.
- Click Finish.

Task 2. Add assets to the export manifest.

- Double-click the export manifest that you created, P8_assets.xml to open it.
 A spreadsheet like page opens, with columns.
- 2. Click the green cross , in the upper menu bar, to add assets to the spreadsheet.
 - The Add Assets window opens. The navigation in this window is very similar to navigating in the Administration Console for Content Platform Engine.
- 3. Expand the **Object Stores** node.
- 4. Expand **DEV_target**.
 - The FileNet P8 assets are stored in the target object store, not the design or staging object store.
- 5. To add a couple of property templates and a folder, complete the following steps.
 - Expand the **Data Design** node, and select the **Property Templates** node.
 - On the right, select Age, and Customer Since.
 You can use the ctrl key to select multiple assets.
 - Click Add at the bottom.
 - On the left, click **Browse > Root Folder**.

- On the right, select **Samples**, then click **Add**.
- Click Close.

Configure the include options.

6. Right-click **Samples** and select **Include Options**.

Since the asset is a folder, you want to focus on the Folders and Contained Objects section. Depending on the options selected, different assets will be included when they are exported.

7. Clear the **Include parent folders** option, since the Root Folder already exists in the destination environment.

The contents of the folder will be exported along with the folder.

- 8. Click OK.
- 9. Right-click **Age** and select **Include Options**.
- 10. Review the default include options under **Data Design**.

For the property templates, you focus on the Data Design include options. Generally the default values will be what you need. Include options that do not apply to an asset category are ignored. It is very common to add a document class, then in the Data Design include options, you select Include property templates on classes. During the export the document class and all the property templates that it uses would be exported.

- 11. Click Cancel.
- 12. Click File > Save.
- 13. Close the P8_assets.xml tab.

Task 3. Export the assets to a deploy data set.

- On the left, right-click the P8_assets.xml export manifest and select Export.
 It is OK to accept the default values, make a note of the Output Folder for Deploy Data Sets and the Deploy Data Set Name.
- 2. Click **OK**.

You should see 5 items processed.

- Click OK.
- 4. To verify the export operation, maximize the Windows Explorer window that is open to the deployment tree, **C:\F2930\P8Deploy**.
- 5. Browse to the folder **Temp**, then open the **Run. Run. Run.**<
- 6. Open the **deployment.log** file in Notepad++.

7. Scroll to the bottom and explore the items that were exported.

```
Exported 1 item(s) of type PropertyTemplateInteger32
Exported 1 item(s) of type PropertyTemplateDateTime
Exported 1 item(s) of type DynamicReferentialContainmentRelationship
Exported 1 item(s) of type Folder
Exported 1 item(s) of type Document
An export run has completed; status: SUCCESS, objects processed 5 failures 0
t - Export status:SUCCESS
```

The first two are for the **Age** and **Customer Since** property definitions. The last three are for the **Samples** folder. If you review the Include Options for the Samples folder asset, the **include contents of folders** and **include relationship to containing folders** include options, caused the **DynamicReferentialContainmentRelationship** and the **Document** assets to be exported. It is a good practice to always verify the deployment.log file after an export operation to ensure that the assets that are exported are what you expect.

8. Explore the **ExportManifests** folder in the deployment tree for the **P8_DEV** environment with Windows Explorer. What file was added to the **ExportManifests** folder?

The answer to the question is in the Results section at the end of the demonstration.

9. Explore the deployment tree. Browse to the **P8_DEV** environment\Assets\P8 assets.

The P8_assets folder and its contents were generated during the export operation. The P8_assets folder is the Deploy Data Set that was created during the export.

Task 4. Retrieve data half maps for the source environment.

- 1. Make sure that you have the **P8_DEV** environment open to the **Overview** tab.
- 2. Click the **Retrieve Data** button for the **Object Store**.
- 3. Accept the default setting, **Deploy Data Set File**, and then click **Next**. If you choose Deploy Data Set file, then only the object stores that are referenced in the exported assets are retrieved. If you choose From Content Platform Engine, then all the object stores that are defined in the Content Platform Engine are retrieved.
- 4. On the next window, the **Deploy Data Set** is automatically populated for you and is usually correct. There are other options that can be selected.
- 5. Leave the default values and then click **Finish**.

6. Click **OK**.

For more information see the IBM Knowledge Center.

(FileNet P8 Platform 5.5.0 > Migrating and deploying applications > Deploying assets with FileNet Deployment Manager > Prepare data for deployment > Preparing the source environment > Extracting the source environment half maps)

If you run the retrieve data multiple times, you might want to overwrite rather than merge the data. It depends on what you are trying to accomplish.

7. In the **Status** you see that 1 entry is retrieved.

Half Maps		
Action	Туре	Status
	Object Store	1 entry, no labels, updated Apr 23, 2018 at 4:53:35 AM
Retrieve Data	Storage Policy	no entries, no labels, updated Apr 23, 2018 at 4:53:35 AM
	Storage Area	no entries, no labels, updated Apr 23, 2018 at 4:53:35 AM

- 8. Click the **Retrieve Data** button for **the Security Principal**, accept the defaults, and then click **Finish**.
- 9. Click OK.

In the **Message Console** you see 5 items processed. The status shows 5 entries.



In this scenario there is no service or connection point data to retrieve. If you have a solution that uses service or connection point data, the steps to retrieve the data are the same.

- 10. To review the half maps that you retrieved, complete the following steps:
 - On the left navigation pane, double-click Object Store Data to open the Object Store Data half map.
 - What is the name of the object store that is listed?

The answer to the question is in the Results section at the end of the demonstration.

11. Click **File > Close All** to close all the open tabs.

Task 5. Retrieve data half maps for the destination environment.

- 1. Open the **Dest** environment.
- 2. Complete the **CPE Connection** tab if it is not already complete. Use the same data that you used for the **P8_DEV** environment, and then save the configuration.

Normally the destination environment would be connecting to a different FileNet P8 domain. However, to reduce the amount of resources required for the training image, the same FileNet P8 domain is used with different object stores.

- 3. Click **Test Connection** to make sure that you can connect successfully.
- 4. Switch to the **Overview** tab, and then click **Retrieve Data** for the **Object Store**.
- 5. Click OK.
- 6. Select From Content Platform Engine, and then click Finish.
- 7. Click Retrieve Data for the Security Principal.

Two options are available when you retrieve the security principal data:

- Deploy Data set (default) commonly used for the source environment.
- From Content Platform Engine's LDAP Provider commonly used for the destination environment.

If you choose the Content Platform Engine's LDAP Provider option, you can specify an LDAP Realm and you can filter to specific users and groups by using a Label File. With a Label File you can restrict the amount of users and groups that are retrieved. You only need to retrieve the users and groups that you need to map. A Label File is a text file that you create with short names for LDAP users or groups, one on each line.

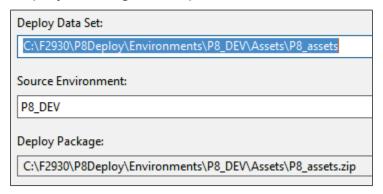
- Select From Content Platform Engine's LDAP Provider, then click Next.
- Click Retrieve Realms.

Only one realm exists on this system, but there could be multiple realms listed.

- In the Filter section, select Use a Label File.
- In the Filter settings section, click the ellipsis to browse to the file,
 C:\Training\F2930\Dest_Label file.txt, and then click Open.
- Click Finish

Task 6. Create a Deploy Package

- Right click the Environments > P8_DEV node and click Deploy Package > Create Deploy Package.
- 2. Use the following data to complete the wizard:
 - Deploy Data set:
 C:\F2930\P8Deploy\Environments\P8_DEV\Assets\P8_assets
 - Source Environment: P8_DEV
 - Deploy Package: accept the default



- Click Finish.
- Click OK.
- 3. Use Windows Explorer to verify that the **P8_assets.zip** file was created in the path specified for the Deploy Package.
- In FileNet Deployment Manager, click File > Close All to close all the open tabs.
- Click File > Exit to exit FileNet Deployment Manager.

Results:

As the solution builder, you exported FileNet P8 assets and created a deploy package.

Answer to question:

Task 3, step 7: P8_assets.xml

Task 4, step 8: DEV_target

The purpose of source-destination pairs

- A source-destination pair connects two environments:
 - A source environment
 - A destination environment
- A source-destination pair provides a mechanism to create data maps.
- The data maps define how the assets will be converted to prepare them for import into the destination environment.

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The purpose of source-destination pairs

When you create a source-destination pair you specify the environment that you want to use as the source and the environment that you want to use as the destination.

FileNet Deployment Manager creates data maps for a source-destination pair. The data maps are created using the half maps for the source and destination environments.

The data maps define how the assets will be converted to prepare them for import into the destination environment.

For more information, see the IBM Knowledge Center.

(FileNet P8 Platform 5.5.0 > Migrating and deploying applications > Deploying assets with FileNet Deployment Manager > Prepare data for deployment > Creating a source-destination pair definition)

Source-destination pair options

- You can run the following operations from a source-destination pair:
 - Convert Assets
 - Analyze
 - Import
 - Generate Audit Report

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Source-destination pair options

After you create a source-destination pair and create the necessary data maps, you can right-click it to run the following possible operations:

- Convert Assets
- Analyze The analyze operation is an information only operation; it runs a change impact analysis that the import of the exported assets will have on the destination environment and generates a ChangeImpactReport.
- Import The import operation imports the converted deploy data set into the destination environment.
- Generate Audit Report Generates an audit report from an audit file.

The Convert Assets operation:

- Converts the exported assets in the Deploy Data Set by applying the mapping that is defined in the Source-Destination Pair data maps.
- Creates a converted Deploy Data Set.

If FileNet Deployment Manager encounters issues during the conversion, it reports the error message, the type of asset, and the object ID of the asset. You can use Administration Console for Content Platform engine to search for the offending asset and figure out the cause of the conversion issue or remove the asset from the export manifest, re-run the export operation, and try the conversion again

The Generate Audit Report operation creates an audit report in html format from the audit file captured during import. In the import options set file, you must select one of the two audit options to create an audit file:

- Import with audit
- Audit only

For more details on auditing changes to imported objects, see the IBM Knowledge Center.

(FileNet P8 Platform 5.5.0 topic > Migrating and deploying applications > Deploying assets with FileNet Deployment Manager > FileNet P8 asset deployment > Importing converted objects > Configuring an import options set file > Auditing changes to imported objects)

Analyze

- The Analyze operation determines the impact that the import will have on the destination environment.
- The Analyze operation:
 - is run against the converted Deploy Data Set.
 - identifies potential import failures before you run the import.
 - generates a Change Impact Analysis Report.
- Always run Analyze before an import.

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Analyze

The Change Impact Analysis Report is an xml based report that includes:

- Summary
- Assets that Failed Analysis if any exist
- Assets that Passed Analysis with Warnings
- Assets that Passed Analysis

You need to investigate any assets that failed or passed with warnings. Failures must be resolved before you attempt to import the asset. You can proceed with warnings if after your investigation you find that the warning can be ignored.

When failures are found, the Change Impact Analysis Report includes the:

- name of the asset.
- asset class.
- · object ID of the asset.
- reason for the failure in the Comments.

For more details about analyzing objects for import, see the IBM Knowledge Center.

(FileNet P8 Platform 5.5.0 > Migrating and deploying applications > Deploying assets with FileNet Deployment Manager > Prepare data for deployment > Analyzing objects for import)

Guidelines for Import Options

- The import operation has a set of default Import Options.
- Key import options to consider when importing FileNet P8 assets for Case Manager solution deployment:
 - Always Update typical selection
 - Import Owner always selected
 - Import Object ID always selected
 - Transfer workflows after import only applies if FileNet P8 workflows are included in the deploy data set.
- Import Mode:
- Select Storage Policy for Imported Objects
- Scripts

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Guidelines for Import Options

When you run the import operation, a default set of import options are selected. Deploying FileNet P8 assets that are part of Case Manager solutions require consideration of some key import options.

Under Import Mode, three options exist:

- Import only runs the import operation in the destination environment.
- Import with audit runs the import operation and tracks the changes in an audit file.
- Audit only simulates the import operation and tracks the changes in an audit file, but does not import any assets in the destination environment.

The Select Storage Policy for Imported Objects option lets you specify specific Storage Policies to use in the destination environment. By default the default storage policy is selected.

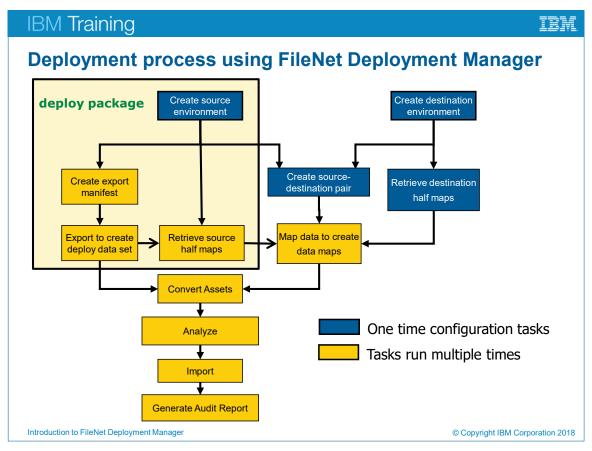
The Scripts option lets you select script files to run during the import.

For more information, see the IBM Knowledge Center.

(FileNet P8 Platform 5.5.0 > Migrating and deploying applications > Deploying assets with FileNet Deployment Manager > FileNet P8 asset deployment > Importing converted objects > Configuring an import options set file > Import options)

For more information on key import options for Case Manager solution deployment, see the IBM Knowledge Center.

(Case Manager 5.3.2 > Migrating and deploying case management solutions > Deploying migrated solutions > Deploying prerequisite > Importing assets by using FileNet Deployment Manager)



Deployment process using FileNet Deployment Manager

The diagram shows a high-level list of tasks that you run to migrate and deploy FileNet P8 assets from a source environment to a destination environment.

You can see the one-time configuration tasks, and the tasks that are generally run multiple times during the deployment process.

A deploy package is a compressed file that contains the entire folder structure for the source environment. This simplifies moving the source environment, the half maps and exported deploy data set to another environment that does not have connectivity to the source environment.

For more information, see the IBM Knowledge Center.

(FileNet P8 Platform 5.5.0 > Migrating and deploying applications > Migration and deployment overview > Overview of a migration and deployment process with FileNet Deployment Manager)

Demonstration 3: Convert, Analyze and Import the assets

- Create a source-destination pair
- Create the Object Store data map
- Create the Security Principal data map
- Convert the FileNet P8 assets
- Analyze the change impact on the destination environment
- Import the converted assets
- Generate Audit Report



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Demonstration 3: Convert, Analyze and Import the assets

Demonstration 3: Convert, Analyze and import the assets

Purpose:

You are an administrator responsible for migrating and deploying FileNet P8 assets between environments. You have prepared the FileNet P8 assets for export and exported the assets. You need to analyze the effect that importing the FileNet P8 assets will have on the UAT environment, and import the FileNet P8 assets into UAT.

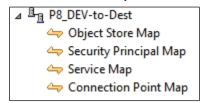
Task 1. Create a source-destination pair.

- Open FileNet Deployment Manager to the deployment tree,
 C:\F2930\P8Deploy.
- 2. Right click the **Source-Destination Pairs** node and select **New > Source-Destination Pair**.
- 3. For the name type, **P8_DEV-to-Dest**.

The name can be anything. It is a good idea to use a name that clearly identifies the source and destination environments.

- 4. For the **Source Environment** select **P8_DEV**.
- 5. For the **Destination Environment** select **Dest**.
- Click Finish.
- 7. Expand the **P8_DEV-to-Dest** node.

You see 4 maps listed, these correspond to the 4 half maps.



Task 2. Create the Object Store data map.

- 1. Double click P8_DEV-to-Dest to open it.
- 2. Click **Map Data** for the **Object Store**, and then click **OK**.

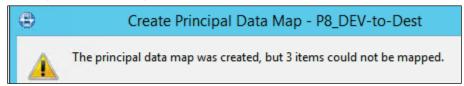
The Object Store Map is opened and it shows the mapping for the source and destination environment object stores. FileNet Deployment Manager will automatically map identical entries if they exist or map entries that have the same label.

- To set the destination object store, click the cell under **Destination Name** and select **UAT_target**.
- 4. Save the map.

Task 3. Create the Security Principal data map.

- 1. Switch to the **P8_DEV-to-Dest** tab.
- 2. Map the Security Principal data.

You get a warning that 3 items could not be mapped,



3. Click OK.

The Security Principal Map is opened. Three rows show ###. These are the items that could not be mapped.

- To map case workers to the master case group uat, click the cell for the Destination Short Name column, on the case workers row, and select master case group uat.
- 5. Map clerks to master case group uat.
- 6. Map **sysadmins** to **uat sysadmins**By default, FileNet Deployment Manager will automatically map users and groups that match. However, you can change the mappings.
- 7 Click File > Save

Task 4. Convert the FileNet P8 assets.

- Right click the P8_DEV-to-Dest Source-Destination Pair and then select Convert Assets.
- 2. Click **OK** on the warning.

It is ok to map more than one source principal to the same destination principal.

- For the Deploy Data Set select,
 C:\F2930\P8Deploy\Environments\P8 DEV\Assets\P8 assets.
- 4. Click Finish.

You see 175 mappings applied. Don't be alarmed by the large number. The number of mappings shows every metadata mapping that took place to convert the 5 assets.

5. Click OK.

Task 5. Analyze the change impact on the destination environment.

- 1. Right click the **P8_DEV-to-Dest** Source-Destination Pair and then select **Analyze**.
- 2. For the **Deploy Data Set** accept the default.

Notice the name of the Deploy Data Set. When you run the Convert Assets operation, FileNet Deployment Manager takes the Deploy Data Set name and appends .converted to create the converted Deploy Data Set.

Click Next.

You have three options to choose from. In this situation, the first two options do the same things since this is the first time the operation is run.

- 4. Select Always update the object if it exists at the destination and then click Next.
- 5. Accept the default in the **Change Impact Report Options** window, and then click **Finish**.

You should see 5 assets passed validation with 1 warning.

6. Click **OK**.

The Change Impact Analysis Report is opened because we chose the option to view report after processing.

7. Review the Summary.

The results appear similar to the following:

Overall Analysis Status:	Passed with warnings
Total # of Assets Analyzed:	5
Total # of Failures:	0
Total # of Warnings:	1
Total # of Assets that would be Created during Import:	3
Total # of Assets that would be Updated during Import:	2
Total # of Assets that would be Skipped during Import:	0

You can repeat the Analyze operation as many times as you want.

8. Try running the operation again and this time select the option, **Include details** for all object in report.

You can replace the existing report or choose a different filename.

9. Click on the **Details** link of the report.

10. Click the Assets that Passed Analysis with Warnings link.

You see a detailed explanation of an asset that might cause issues during the import. It is your responsibility to investigate the potential issue prior to running the import. In this case, the warning is regarding the StorageArea. The import will use the default StorageArea defined in the destination environment, so we can ignore the warning.

11. Click the Passed Assets Report #1 link.

You see details for each asset, including the Name, Class, object ID, and the Import Operations.

12. Close or minimize the Change Impact Analysis Report.

Task 6. Import the converted assets.

For this task, the UAT Case Manager environment must be running.

- Open the Windows Services console.
 Use the icon on the system tray.
- Check the status of the IBM WebSphere Application Server V9.0 -UATNode01 service. If it is not running, then start the service.
 It can take a few minutes to start.
- 3. Right click the **P8_DEV-to-Dest** Source-Destination Pair and select **Import**.
- 4. For the Option Set, click New.
- 5. Choose the folder path, for example, **C:\F2930**.
 - For the file name type **Dest import options**, and then click **Save**.
- 6. Review the default import options.
- 7. Change the following import options:
 - Under Update Options, select Always Update.
 - Under Standard Options:
 - clear Import Security Permissions.
 - clear Use original create/update timestamps and users.
 - Under Import Mode, select Import with audit.
- 8. Click **OK**, and then click **OK** again to save the changes to the Option Set.
- 9. Click Save.

10. Click Finish.

The results appear similar to the following:



- 11. Click **OK** to close the window.
- 12. Review the deployment.log file in the latest Run folder.
- 13. Use Windows Explorer to explore the **Dest** environment folder.
 - What folder do you find in the Assets folder?
 - What does that folder contain?

The answers to the questions are in the Results section at the end of the demonstration.

14. To close all the open tabs in FileNet Deployment Manager, click **File > Close All**.

Task 7. Generate and Audit Report.

- Right click the P8_DEV-to-Dest Source-Destination Pair and select Generate Audit Report.
 - Verify the path to the converted deploy data set.
 - Accept the default values for the next two fields.
 - Select Generate detailed report.
 - Clear View report in browser after processing.

This system is configured to open Internet Explorer by default. Unfortunately Internet Explorer just shows the xml version of the document.

- 2. Click Finish.
- 3. In Windows Explorer open the folder for the converted deploy data set that was used in Step 1.

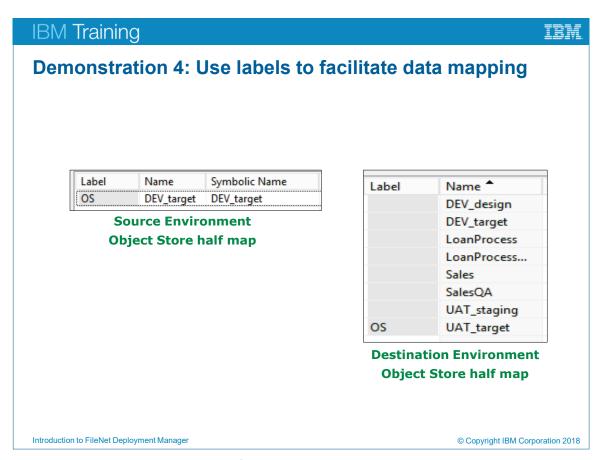
- 4. Right-click **AuditReport.html** and then select **Open with > Firefox**.
- Review the Audit Report.
 Leave FileNet Deployment Manager open for the next demonstration.

Results:

As an administrator, you analyzed the impact of importing the FileNet P8 assets into UAT and imported the FileNet P8 assets into UAT.

Answers to questions:

Task 6, step 11: P8_assets.converted, the converted P8_assets



Demonstration 4: Use labels to facilitate data mapping

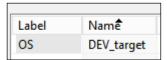
Demonstration 4: Use labels to facilitate data mapping

Purpose:

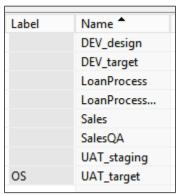
You are an administrator responsible for migrating and deploying FileNet P8 assets between environments. You need to learn how to use labels in the environment half maps to control the data mapping, which is a critical step in the migration and deployment process.

FileNet Deployment Manager provides labels to help facilitate mapping the half maps into data maps. If the same label exists in a source half map and a destination half map, when you map the data, FileNet Deployment Manager will map the two entries that have the same label, even if the field values being mapped are different.

- In FileNet Deployment Manager, open the P8_DEV > Object Store Data half map by double-clicking it.
- 2. In the **Label** column, replace the existing label, **UAT_target** with **OS**.



- 3. Open the **Dest > Object Store Data** half map.
- 4. In the Label column, replace the existing label with **OS**.



- 5. Click **File > Save All** to save the changes.
- 6. Double-click the **P8_DEV-to-Dest** Source-Destination Pair to open it.

7. Map the Object Store data.

Notice how **DEV_target** is automatically mapped to **UAT_target**.

The icon indicates that mapping was explicit using labels or by manually selecting it. Before adding the labels, FileNet Deployment Manager mapped **DEV_target** to **DEV_target**.

8. Close FileNet Deployment Manager and all open windows.

Results:

As a system administrator, you used labels in the environment half maps to control data mapping.

IBM Training

IRM

Unit summary

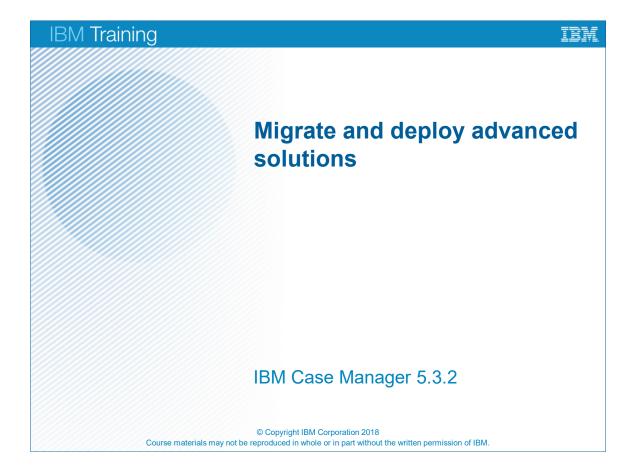
- What is FileNet Deployment Manager?
- FileNet Deployment Manager basics
- Deploying assets with FileNet Deployment Manager

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Unit summary

Unit 4 Migrate and deploy advanced solutions



Unit 4 N	/ligrate	and o	deploy	advanced	solutions
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Unit objectives

- Prepare for advanced solution migration and deployment
- Export other FileNet P8 assets
- Export other IBM and external assets
- Import other FileNet P8 assets
- Import other IBM assets

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Unit objectives

Phases for advanced solution migration and deployment

- Preparing for solution migration
- Migrating solutions
- Deploying migrated solutions
- Configuring the target environment after solution deployment
- Verifying solution deployment

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Phases for advanced solution migration and deployment

The phases for advanced solution deployment are the same as for basic solution deployment. The difference is that advanced solutions have additional assets that are external to IBM Case Manager that must be migrated and deployed to complete the solution deployment. This unit focus on the areas that are unique to advanced solution deployment.

Preparing for advanced solution migration and deployment

- Identify the solution assets
- Identify the solution application assets:
- Plan the migration strategy
 - What environments do you need to migrate to?
 - DEV, Test, UAT, Prod
 - How is change control implemented?
- Prepare customized migration and deployment instructions

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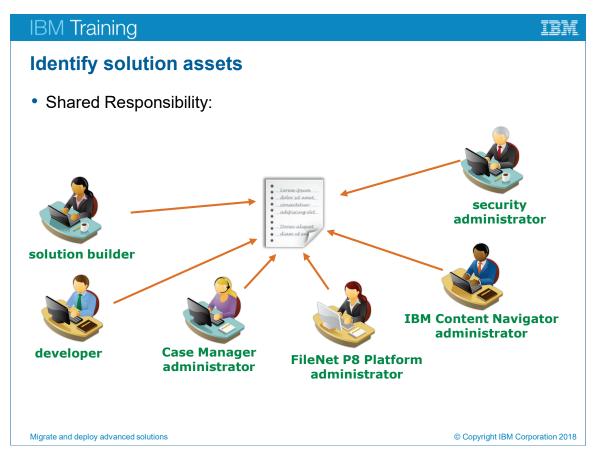
Preparing for advanced solution migration and deployment

The term advanced solution is used to categorize IBM Case Manager solutions that use other FileNet P8 assets, other IBM assets, or external assets.

The preparation phase for migrating and deploying an advanced solution, is essentially the same except that additional solution application assets must be identified and included in the customized migration and deployment instructions. For example,

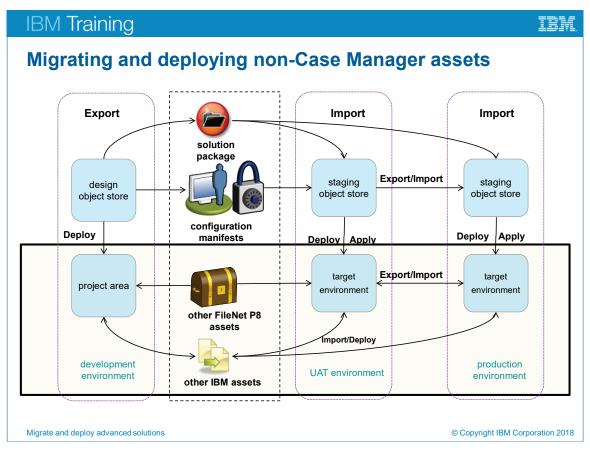
- other FileNet P8 assets
- other IBM assets
- external non-IBM assets

This unit will expand on what you learned in the Migrate and deploy basic solutions unit, and focus on how to migrate and deploy the non-Case Manager assets.



Identify solution assets

Identifying the solution assets in the case of solution applications that include non-Case Manager assets can involve additional administrators, such as the FileNet P8 Platform administrator and the IBM Content Navigator administrator.



Migrating and deploying non-Case Manager assets

The diagram is a review of the migration and deployment process diagram that was presented in Unit 01. In this unit, you will focus on the migration and deployment of the non-Case Manager assets, other FileNet P8 assets and other IBM assets.

Other FileNet P8 assets and other IBM assets can follow a more traditional migration process. You export FileNet P8 assets from the development environment, then import them into a preproduction test environment such as UAT. In the UAT environment modifications can be made to the P8 assets and the FileNet P8 assets can then be exported from the UAT environment and imported into the production environment and maybe even back to the development environment. The same can be true for other IBM assets, such as IBM Content Navigator desktops.

Migration process for non-Case Manager assets

- Other FileNet P8 assets: Initial design occurs in the development environment, modifications might be made in preproduction environments.
 - Dev > UAT > PROD.
 - Most organizations have a FileNet P8 domain for each environment. You
 migrate the FileNet P8 assets with FileNet Deployment Manager. Security
 usually differs between environments.
- Other IBM assets: Initial design occurs in the development environment, modifications might be made in preproduction environments.
 - You use application-specific tools to migrate these assets.

Source and destination environment compatibility

Before any migration, you need to ensure that the source and destination environments are compatible.

- Object store AddOns must be the same in the source and destination object stores.
- The release level of the deployment tools, IBM Case Manager administration client, and FileNet Deployment Manager should match the server that they are connecting to.
- The release level of the IBM Products should be the same in the source and destination environments to avoid issues during import.

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Source and destination environment compatibility

You can use the context ping pages to determine the release levels of the software:

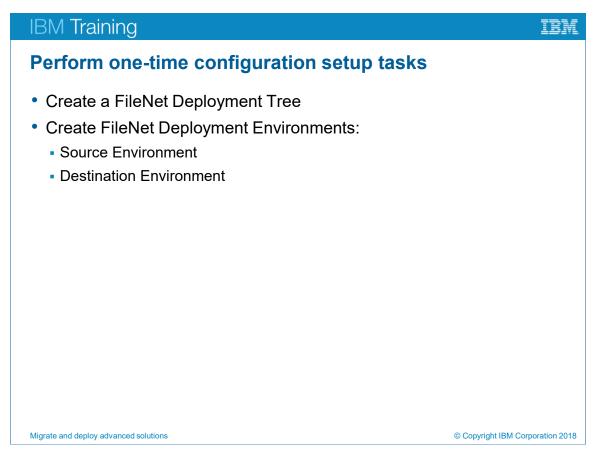
- Manager (FDM) Start FDM, and then click help about.
- Case Manager http://<ICM_server>:port/CaseManager/CASEREST/v1/info
- Content Platform Engine http://<CPE_server>:port/FileNet/Engine
- IBM Content Navigator http://</CN_server>:port/navigatgor/ping

FileNet Deployment

For more information, see the IBM Case Manager 5.2 Solution Deployment Guide, Part 2.

(IBM Case Manager 5.2 Solution Deployment Guide, Part 2: Advanced Solution Migration and Deployment)

Chapter: Source and destination environment compatibility



Perform one-time configuration setup tasks

After you have completed:

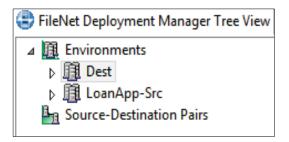
- Identifying the solution assets and solution application assets.
- Planning the solution migration strategy.

The next step in preparing to migrate is to perform one-time configuration setup tasks.

If you have other FileNet P8 assets you will use FileNet Deployment Manager (FDM) to migrate the assets. You need a deployment tree and a source and destination environment. An existing deployment tree can be used and you can reuse existing environment definitions, if appropriate ones already exist.

Demonstration 1: Prepare for advanced solution deployment

- Create a FileNet Deployment tree
- Create the source environment from a deploy package
- · Create a destination environment from an existing environment



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Demonstration 1: Prepare for advanced solution deployment

Demonstration 1: Prepare for advanced solution deployment

Purpose:

You are an administrator responsible for migrating and deploying IBM Case Manager solutions. You need to prepare to migrate and deploy the Loan Application to the UAT environment. The Solution Builder provided the Loan Application Package. You need to use content of the Loan Application Package to complete the preparation tasks for migrating and deploying the FileNet P8 assets that are used by the solution.

Task 1. Create a FileNet Deployment tree.

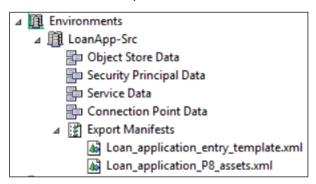
- Open FileNet Deployment Manager.
- 2. Create a FileNet Deployment tree in the path C:\F2930\LoanApp-deploy.

Task 2. Create the source environment from a deploy package.

Instead of creating the source environment from scratch. The solution builder has provided a Deploy Package, in the Loan Application Package. The Deploy Package, includes the exported FileNet P8 assets that are used by the Loan Application solution. The Loan Application Package also includes the export manifest that was used to export the FileNet P8 assets.

- Use Windows Explorer to navigate to the file, C:\Traning\F2930\
 04-Migrate_and_deploy_advanced_solutions\Loan Application Package.zip
- Extract All to the,
 C:\Training\F2930\04-Migrate and deploy advanced solutions\ folder
- In FileNet Deployment Manager, click File > Deploy Package > Expand Deploy Package.
 - For the Deploy Package field, use C:\Training\F2930\04-Migrate_and_deploy_advanced_solutions\Loan Application Package\Loan_application_P8_assets.zip.
 - Under Source Environment, make sure Create New Source Environment is selected.
 - For the name type, LoanApp-Src.
 - Accept the default values for the remaining fields, and then click Finish.
 - Click **OK** on the successfully expanded deploy package message window.

- 4. Use Windows Explorer to explore the files that were added to the deployment tree, C:\F2930\LoanApp-deploy.
- 5. Explore the contents of the **Assets** folder in the **LoanApp-Src** environment.
- 6. Add the export manifest into the deployment tree by completing the following steps:
 - Use Windows Explorer to copy the two xml files from
 C:\Training\F2930\04-Migrate_and_deploy_advanced_solutions\Loan
 Application Package\ExportManifests to
 - C:\F2930\LoanApp-deploy\Environments\LoanApp-Src\Assets\ExportManifests\.
 - Switch back to FileNet Deployment Manager, and from the File menu click Refresh.
 - Expand the **LoanApp-Src** environment and the **Export Manifests** node. You should see,

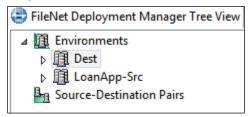


Task 3. Create the destination environment from an existing environment.

In Unit 03 you created the Dest environment. You will see how you can easily reuse the information from a different deployment tree. You need to be careful when you copy environments. Only copy environment folders if they are the same environment, with the same connection configuration.

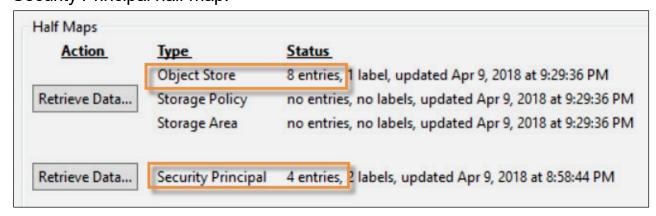
- Use Windows Explorer to copy the **Dest** folder from C:\F2930\P8Deploy\Environments\ to
 C:\F2930\LoanApp-deploy\Environments\
- 2. In FileNet Deployment Manager click **File > Refresh**.

3. Expand the **Environments** node, you see the **Dest** environment listed.



You will rename the Dest environment to UAT.

- 4. Right-click **Dest** and select **Rename**, and then type **UAT**.
- Double-click **UAT** to open it, and then select the **Overview** tab.
 Notice that there are 8 entries in the Object Store half map and 4 entries in the Security Principal half map.



6. Close FileNet Deployment Manager.

Results:

As an administrator, you completed the preparation steps for migrating FileNet P8 assets that the Loan Application solution needs. You used the Loan Application Package that the Solution Builder provided, to expand the deploy package and created the source environment. You created the UAT environment by copying an environment folder from another deployment tree.

Migrating an advanced solution

- The tasks for the migrating an advanced solution phase are:
 - Export the advanced solution assets from the source environment.
 - Stage the exported solution assets into the destination environment.
 - Import the Case Manager solution package into the destination environment.

Migrate and deploy advanced solutions

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Migrating an advanced solution

The tasks for migrating an advanced solution and a basic solution are very similar. The advanced solution migration has additional export tasks that are completed with FileNet Deployment Manager, IBM Content Navigator administration tool, and other tools, depending on the types of assets.

- Export other FileNet P8 assets from the source environment.
- Export other IBM assets from the source environment.
- Export external assets from the source environment.

Migrating a basic solution was covered in a previous unit. This unit will focus on migrating other FileNet P8 assets and other IBM assets and external assets.

Export other FileNet P8 assets

- Other FileNet P8 assets are FileNet P8 assets that are not managed by IBM Case Manager.
- Use FileNet Deployment Manager to export the FileNet P8 assets from the source environment target object store.
 - Create export manifests.
 - Add assets to the export manifests.
 - Define export include options.
 - Export the assets to create a deploy data set.
 - Create the half-maps for the source environment.
 - Create a deploy package.

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Export other FileNet P8 assets

Other FileNet P8 assets that are commonly used in Case Manager solutions are:

- classes
- properties
- FileNet P8 workflow definitions
- search templates

To export FileNet P8 assets using FileNet Deployment Manager (FDM), you:

- Create the export manifests.
 - You might need to create multiple export manifests to handle asset dependencies during import.
- Add assets to the export manifests.

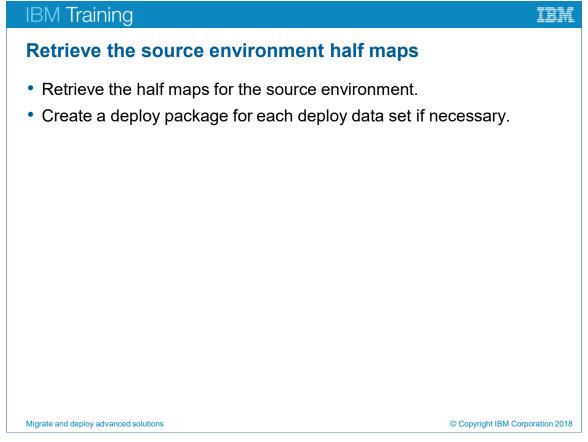
If your assets include FileNet P8 workflow subscriptions, include the workflow definition and the workflow subscription in the same export manifest. This only works for the current version of the FileNet P8 workflow, so make sure that the subscription is linked to the current version of the workflow definition. If you need to link to a FileNet P8 workflow that is not the current version, you will need to link the workflow subscription manually after the import is complete.

- Define export include options.
- Export the assets and create deploy datasets.

Each export manifest creates a deploy dataset. Every time you run the export operation in FDM, the export operation grabs the version of the asset that the export manifest dictates, which might not be the latest version of the asset. To ensure that the latest version is always grabbed, you can either set the include option **include all versions**, or remove the asset from the export manifest and re-add it, selecting the latest version. Then repeat the export.

For more information, see the IBM Knowledge Center.

(Case Manager 5.3.2 > Migrating and deploying case management solutions > Migrating solutions > Exporting other FileNet P8 assets)



Retrieve the source environment half maps

After you create the necessary deploy data sets from the exported assets, the next step is to create the half maps for the source environment. There are four possible half maps that you can create. Only the object store half map is required.

Generally you select **Deploy Data Set File** as the source for the half map, this way only the configuration information that is referenced by the exported assets is included.

It is common to create the security principal half map so that you can maintain the security of the assets.

If you have external services, such as a web service, that you are exporting, then you will need to create the service half map.

The connection point half map is needed if you are migrating FileNet P8 workflows or workflow system configuration assets.

If you are using FileNet Deployment manager in connected mode, which means that the tool has network access to the source and destination environments, you do not need to create a deploy package.

Export other IBM and external assets

- Export assets that are developed outside of IBM Case Manager and IBM FileNet P8 Platform.
- Examples:
 - IBM Content Navigator assets such as desktops
 - IBM Content Manager item types
 - Reused IBM Business Process Manager processes

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Export other IBM and external assets

Different types of assets will use different tools to export and import them.

The solution deployment instructions documentation should include detailed steps of how to migrate and deploy each type of asset and what tool to use.

To export IBM Content Navigator assets, you use the IBM Content Navigator administration tool.

Prepare the FileNet P8 assets for import

- FileNet P8 assets are imported directly to a target environment.
- The Import operation is performed during the Deploy phase of the migration process.
- Many tasks can be performed in preparation for the import:
 - Create FileNet Deployment Manager Deployment Tree.
 - Create security principal half map for the destination environment.
 - Create source-destination pair with data mappings.
 - Convert deploy data sets.
 - Run the Analyze operation to create a Change Impact Analysis Report.

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Prepare the FileNet P8 assets for import

Unlike the IBM Case Manager assets which are imported into a staging object store, you import the other FileNet P8 assets directly into the destination target environment. Therefore the import operation is not performed until the *Deploy* phase of the migration and deployment process.

You can complete many of the tasks prior to the import of the FileNet P8 assets into the destination target environment.

If you are running FileNet Deployment Manager (FDM) in disconnected mode, you can create the deployment tree on the destination environment. You can complete all the required FDM operations except for the import operation.

The Change Impact Analysis Report will help you resolve any potential import issues prior to running the import operation.

Deploy migrated advanced solutions

- Suspend and backup the target environment.
 - Temporarily suspend all activity on the system.
 - Backup the target environment.
 - Minimize access to the system during deploy.
- Deploy prerequisite assets.
 - Import other FileNet P8 assets into the destination target object store.
 - Import other IBM assets and external assets.
- Deploy the Case Manager solution.
- Import and apply security or auditing configurations.

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Deploy migrated advanced solutions

It is very important to back up the target environment before importing any FileNet P8 assets into the target object store. Because of the complex metadata associated with FileNet P8 assets, it might not be possible to delete the imported assets. The only way to ensure that you revert back is to restore the target environment from backups.

Import other FileNet P8 assets

- Import FileNet P8 assets into the destination target object store with FileNet Deployment Manager.
 - Run the import operation on the converted deploy data sets.
- Important import options:
 - Standard Options:
 - Import owner choose this option and use data mapping to switch ownership in the destination environment.
 - Import Object ID preserves the object ID or GUID of the object.
 - Update Options:
 - Always Update typically used.

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Import other FileNet P8 assets

For more detailed information on the Import options, see the IBM Knowledge Center.

(Case Manager 5.3.2 > Migrating and deploying case management solutions > Deploying migrated solutions > Deploying prerequisite assets > Importing assets by using FileNet Deployment Manager)

IBM Training Import other IBM or external assets

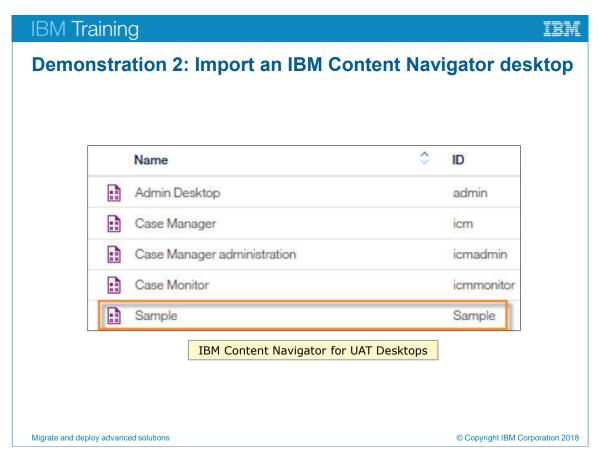
- Import other IBM assets such as IBM Content Navigator desktops.
- Import external assets such as an external data service.
- The tool you use to import depends on the asset.

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Import other IBM or external assets

For more information on migrating and deploying other IBM and external assets see the (IBM Case Manager 5.2 Solution Deployment Guide, Part 3.)



Demonstration 2: Import an IBM Content Navigator desktop

Demonstration 2: Import an IBM Content Navigator desktop

Purpose:

You are an administrator responsible for migrating and deploying IBM Case Manager solutions. You need to migrate and deploy an advanced solution that includes a custom IBM Content Navigator desktop. You have an export of the desktop from another environment and you need to import the desktop into the destination environment.

1. Open Mozilla Firefox.

Open the IBM Content Navigator administration tool for the UAT environment.

Under IBM Case Manager UAT environment, click UAT ICN Admin.
 If you get Unable to connect, then the UAT environment is not running. To start the UAT environment, complete the following steps:

 Open the Windows Services console and start the IBM WebSphere Application Server V9.0 - UATNode01 service.

Wait until the service starts, it can take a few minutes.

- Close the Firefox window and open a new window, and then click the UAT ICN Admin link.
- 3. Log on as p8admin/FileNet1.

The Desktops tab opens.

- 4. Click **Import** on the upper right.
- 5. Click **Browse**, and then navigate to,

C:\Training\F2930\04-Migrate_and_deploy_advanced_solutions\Loan Application Package\SampleDesktopExportedConfiguration.properties

6. Click **Open**.



7. Click **Import**.

8. Review the **Desktop Import Summary** and then click **Close**.



Log out of IBM Content Navigator for UAT and then close the browser window.

It is possible that additional configuration steps might be required after importing the desktop. These configuration steps should be listed in the deployment instructions documentation.

Results:

As an administrator you imported an IBM Content Navigator desktop into UAT, using an export that was provided as part of the Loan Application Package.

Configure the target environment after solution deployment

- Additional system configuration steps might be required after a solution is migrated and deployed.
- For example:
 - FileNet P8 assets might require additional configuration steps for:
 - component queue JAAS credentials
 - JMS JNDI specifications for a JMS queue.
 - An imported IBM Content Navigator desktop might need the configuration modified for the destination environment.

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Configure the target environment after solution deployment

Most of the FileNet Content Platform Engine configuration is migrated when the FileNet P8 assets are deployed with FileNet Deployment Manager. However some elements might need additional configuration after deployment. The specific solution assets determine what configuration steps are required. The additional configuration steps that are required should be documented in the solution deployment instructions.

Verify the advanced solution deployment

- Verify that the deployed advanced solution is working correctly.
- The solution deployment instructions documentation should include a plan for verifying the migrated and deployed advanced solution.
- Verify the migrated solution completely in test and pre-production environments before migrating and deploying to production.

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Verify the advanced solution deployment

Verifying the migrated and deployed advanced solution is the final phase of advanced solution deployment.

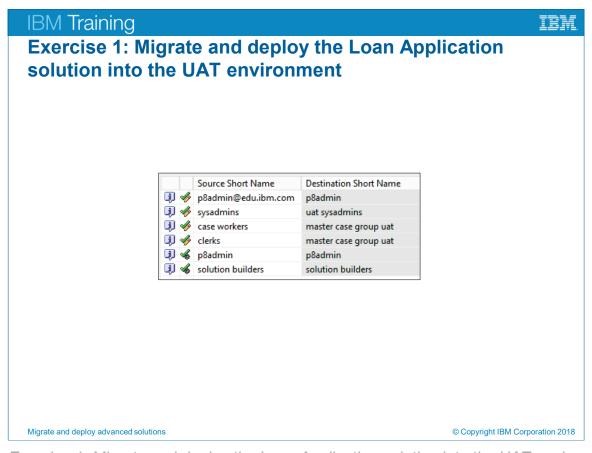
Unit summary

- Prepare for advanced solution migration and deployment
- Export other FileNet P8 assets
- Export other IBM and external assets
- Import other FileNet P8 assets
- Import other IBM assets

Migrate and deploy advanced solutions

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Unit summary



Exercise 1: Migrate and deploy the Loan Application solution into the UAT environment

Exercise 1:

Migrate and deploy the Loan Application solution into the UAT environment

You are the Case Manager administrator, the Solution Builder provided the Loan Application deployment instructions as well as the Loan Application Package. Testing of the Loan Application solution is complete in the development environment. The Loan Application solution is ready to be migrated and deployed into the UAT environment for further testing.

Loan Application Package: C:\Training\F2930\04-Migrate_and_deploy_advanced_solutions\Loan Application Package Deployment tree: C:\F2930\LoanApp-deploy

List of high-level tasks that you must complete:

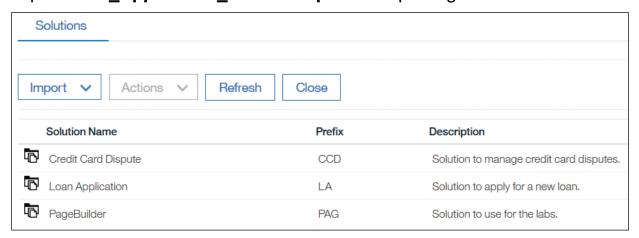
- Review the Loan Application deployment instructions.
- Use IBM Case Manager administration client to import the Loan_Application_solution.zip to UAT_staging.
- Use FileNet Deployment Manager to import the Loan_application_P8_assets into the UAT target object store.
- Use FileNet Deployment Manager to import the Loan_application_entry_template into the UAT_target object store.
- Use IBM Case Manager administration client to deploy the Loan Application solution to the UAT target environment.
- Import and apply the security configuration manifest, Loan Application securityManfiest.zip.
- Configure the Sample desktop for the UAT environment.
 - Enable Entry template management on the ICMUAT_target repository.
 - Change the Sample desktop name to Sample-UAT.
 - Change the repository for authentication and features to ICMUAT target.
 - Set the application name to, Sample-UAT.
- Verify the solution, following the steps in the Loan Application deployment instructions.

For more information about where to work and the exercise results, refer to the Tasks and Results section that follows. If you need more information to complete a task, refer to earlier demonstrations for detailed steps.

Exercise 1: Tasks and results

Task 1. Import the Loan Application solution to UAT_staging.

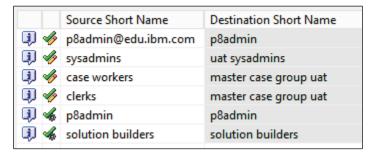
- Review the Loan Application deployment instructions, C:\Training\F2930\
 04-Migrate_and_deploy_advanced_solutions \Loan Application
 Package\Loan Application solution deployment instructions.pdf.
- Open IBM Case Manager administration client and log on as p8admin/FileNet1.
- Select the **UAT_staging** object store.
- Import Loan Application solution.zip solution package.



Task 2. Import the Loan Application P8 assets into UAT_target.

- Open FileNet Deployment Manager and use the deployment tree
 C:\F2930\LoanApp-deploy.
- Create a Source-Destination Pair,
 - For the name type, LoanApp-Src-to-UAT.
 - For Source Environment select LoanApp-Src.
 - For Destination Environment select UAT.
- Map the data for the Object Store so that **Dev_target** is mapped to **UAT_target**.
 Use the label OS to facilitate the mapping.

 Map the data for the Security Principals to obtain the following security principal mapping.



- Click Save.
- Convert Assets for the deploy data set, Loan_application_P8_assets.
 You see 339 mappings applied.
- Analyze the converted deploy data set,
 Loan_application_P8_assets.converted.
- Select Always update the object if it exists at the destination.
- Select Include details for all objects in report.
 You should see 5 assets that passed validation.
- Review the Change Impact Analysis report.

Name	Class	ID	Analysis Status	Import Operation
Loan Amount	PropertyTemplateFloat64	{927758AF-29FB-4C96-805D- E9059E770957}	Passed	Create
Account Number	PropertyTemplateString	{79641769-E166-47BF-8404- 095234B65E97}	Passed	Create
Applicant Name	PropertyTemplateString	{FC97C932-F75F-4E85-82F2- B6E05D76B675}	Passed	Create
Loan Request	DocumentClassDefinition	{50407A62-0000-C41D-9618- 7DFFEF9D0C12}	Passed	Create
LoanApp	Folder	{5F89C635-8640-468F-817A- D30E666CA338}	Passed	Create

If you get any errors, you must resolve them before continuing. Read the comments in the **Change Impact Analysis Report** to help identify the cause of the issue.

- Import the converted deploy data set, Loan_application_ P8_assets.converted.
 - Use the Import Options set file C:\Training\F2930\04-Migrate_and_deploy_advanced_solutions\Loan Application Package\LoanApp-import options.xml.

You should get an Import successful message with 5 items processed. In the message console you see,

Import successful from C:\F2930\P8-deploy\Environments\UAT\Assets\Loan_application_P8_assets.converted 5 items processed.

- Generate an Audit Report.
 - Right-click LoanApp-Src-to-UAT and select the option Generate Audit Report.
 - Clear the option, View report in browser after processing.

Make note of the path for the **Audit Report File to Generate**.

Review the Audit Report using Firefox.

Task 3. Import the Loan Application entry template into UAT_target.

Make sure that you have successfully imported the deploy data set, **Loan_application_P8_assets.converted**, before you proceed with this task. The entry template import will fail if you have not previously imported the Loan_Application_P8_assets.

- Expand the Deploy Package, C:\Training\F2930\04Migrate_and_deploy_advanced_solutions\Loan Application
 Package\Loan_application_entry_template.zip into the Existing Source
 Environment LoanApp-Src.
 - Make sure the Half Map Mode is set to Merge.
- Convert Assets for the Deploy Data Set Loan_application_entry_template.
 - Use the LoanApp-Src-to-UAT Source-Destination Pair and browse to the correct Deploy Data Set.

You see 237 mappings applied.

- Analyze the Deploy Data Set Loan application entry template.converted.
 - Accept the default settings for the first two windows.
 - On the Change Impact Report Options, select Include details for all objects in report.

You see 3 assets passed validation with 1 warning.

Review the Change Impact analysis report.

If the warning you get is regarding the storage policy, you can ignore it. You will be using the default Storage Policy in UAT.

- Import the deploy data set, Loan_application_entry_template.converted.
 - Use the Import Options set file C:\Training\F2930\
 04-Migrate_and_deploy_advanced_solutions\Loan Application
 Package\LoanApp-import options.xml.

You should see an Import successful message with 3 items processed.

- Generate an Audit Report.
 - Select Generate detailed report.
 - Verify the Deploy Data Set path.
 - Ensure the path for the **Audit Report File to Generate** is set to the **Loan_application_entry_template.converted** folder.
 - Select the option Generate detailed report.
 If you need more details, see Unit 3, Demonstration 3, Task 7.
- Review the Audit Report.

Task 4. Deploy the Loan Application solution to the UAT target environment.

- Open IBM Case Manager administration client and log in as p8admin/FileNet1.
- Click UAT_staging > Solutions.
- Deploy the Loan Application solution to UAT_target_env.

If you need more details, see Unit 2, Demonstration 2.

Task 5. Import and apply the security configuration.

- Use IBM Case Manager administration client to import the security configuration,
 Loan_Application_securityManfiest.zip.
- Edit the security configuration Loan_Application_Security and make the following changes:
 - In the Define the administrations and assign privileges, remove the group Sysadmins and add the group UAT Sysadmins.
 - In the Associate users and groups with roles, make the necessary changes so that the Loan Processor groups is associated with:
 - Master Case Group UAT
 - UAT Sysadmins
 - Save and apply the security configuration.
 If you need more details, see Unit 2, Demonstration 3.
- Log out of the Case Manager administration client and close the browser window.

Task 6. Configure the Sample desktop for the UAT environment.

- Open a Firefox browser and click UAT ICN Admin, then log in as p8admin/FileNet1.
- Click Repositories.
- Select ICMUAT_target and click Edit.
 - On the **General** tab, click **Connect**, for user name/password type, **p8admin/FileNet1**.
 - When the Configuration Parameters tab is enabled, click the tab.
 - Under **Optional Features**, find **Entry template management** and select **Enable**.
 - Click Save and Close.

Configure the features on the Sample desktop.

- On the **Desktops** tab, select **Sample** and click **Edit**.
 - Change the Name to Sample-UAT.
 - Change the **Authentication > Repository** to **ICMUAT_target**.

- Click the Layout tab.
 - Select the Browse feature.
 - Set the default repository to ICMUAT_target and remove the ICMDEV_target repository.
 - Repeat the step for the **Search**, and **Entry Template Manager** features.
- Click the Appearance tab.
 - Set the Application name to Sample-UAT.
 - Click Save and Close.
- Log out and close the browser.

Task 7. Verify the solution, following the steps in the Loan Application deployment instructions.

- Open a Firefox browser and click UAT Case Client, then log in as p8admin/FileNet1.
- On the upper-right corner, select the Loan Application solution and the role Loan Processor.
- Follow the steps in the Loan Application solution deployment instructions to verify the Loan Application solution.

At the end of the exercise, you are able to add a case of type Loan Request as the Loan Processor. You can add a document using an entry template and complete the case.

Successfully completing the Loan Application solution verification steps indicates that you successfully migrated and deployed the advanced Case Manager solution, Loan Application to the UAT environment. The Loan Application solution uses FileNet P8 assets and IBM Content Navigator assets.

Unit 4 N	/ligrate	and o	deploy	advanced	solutions
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