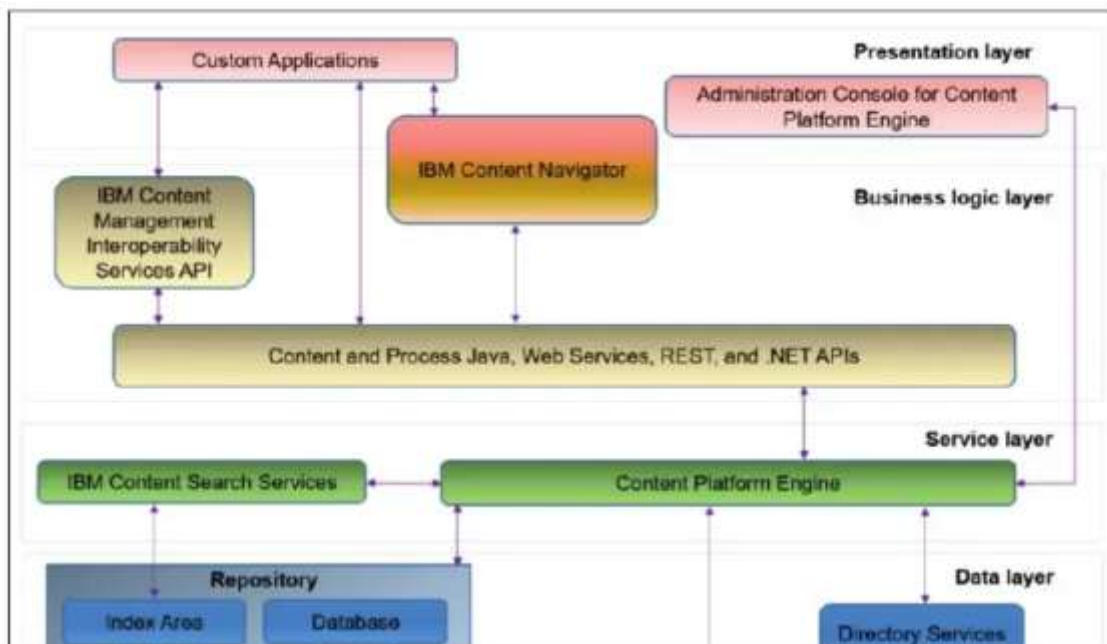


Architecture and domain structures

In this section, you will learn about the IBM FileNet P8 Platform architecture, P8 domain, and objects present within the domain.

IBM FileNet P8 Platform Architecture

The IBM FileNet P8 Platform includes back-end services, development tools, and applications that address enterprise content and process management requirements.



- The presentation layer and business logic layer, on the top, focus on the clients that connect to Content Platform Engine.

IBM Content Navigator (ICN) is the primary web client to manage the content.

You can customize and extend ICN and also create custom applications.

Administration Console for Content Platform Engine is the web client to configure and administer Content Platform Engine.

The business logic layer includes Content and Process Java, Web Services, REST, and .NET APIs.

- The services layer in the middle includes the core components that make up IBM FileNet P8 Platform.

The Content Platform Engine is the core engine providing both content and process services.

This layer also includes IBM Content Search Services.

- The data layer, which is the lowest layer, includes LDAP directory services, databases, and content storage.

Content Platform Engine architecture

Content Platform Engine is an IBM FileNet P8 Platform component that manages enterprise-wide objects and documents by offering powerful and administration tools. Using these tools, an administrator can create and manage the classes, properties, storage, and metadata that form the foundation of an enterprise content management system.

The Content Platform Engine architecture includes the following aspects:

- **Object-oriented, extensible metadata model**

This model enables Content Platform Engine to provide complex and flexible data representation.

The model includes a rich event framework that provides the means to trigger actions in response to activities performed against Content Platform Engine objects.

- **Content Engine Application programming interfaces (APIs)**

The APIs provide an extensible platform for development.

A Java-based API provides a rich set of Java classes that maps to object store objects, such as Document, Folder, or Property Description.

A Web Service API enables users to author applications in a platform and language-independent manner that expose the object model in a few generic methods suitable for deployment in a web environment.

A Microsoft .NET framework-based API, functionally equivalent to the Java-based API, provides for development of applications that use the .NET framework.

- **Process Engine Application programming interfaces (APIs)**

A Java-based API provides a rich set of Java classes to customize the way that the application interfaces with user, data, and workflow services.

A Web Service API enables users to author applications in a platform and language-independent manner.

The REST Service enables lightweight client applications to access workflow system resources over HTTP and perform the fundamental workflow system operations.

- **Java EE-compliant application server**

Java Platform, Enterprise Edition (Java EE) offers reliability, scalability, and high availability features, and support for a wide range of operating system platforms, application servers, and database technologies.

The Content Platform Engine can be deployed to suit the demands of the enterprise. As the enterprise's needs change, you can reconfigure the system by replacing, adding, or removing servers or applications without bringing the system down. You can add members to web server clusters and Content Platform Engine server clusters at any time.

- **Directory server**

Each P8 domain is associated with one or more LDAP directory servers. The LDAP users and groups are used to define authentication and authorization rights.

- **Database server**

Each environment needs one or more database servers to host the tables that are used to define the P8 domain, the object stores, and workflow systems, as well as the configuration database used by IBM Content Navigator.

- **Content services**

These services are responsible for adding, retrieving, and deleting content and objects from an object store. In addition to servicing requests from enterprise content management (ECM) applications, the content services host various background tasks that maintain all the resources that are associated with each object store.

- **Process services**

These services manage all aspects of business processes (also called workflows).

Content Platform Engine resources (P8 Domain)

The FileNet P8 domain represents a logical grouping of Content Platform Engine physical resources (such as object stores) and the Content Platform Engine servers that provide access to those resources.

Each resource and server belong to only one domain. A server can access any resource in the domain, but cannot access any resource that lies outside of the domain.

Each FileNet P8 Domain contains:

- A Global Configuration Database (GCD) that contains domain level configuration and properties.
- One or more object stores.

An object store is a repository for storing objects (such as documents, folders, and business objects) and the metadata that defines those objects.

Each object store contains:

- **Business Objects**
Documents, Folders, and custom business objects used by applications
- **Metadata**
Customizable definitions of business object classes and their properties
- **Full Text Indexes**
Indexes that allow rapidly searching across document content
- **One or more storage areas.**
A storage area is a container for content storage.
- **Optional workflow system** - A workflow system contains the queues, rosters, and event logs that are necessary to create and process workflows.

Content Platform Engine tools

The Content Platform Engine provides the following tools to help with administration and maintenance:

- **Administration Console for Content Platform Engine (ACCE)**
ACCE is a web tool that is used to administer and configure a FileNet P8 Domain, as well as to define and manage object stores and workflow systems.
- **FileNet Configuration Manager**
FileNet Configuration Manager is a graphical user interface to configure and deploy Content Platform Engine instances on an application server. It is generally used during initial installation or when applying software upgrades.
- **FileNet Deployment Manager (FDM)**
FDM is a desktop tool used to move data from one object store to another. FDM is often used to move data from one environment to another. For example, from development to Quality Assurance, and to Production.

FDM can also be used to move workflow and Content Navigator-related information, as well as to reassign object stores to different P8 domains.

- **IBM Content Engine Bulk Import Tool**
Bulk Import Tool is a command-line tool that you can use to import large volumes of documents into a Content Platform Engine object store.

Sites

A site is created to organize Content Platform Engine resources based on network topology. A site represents a geographical location where resources are connected through a local area network (LAN). Object stores, storage areas, content cache areas, index areas, and virtual servers are all associated with an individual site.

After you create a domain, the domain node contains one site that is named as Initial Site. This site is set as the default site for the domain. The default site contains the associated resources such as virtual servers, index areas, and object stores.

Resources that are added to the domain are associated with the default site, unless otherwise specified.

You can create a new site and set it as the default site. You can have multiple sites in a single FileNet P8 domain but each site name must be unique within the domain.

FileNet P8 component relationships

The components in a FileNet P8 environment are interdependent. Although most components do not require other components to be running to start successfully, the absence of some components can affect processing.

Generally, start the components and related servers in the following order. Reverse the order to shut down.

- Directory services
- Database servers
- Content Platform Engine servers
 - Content Platform Engine runs as an application within a Java EE application server.
- IBM Content Search Services servers
- IBM Content Navigator
 - IBM Content Navigator runs as application within a Java EE application server
- Other FileNet P8 components

Activity: Prepare your system - Start IBM FileNet P8 Platform

The environment that is provided with this course requires that you start the IBM WebSphere Application Server that hosts the IBM FileNet P8 Platform components. The WebSphere Admin folder on the desktop includes the scripts that you need to run to start the components.

For this course, you will use a Windows Server 2012 R2 operating system, and the server name is VCLASSBASE.edu.ibm.com.


Complete the following tasks to ensure that your environment is ready and the services are running before working on other activities in the course.

Log in to the system.

If the system is powered off, power the system on.

- Log in to the operating system by using the following credentials:
 - User: **p8admin**
 - Password: **FileNet1**

Verify that the WebSphere Application Server deployment manager and node agent started.

- Click the **Services**  shortcut on the taskbar.
- If the **IBM WebSphere Application Server V9.0 - Dmgr01** service does not have the Running status, then start it by right-clicking the service and selecting **Start**.
- If the **IBM WebSphere Application Server V9.0 - Node01** service does not have the Running status, then start it by right-clicking the service and selecting **Start**.

Start the WebSphere Application Server application servers.

Two application servers are needed: The *server1* application server runs Content Platform Engine (CPE) and the *ICNserver* application server runs IBM Content Navigator (ICN). Because ICN must be deployed in its own application server instance (deployed into a single JVM). Running ICN and CPE in the same JVM is not supported. CPE uses the port number 9080 and ICN uses 9081.

In this task, you will start *server1* first and then *ICNserver*. *Server1* usually starts in a couple of minutes and *ICNserver* can take longer.

- On the **Windows desktop**, open the **WebSphere Admin** folder.

- Right-click **_1 Start server1.bat**, and then select **Run as administrator**.
- Click **Yes** if prompted to allow the program to make changes.
Wait for the command window to close.
- Right-click **_2 Start ICNserver.bat**, and then select **Run as administrator**.
- Click **Yes** if prompted to allow the program to make changes.
Wait for the command window to close.

Troubleshooting.

- If any of the clients are not coming up, verify that the following two services are running:
 - IBM WebSphere Application Server V9.0 - Dmgr01
 - IBM WebSphere Application Server V9.0 - Node01
- Stop and start the components
In the WebSphere Admin folder, stop the two application servers and restart them.
 - Right-click **_3 Stop ICNserver.bat** and then select **Run as administrator**.
Wait for the command window to close.
 - Right-click **_4 Stop server1.bat** and then select **Run as administrator**.
Wait for the command window to close.
 - Right-click **_1 Start server1.bat** and then select **Run as administrator**.
Wait for the command window to close.
 - Right-click **_2 Start ICNserver.bat** and then select **Run as administrator**.
Wait for the command window to close.

Do not start the next script until the command window closes for the previous script.

Activity: Explore the core IBM FileNet P8 Platform applications

In this activity, you will check the IBM FileNet P8 components are running and then you will use the WebSphere Integrated Solutions console to explore the core IBM FileNet P8 Platform applications in WebSphere Application Server.

In this activity, you will accomplish the following:

- Check the FileNet P8 system components are running.
- Examine the IBM FileNet P8 Platform applications.
- Explore the interdependencies between IBM Content Navigator and Content Platform Engine.

Check the IBM FileNet P8 components are running.

In this activity, you will verify that all the components that are used in this course for the IBM FileNet P8 system are running. The IBM FileNet P8 system includes Content Platform Engine (CPE) with two primary services (content and process) and the IBM Content Navigator (ICN) client application. Because these two applications rely on more software, testing the two applications also ensures that the underlying software is also functioning properly within your system.

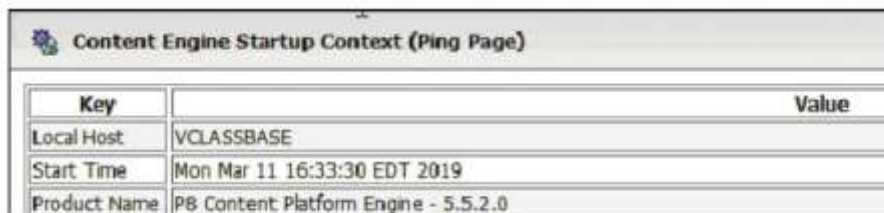
- Ensure that the IBM FileNet P8 Platform components are started.

If you have not started them, start the components by using the earlier activity:
Prepare your system - Start IBM FileNet P8 Platform.

- In the **Mozilla Firefox** browser, click the **Bookmarks** menu and then select **System Health > CE Ping**

You can also enter the following URL for the ping page:
<http://vclassbase:9080/FileNet/Engine>

- Verify that the **Content Engine Startup Context (Ping Page)** is displayed to indicate that Content Platform Engine content services are functioning properly.



Key	Value
Local Host	VCLASSBASE
Start Time	Mon Mar 11 16:33:30 EDT 2019
Product Name	P8 Content Platform Engine - 5.5.2.0

This page contains information about the IBM FileNet P8 system including the product name and version, and log files location.

- In the **Mozilla Firefox** browser, open a new tab, click the **Bookmarks** menu and then select **System Health > PE Ping**

You can also enter the following URL for the ping page:
<http://vclassbase:9080/peengine/IOR/ping>

- Type **p8admin** for the **User name** field, **FileNet1** for the **Password** field, and then click **OK**.
- Verify that the **Process Engine Server Information (Ping Page)** is displayed to indicate that Content Platform Engine process services are functioning properly.

This page contains information about the IBM FileNet P8 system including the product name and version, and log files location.

- In the **Mozilla Firefox** browser, open a new tab, click the **Bookmarks** menu and then select **System Health > FileNet P8 System Health**

You can also enter the following URL: <http://vclassbase:9080/P8CE/Health>

- Verify that the **IBM FileNet Content Manager - CE System Health** page is displayed.

This page includes information about P8 Domain (EDU_P8), object stores, and other resources. Each item has a link to view more details. The green circle shows these resources are available.

- Click the **Object Stores** link under the **Resources** section and then verify that the available object stores are listed.
- In the **Mozilla Firefox** browser, open a new tab, click the **Bookmarks** menu and then select **System Health > ICN Ping**

You can also enter the following URL for the ping page:

<http://vclassbase:9081/navigator/ping.jsp>

Takes a few seconds for the page to open.

- If prompted to log on, type **p8admin** for the **User name** field, **FileNet1** for the **Password** field, and then click **OK**.
- Verify that the **IBM Content Navigator Ping Page** is displayed to indicate that IBM Content Navigator application is functioning properly.

This page contains information about Content Navigator including the product name and version.

- In the **Mozilla Firefox** browser, open a new tab, click the **Sample Desktop** bookmark.

You can also enter the following URL: <http://vclassbase:9081/navigator/>

- If prompted to login, type **p8admin** for the **User name** field, **FileNet1** for the **Password** field, and then click **Log In**.
- Verify that the Content Navigator Desktop (called **Sample Desktop**) opens with the **Browse** view (indicated on the upper left).

This desktop is configured to browse the LoanProcess object store by default (indicated on the upper right).

- In this view, you can browse to folders, view documents, and manage the content.

If you get the Browse page, it indicates that the following components are running and communicating within your student system:

- A database system

Your student system uses the IBM DB2 database software. Every time a user logs in to the desktop, the desktop configuration is loaded from the DB2 database. This step demonstrates that the database used by the FileNet P8 Platform is functional.

- An LDAP directory service to handle user authentication. Your student system uses Active Directory.

- Click the **head and shoulder icon** on the banner, select **Log Out** to log out of **IBM Content Navigator** and then close the browser.



In a business scenario, if an IBM FileNet P8 environment has multiple CPE and ICN servers, the ping page only indicates that the one server that is used in the ping URL is verified. This statement applies even if you use a load balancer URL. For a multi-server environment, ping each server to ensure the whole environment is up and running.

Examine the IBM FileNet P8 Platform applications.

In this task, you will open the WebSphere Integrated Solutions Console and observe the IBM FileNet P8 Platform applications.

- In the **Mozilla Firefox** browser, click the **WAS** bookmark or enter the following URL: **<https://vclassbase:9043/ibm/console/logon.jsp>**
- Type **wasadmin** for the **User ID** field, **FileNet1** for the **Password** field, and then click **Log in**.

The console opens.

- On the left pane, expand the **Applications > Application Types** node and then click **WebSphere enterprise applications**.
- On the right pane, verify that the **Application Status** column shows a green arrow to indicate that the following two applications are running.
 - FileNetEngine (Content Platform Engine)
 - navigator (IBM Content Navigator)

Select	Name ↕	Application Status ↻
You can administer the following resources:		
<input type="checkbox"/>	DefaultApplication	✖
<input type="checkbox"/>	FileNetEngine	➡
<input type="checkbox"/>	navigator	➡

These two key applications are required for IBM FileNet P8 Platform. You will not be using the DefaultApplication and starting it is not required.

- Click **FileNetEngine** to open it.
It takes a few moments to open.
You can also right-click FileNetEngine and select Open Link in New Tab.
- Under the **Modules** section, click **Manage Modules**.

A list of modules are shown that make up the *FileNetEngine* application.


The *acce* application is the Administration Console for Content Platform Engine tool.

- If you opened the **FileNetEngine** application in a separate tab, close the tab.

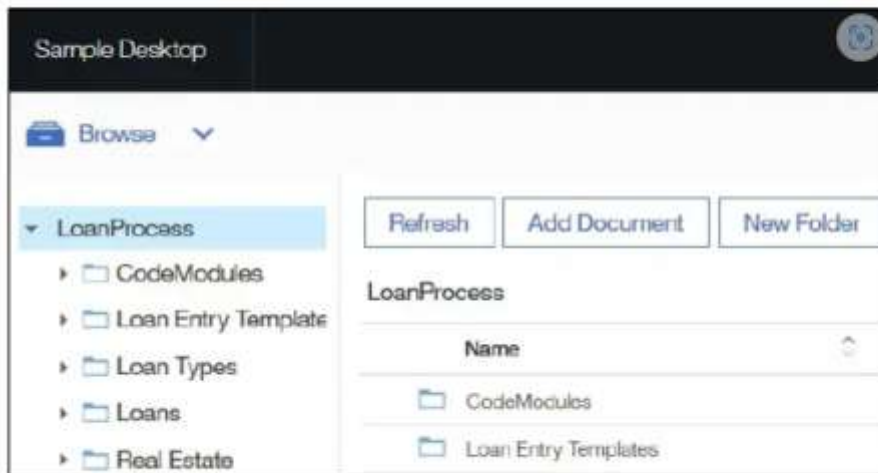
Explore the interdependencies between IBM Content Navigator and Content Platform Engine.

In this task, you will stop the FileNetEngine application (Content Platform Engine) and open an IBM Content Navigator (ICN) desktop. ICN is the primary web client for business users to work with content and workflow tasks. ICN connects to the IBM FileNet Content Manager repositories and uses the repository for authentication.

- If it is not already open, from the left pane, click the **Applications > Application Types > WebSphere enterprise applications** node.
- On the right pane, select the box next to **FileNetEngine** and click **Stop**.
- Wait until a **red X** is shown to the right of **FileNetEngine** on the **Application Status** column.
- Log out of the **WebSphere Integrated Solutions Console** and close the browser.
- Open the **Mozilla Firefox** browser, click the **Sample Desktop** bookmark or enter the following URL: **http://vclassbase:9081/navigator**.
- Type **p8admin** for the **User name** field, **FileNet1** for the **Password** field, and then click **Log In**.

You get an error with the message that the repository is not available. IBM Content Navigator (ICN) attempts to load the desktop but it cannot load the desktop because FileNetEngine is not running and ICN cannot connect to the repository.
- Close the browser and reopen to log in to the **WebSphere Integrated Solutions Console (WAS)** again with the same user ID and password as above (**wasadmin/FileNet1**).
- On the left pane, expand the **Applications > Application Types** node and then click **WebSphere enterprise applications**.
- On the right pane, select the box next to **FileNetEngine** and click **Start**.
- Wait until a green check mark is shown to the right of FileNetEngine on the **Application Status** column.
- Click the **Refresh**  icon next to the **Application Status** column header to refresh the view.
- Log out of the **WebSphere Integrated Solutions Console** and close the browser.
- In the **Mozilla Firefox** browser, click the **Sample Desktop** bookmark or enter the following URL: **http://vclassbase:9081/navigator**.
- Type **p8admin** for the **User name** field, **FileNet1** for the **Password** field, and then click **Log In**.

- This time, the desktop opens without any errors and the **LoanProcess** Repository is listed in the **Browse** mode.



- Logout of the ICN desktop and close the browser.

Activity: Locate P8 domain structures

In this activity, you will use Administration Console for Content Platform Engine to locate P8 domain structures.

In this activity, you will accomplish the following:

- Log in to Administration Console for Content Platform Engine (ACCE)
- Explore the domain level properties.
- Locate the Global Configuration folder structure.
- Locate the Object Stores folder structure.
- Find specific objects in a FileNet P8 Domain (Optional)

Log in to Administration Console for Content Platform Engine (ACCE).

Throughout this course, Administration Console for Content Platform Engine (ACCE) is also referred to as ACCE or the administration console.

- In the **Mozilla Firefox** browser, click the **ACCE** bookmark or type the following URL: **http://vclassbase:9080/acce**
- Type **p8admin** for the **User name** field, **FileNet1** for the **Password** field, and then click **Log In**.

This account is created on the student system and it has administrative rights on the FileNet P8 Domain.

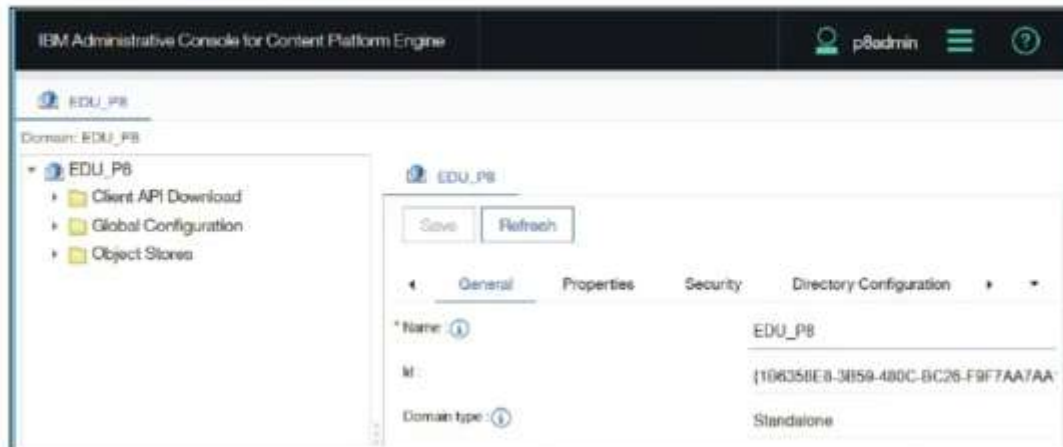
Administration Console for Content Platform Engine (ACCE) opens.

On the right pane, there are a series of subtabs, with the General subtab selected.

Explore the domain level properties.

In this task, you use ACCE to explore the domain level properties.

- On the right pane of ACCE, under the **General** subtab, notice the properties that are listed.



Name, ID, and type of the P8 domain are shown. The name of the domain for the student system is EDU_P8.

- Select the **Properties** subtab, click the **Property Name** cell to sort the list alphabetically and then review the properties that are listed.
The Default Site property has Initial Site as the value.
- Scroll down to the **Subsystem Configurations** property, and then click the blue down arrow to the right of that property.

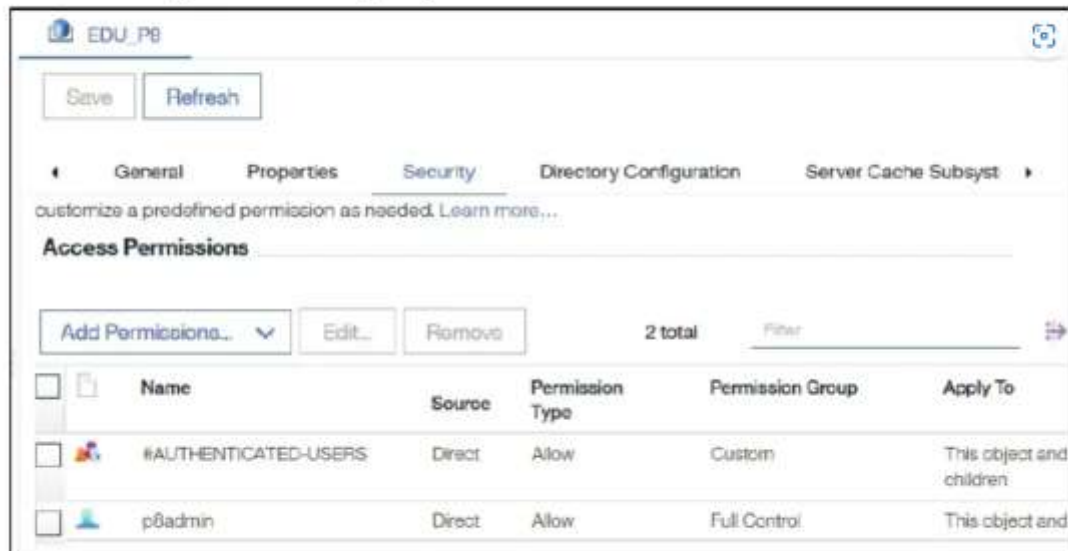


Observe that a list of different subsystem configurations displays. When you select a subsystem, it opens as a separate tab and the configuration can be updated.

- If you opened any subsystem tabs, you can close them.

- In the **EDU_P8** main tab, click the **Security** subtab.

In the security tab is where you grant access to the entire domain.



In this domain (EDU_P8), the p8admin user has full control on the domain and all its children. The default #AUTHENTICATED-USERS group has custom

permission access for the domain and its immediate children.

- Click the **Directory Configuration** subtab.

Notice that EDU_AD is defined for the P8 domain. A FileNet P8 Domain can be configured to use multiple directory configurations.

- Click the **EDU_AD** link in the **Name** column.

The EDU_AD tab opens.

- In the **EDU_AD** tab, examine the properties that are displayed, such as **Directory Server Type** and then close the tab.

The directory configuration is generally configured with the FileNet Configuration Manager. ACCE can be used to update the settings or just to view them.

- Click the **Server Cache Subsystem** tab and then review the properties.

You optimize the efficiency of the server cache for improving the system performance.

- Optionally, click each of the subsequent tabs to review the properties.

Click the forward arrow to access more tabs.

- Click the down arrow at the top right and select **SMTP Subsystem** tab.

Click the SMTP Subsystem tab, if the content is not displayed. You can also click Refresh. In this tab, you can configure an SMTP mail server to set up email notifications. Mail services are not enabled on this domain for the student system.

- Click the **Workflow Subsystem** tab.

In this tab, you enable Workflow and Case Analyzer and adjust tuning parameters.

Explore the Global Configuration folder structure.

In this task, you explore the properties and objects that are located in the Global Configuration folder.

- On the left pane of the **EDU_P8** tab, expand **Global Configuration > Administration > Sites > Initial Site (Default)**.
This is the site that is created when you create a P8 domain. This site is set as the default site for the domain.
You can create a new site and set it as the default site. You can have multiple sites in a single FileNet P8 domain.
 - Observe that there are several nodes listed under the **Initial Site (Default)** node.
The default site contains the associated resources such as virtual servers, index areas, and object stores.
Any resources that are added to the domain are associated with the default site, unless otherwise specified.
 - Select the **Initial Site (Default)** node on the left pane, explore the subtabs that are available for the **Initial Site (Default)** tab, and then close the tab.
 - On the left pane of the **EDU_P8** tab, expand **Global Configuration > Administration > Database Connections** and select **FNOSDS**.
The FNOSDS tab opens.
-

- On the right pane, click the **Properties** subtab of the **FNOSDS** tab and then examine the data source properties and the database type.
- Click the **Object Stores** subtab.
The object stores that use this database connection are listed.
- Click the **Sales** object store.
A new tab opens for the Sales object store. You will explore the object store in the next task.
- Close the **Sales** tab by clicking the **X** on the tab, and then close the **FNOSDS** tab by clicking **Close**.
- From the **EDU_P8** tab, on the left pane, collapse the **Administration** folder, expand the **Global Configuration > Data Design** and click the **Add-ons** folder.
On the right pane, object store add-ons are listed. When you create a new object store, you choose from this list of Add-ons. Each Add-on provides predefined metadata that extends the basic operation of IBM FileNet P8 Platform. For example, Thumbnail Extensions are required if your object store needs to support thumbnails.
- Close the **Add-ons** tab.
- On the left pane, notice the **Data Design > Marking Sets** folder.
Marking Sets are primarily used for records management. No Marking Sets are defined in this domain.

Explore the Object Stores folder structure.

In this task, you explore the objects and properties that are located in the Object stores folder.

- On the left pane of the **EDU_P8** tab, collapse the **Global Configuration** folder and expand the **Object Stores** folder.

A list of object stores that exist in the EDU_P8 domain are shown.

- Click the **Sales** object store.

The Sales tab opens.

- On the left pane, expand the **Administrative > Workflow system** and observe that there are nodes for **Connection Points** and **Isolated Regions**.

To learn more about how to configure a workflow system, refer to the *F231G: IBM Case Foundation 5.2.1 - Configure the workflow system* course.

- On the left pane, collapse **Administrative**, expand the **Browse** folder and then verify that there are two main nodes: **Root Folder** and **Unfiled Documents**.
- Expand **Root Folder** to view all the top-level folders that exist in this object store and then click **Orders** folder to open it.
- From the **Orders** tab > **Contents** subtab on the right, notice a list of documents that are filed in this folder.
- Open a document by clicking the link in the **Containment Name** column.

The document opens in a separate tab with the document name. You can access the properties and settings of the document.

- On the left pane, collapse the **Root Folder** and then click the **Unfiled Documents** node.

If any documents are added to this object store but not filed in a folder, they will be listed under this node.

- Close all open tabs on the right pane.
- On the left pane, collapse the **Browse** folder and expand the **Data Design** node.

Under this node, are objects that are used to define metadata such as property templates, classes, and choice lists.

- Expand **Classes > Document** to view all the document subclasses.
- Expand the **Order** subclass and notice that there are sub-classes that are called **ProductOrder** and **ServiceOrder**.
- Click **Order** to open the Order tab on the right pane.
- From the **Order** tab, click the **Property Definitions** subtab to access the property definitions that are defined for the **Order** class.

You will explore these property definitions in the following steps.

- Collapse the **Classes** node, expand the **Property Templates** folder and then scroll down to **customer_name**.

You can type the name in the filter field to find it quickly.

This is one of the property definitions that you saw for the Order class in the prior step.

- Click **customer_name** to open it and explore the subtabs under the **customer_name** tab.
- Close all open tabs on the right.

Find specific objects in a FileNet P8 Domain.

In this task, you will use Administration Console for Content Platform Engine (ACCE) to find specific objects in the FileNet P8 Domain. For more details, refer to the previous tasks.

- In **ACCE**, open the **Sales** object store, if it is not already opened.
- How many property definitions are defined for the **PriceQuote** document class?
- What are the names of the two workflows in the **Workflows** folder?

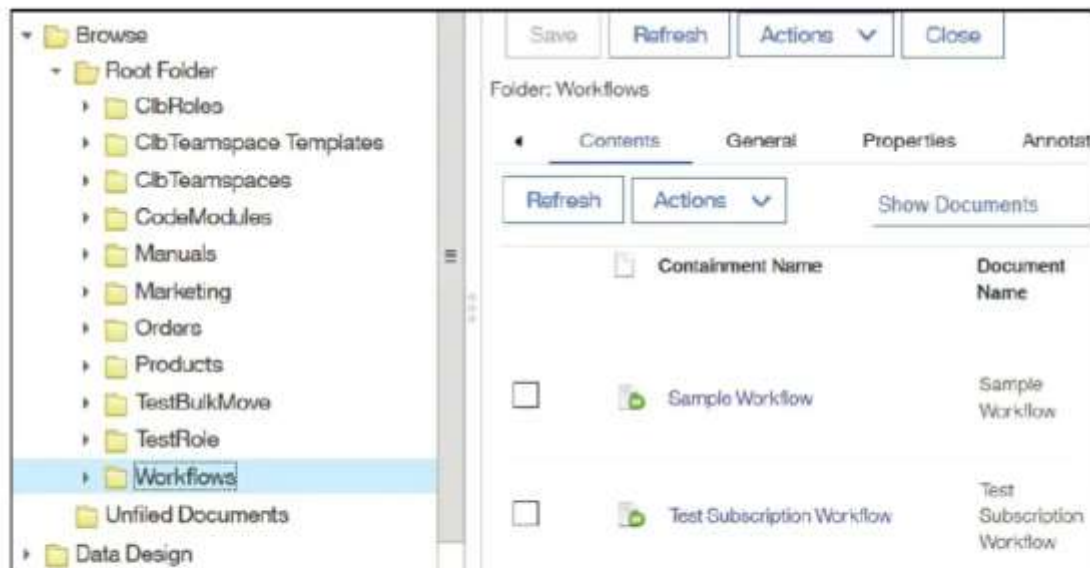
- Verify your answers:

The PriceQuote class has three property definitions: customer_name, Description, and price.

The screenshot shows the ACCE Administration Console interface. On the left, a tree view under 'Data Design' shows 'Classes' expanded, with 'PriceQuote' selected. On the right, the 'Class Definition: PriceQuote' panel is open, showing the 'Property Definitions' tab. It contains a table with three property definitions: 'customer_name' (String), 'Description' (String), and 'price' (Float). The 'Is Name' column is empty for all three.

Property	Data Type	Is Name
customer_name	String	
Description	String	
price	Float	

The names of the two workflows are: Sample Workflow, and Test Subscription Workflow.



- Click the Head and Shoulder icon on the banner and select **Log out** to log out of the Administration Console for Content Platform Engine and then close the browser.

Activity: Use IBM Content Navigator

IBM Content Navigator (ICN) is the primary web client for business users to work with content and workflow tasks. ICN client can be configured to connect to the IBM FileNet Content Manager repositories. Users can browse or search for content in the repositories, access their work items, and do many more content-related activities. In this activity, you will use the IBM Content Navigator Sample Desktop that is configured for the student system and explore a very simplified view of the application.

In this activity, you will accomplish the following:

- Log in to IBM Content Navigator desktop.
- Explore the repositories, folders, and documents.
- Add a folder and a document.

Log in to IBM Content Navigator desktop.

- In the **Mozilla Firefox** browser, click the **Sample Desktop** bookmark or enter the following URL: **<http://vclassbase:9081/navigator>**
- Type **p8admin** for the **User name** field, **FileNet1** for the **Password** field, and then click **Log In**.

The Content Navigator Desktop opens.

- Notice that the default page opened is **Browse**, as indicated in the upper left of the page and the default repository opened is **LoanProcess**.
- From the upper left, click the down arrow next to **Browse** and notice that the following features are listed: **Home, Browse, Search, Entry Template Manager, Work, and Administration**

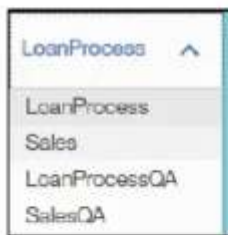
Each feature in an ICN desktop open as a page that contains a set of functionality and actions. For example, on the Browse feature page, you can browse the folders and documents, and you can perform actions associated with documents and folders.

Leave the Browse page in Content Navigator open for the next task.

Explore the repositories, folders, and documents.

P8admin user has access to multiple repositories. The LoanProcess repository opens by default. In this task, you will access other repositories and check the folders, documents, and the details for the documents.

- To open a different repository, click the down arrow next to **LoanProcess** on the upper right of the page and then select any of the available repositories from the list to access the content of that repository.



All the repositories that are configured for this desktop are shown in the list.

- Select the **Sales** repository.

This is the repository that you explored in the Administration Console for Content Platform Engine (ACCE) tool in a previous activity.

On the left pane, under the Sales repository, a list of top-level folders, to which the user has access is shown.

- Click **Workflows** and then observe that there are two documents filed in this folder. This is the folder that you explored in the ACCE tool in a previous activity. The documents in the selected folder are shown on the right pane. If there are any subfolders, they will also displayed.
- On the left pane, click the **Orders** folder, select a document (for example, **PO 3411.tif**) by clicking the document title. Single-click the document to view the properties on the lower right pane. A double-click opens the document in the Viewer (for the document mime types that are configured for this desktop). Content Navigator provides a thumbnail view of the document on the upper right pane.
- Review the information that is shown in the **Properties** section on the right pane. The document class is ProductOrder. It includes many custom properties that are specific to product order documents, such as customer_id, customer_name, po_number, and product_ids.
- Double-click the **PO 3411.tif** document title. The document opens in the Viewer. Notice that there are controls to magnify, rotate, and invert at the top. There are more controls on the left to add annotations to the image.
- Close the Viewer and leave Content Navigator open for the next task.

Add a folder and a document.

In this task, you create a folder and a document in an object store using the IBM Content Navigator (ICN) desktop.

- From the Browse page, click the down arrow next to **Sales** on the upper right and select the **LoanProcess** repository. You can also add folders and documents in any of the other repositories.
- Click **New Folder** from the toolbar.
- In the **New Folder** page, type **SampleFolder** for the **Folder Name** field. Leave the default values for all the other fields. Observe the Folder class and security that is assigned to this folder.

- Click **Add**.
- Back on the **Browse** page, double-click **SampleFolder** to open the new folder, and then click **Add Document** from the toolbar.
- In the **Add Document** page, type **SampleDoc** for the **Document Title** field.
- For the **What do you want to save?** field, click **Browse**.
- On the **File Upload** page, select any file from the **C:\Training\F2810G\SampleDocs** folder and then click **Open**.
Back on the Add Document page, leave the default for all the other fields. Observe the Document class and security that is assigned to this document.
- Click **Add** and then back on the **Browse** page, verify that the new document is listed.
- Click the **head and shoulder icon** in the banner, select **Log Out** to log out of IBM Content Navigator and then close the browser.

Throughout this course, you will be using IBM Content Navigator desktop to add content and modify properties.

IBM Content Navigator (ICN) courses provide details on ICN administration and on using ICN to manage the IBM FileNet Content Manager repository content.