

Course Exercises Guide

# IBM FileNet Content Manager

## 5.2.1: Introduction

Course code F280 ERC 1.0



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# Exercise 1. Place holder

## Estimated time

00:00

## Overview

No hands on lab for this lesson.

## Objectives

None

---

# Exercise 2. Explore the IBM FileNet Content Manager applications

## Estimated time

00:20

## Overview

Use the WebSphere Integrated Solutions console to explore the core applications that comprise IBM FileNet Content Manager.

## Objectives

After completing this exercise, you should be able to:

- Examine the applications that comprise IBM FileNet Content Manager.
- Explore the interdependencies between IBM Content Navigator and Content Platform Engine.

# Exercise Introduction

## Introduction

In this exercise, you:

- Examine the applications that must be running for IBM FileNet Content Manager to run.
- You stop the core Content Platform Engine (CPE) application and try to open an IBM Content Navigator desktop to see the interdependencies between IBM Content Navigator and CPE.

## Activities

- ["Explore the IBM FileNet Content Manager applications"](#) on page 2-3

## Before you begin

Follow the instructions in Procedure 1 and 2 of Appendix A to start the system components. ["Start and Stop System Components"](#) on page A-1

## User accounts

Type	User ID	Password
Administrator	p8admin	IBMFileNetP8



### Note

Passwords are always case-sensitive.

---

## 2.1. Explore the IBM FileNet Content Manager applications

### Introduction

In this activity, you use the WebSphere Integrated Solutions Console to explore the applications that comprise IBM FileNet Content Manager.

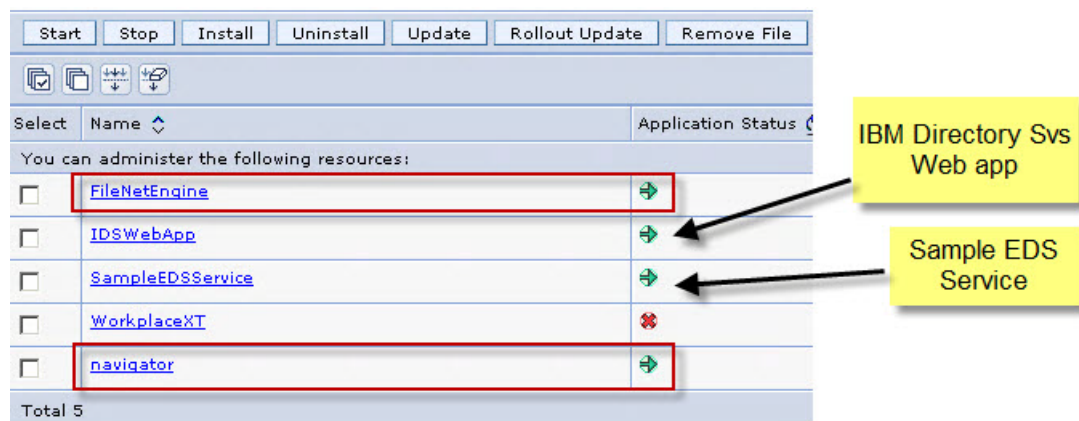
### Procedures

[Procedure 1, "Examine the applications that comprise IBM FileNet Content Manager,"](#) on page 2-3

[Procedure 2, "Explore the interdependencies between IBM Content Navigator and Content Platform Engine,"](#) on page 2-4

#### ***Procedure 1: Examine the applications that comprise IBM FileNet Content Manager***

1. If your student system is not started, follow the steps in the section, Before you begin at ["Exercise Introduction"](#) on page 2-2
2. Open the WebSphere Integrated Solutions Console.
  - a. Go to the folder, WebSphere Admin folder, on the desktop.
  - b. Double-click **Administrative console server1**.
  - c. Accept the username and password and click **Log in**. (It can take several seconds to log in).
3. Examine the applications that compose IBM FileNet Content Manager.
  - a. On the left, expand Applications > Application Types.
  - b. Click WebSphere enterprise applications.
  - c. The applications with a green arrow are running. The two key applications that are required for IBM FileNet Content Manager to run are:
    - FileNetEngine (Content Platform Engine)
    - Navigator (IBM Content Navigator)





4. Explore the FileNetEngine application.
  - a. Click FileNetEngine to open it.
  - b. Click Manage Modules.

Configuration

---

**General Properties**

\* Name  
FileNetEngine

Application reference validation  
Issue warnings

**Detail Properties**

- [Target specific application status](#)
- [Startup behavior](#)
- [Application binaries](#)
- [Class loading and update detection](#)

**Modules**

- [Manage Modules](#)
- [Metadata for modules](#)
- [Display module build Ids](#)

**Web Module Properties**

- [Session management](#)
- [Context Root For Web Modules](#)
- [Initialize parameters for servlets](#)
- [JSP and JSF options](#)
- [Virtual hosts](#)

- c. You see the modules that make up the FileNetEngine application.
  - The application acce is the Administration Console for Content Platform Engine.

Select	Module	URI	Module Type
<input type="checkbox"/>	<a href="#">Engine-ejb-ws.jar</a>	Engine-ejb-ws.jar,META-INF/ejb-jar.xml	EJB Module
<input type="checkbox"/>	<a href="#">peengine-ejb.jar</a>	peengine-ejb.jar,META-INF/ejb-jar.xml	EJB Module
<input type="checkbox"/>	<a href="#">Engine-init.war</a>	Engine-init.war,WEB-INF/web.xml	Web Module
<input type="checkbox"/>	<a href="#">client-download.war</a>	client-download.war,WEB-INF/web.xml	Web Module
<input type="checkbox"/>	<a href="#">engine-health</a>	Engine-health.war,WEB-INF/web.xml	Web Module
<input type="checkbox"/>	<a href="#">IBM FileNet P8 CEWS</a>	cews.war,WEB-INF/web.xml	Web Module
<input type="checkbox"/>	<a href="#">acce</a>	acce_navigator.war,WEB-INF/web.xml	Web Module
<input type="checkbox"/>	<a href="#">IBM FileNet BPM PEWSI</a>	pewsAxis2-ws.war,WEB-INF/web.xml	Web Module
<input type="checkbox"/>	<a href="#">IBM Content Case Engine</a>	peengine.war,WEB-INF/web.xml	Web Module
<input type="checkbox"/>	<a href="#">IBM Content Case Engine WS-Broker</a>	ccepowsbroker.war,WEB-INF/web.xml	Web Module
<input type="checkbox"/>	<a href="#">FileNet P8 Connector</a>	engine.rar,META-INF/ra.xml	Connector Module

## ***Procedure 2: Explore the interdependencies between IBM Content Navigator and Content Platform Engine***

In this procedure, you stop the CPE application, FileNetEngine, and attempt to open an IBM Content Navigator desktop.

1. Stop FileNetEngine.
  - a. On the left, click the node, WebSphere enterprise applications.

- b. On the right, select the box next to FileNetEngine and click Stop.
  - c. Wait until you see a red X to the right of FileNetEngine.
2. Test opening the Sample desktop.
  - a. Open another browser tab.
  - b. Open the Sample desktop, <http://ecmedu01:9080/navigator>.
  - c. You get the error, **The repository is not available**.
  - d. Close the message after you are done reading. You see that Content Navigator attempts to load the desktop. It can't load the desktop because FileNetEngine is not running.
  - e. Close the browser tab that you opened.

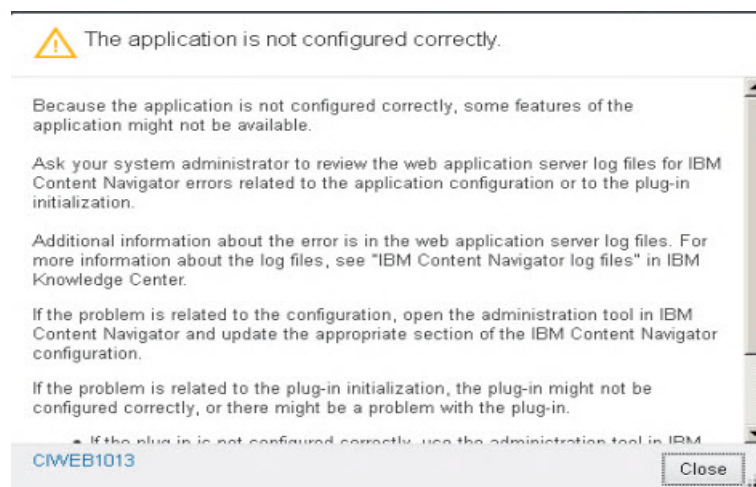


### Information

The Content Platform Engine is stopped, IBM Content Navigator cannot connect to the repository, so the desktop cannot open.

3. Start FileNetEngine.
  - a. Go back to the WebSphere Integrated Solutions Console tab.
  - b. Select the box next to FileNetEngine and click Start.
  - c. Wait until you see a green check mark to the right of FileNetEngine.
4. In a new browser tab, open the Sample desktop, <http://ecmedu01:9080/navigator>.
  - a. The desktop opens and automatically logs in as p8admin because of the WebSphere Integrated Solutions Console logged on session.

You might get the following message, when you open the Sample Desktop. It is OK to proceed. Close the window.



5. Logout and close all the browser tabs.

---

# Exercise 3. Explore Administration Console for Content Platform Engine

## Estimated time

00:30

## Overview

Use the Administration Console for Content Platform Engine (ACCE) to locate FileNet P8 Domain objects.

## Objectives

After completing this exercise, you should be able to:

- Explore the domain level properties.
- Locate the Global Configuration folder structure.
- Locate the Object Stores folder structure.
- Challenge: Find specific objects in a FileNet P8 Domain.

# Exercise Introduction

## Introduction

In this exercise, you explore the Administration Console for Content Platform Engine (ACCE).

## Activities

- [Use Administration Console for Content Platform Engine to locate FileNet P8 Domain objects](#), on page 3-3
- [Challenge - Find objects in the domain](#), on page 3-10

## User accounts

Type	User ID	Password
Administrator	p8admin	IBMFileNetP8



### Note

Passwords are always case-sensitive.

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## 3.1. Use Administration Console for Content Platform Engine to locate FileNet P8 Domain objects

### Procedures

[Procedure 1, "Explore the domain level properties,"](#) on page 3-3

[Procedure 2, "Explore the Global Configuration folder structure,"](#) on page 3-5

[Procedure 3, "Explore the Object Stores folder structure,"](#) on page 3-6

### **Procedure 1: Explore the domain level properties**

In this procedure, you use the Administration Console for Content Platform Engine (ACCE) to explore the domain level properties.

1. Start Administration Console for Content Platform Engine (ACCE).
  - a. Open a Mozilla Firefox window.
  - b. Go to the URL, <http://ecmedu01:9080/acce>.



#### Hint

A bookmark, ACCE is created for your convenience.

- c. Log in with an account that has administrative rights on the FileNet P8 Domain:
  - Username: p8admin
  - Password: IBMFileNetP8
2. On the right, you see a series of tabs, with the General tab selected. Four general properties are listed:

The screenshot shows the 'P8Domain' configuration page in the Administration Console. The 'General' tab is selected. The following table represents the data shown in the form:

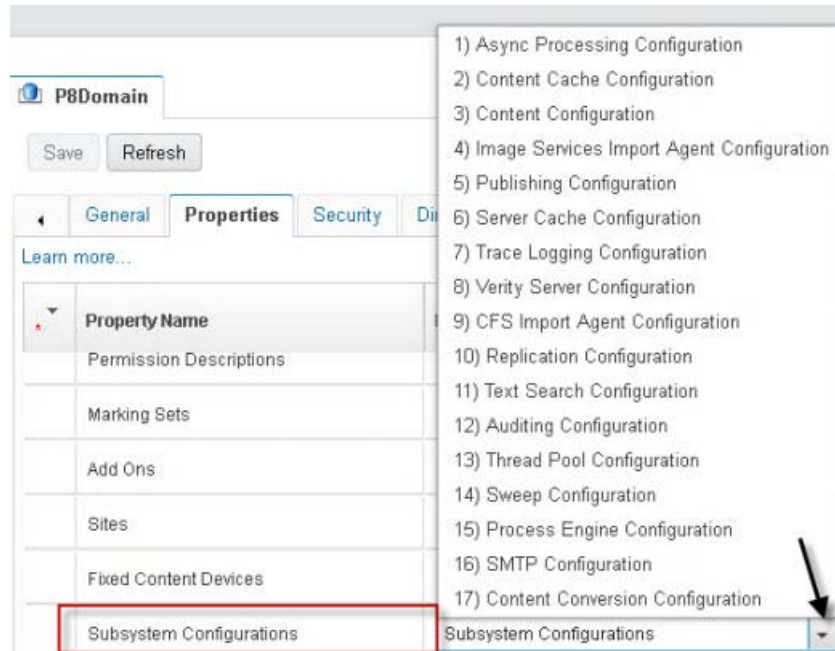
Property	Value
Name	P8Domain
Id	{E5C36E02-20D2-47CD-A2CB-07F0DB1B4412}
Domain type	Standalone
Documentation URL	<a href="http://www.ibm.com/support/knowledgecenter/SSNW2F_5.2.1">http://www.ibm.com/support/knowledgecenter/SSNW2F_5.2.1</a>

Yellow callout boxes with arrows point to the following fields:

- Name of the P8 domain:** Points to the 'Name' field.
- ID or globally unique identifier (GUID). A 128-bit data identifier used to:** Points to the 'Id' field.
- Domain type, standalone, managed or non-:** Points to the 'Domain type' field.
- Documentation URL:** Points to the 'Documentation URL' field.

3. Explore the Properties tab.
  - a. Click the Properties tab.
  - b. Review the properties listed.

- c. Scroll down until you see Subsystem Configurations, and click the down arrow to the right.
- You see a list of different subsystem configurations that you can select.



- Close any subsystem tabs that you opened.

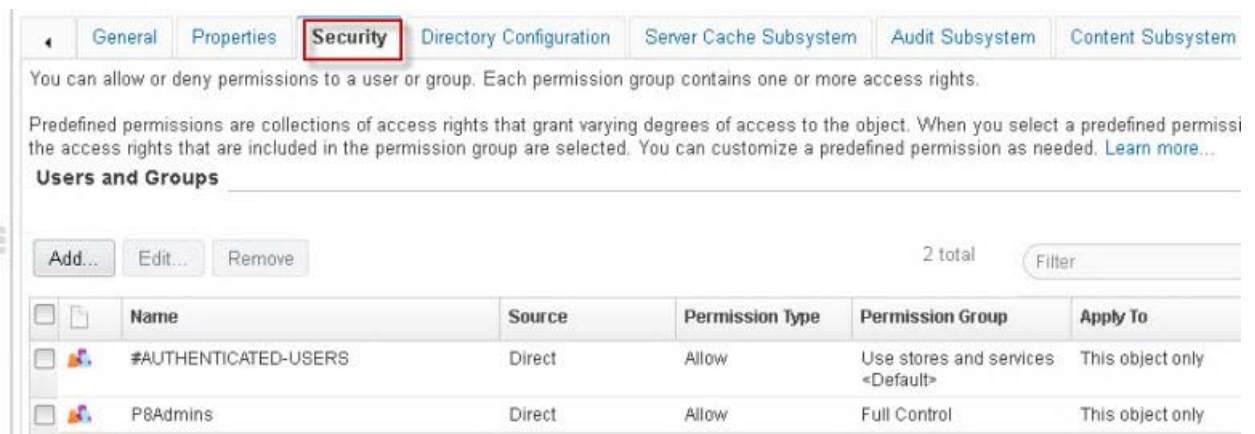


### Note

Depending on the property, you might be able to select options or values.

## 4. Explore the Security tab.

- Back in the P8Domain tab, click the Security tab.
- The Security tab is where you grant access to the entire domain.



**Note**

In this FileNet P8 Domain, P8Admins has full control on the domain. The default group, #AUTHENTICATED-USERS has default access to use stores and services.

5. Explore the Directory Configuration tab.
  - a. Click the Directory Configuration tab.
    - A FileNet P8 Domain can be configured to use multiple directory configurations.
  - b. Click P8\_TDS and examine the properties displayed.
  - c. Close the P8\_TDS tab.

**Information**

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

6. Explore the remaining tabs.
  - a. Click the Server Cache Subsystem tab.
  - b. Review the properties.
  - c. Click each of the subsequent tabs and review the properties (you might need to click the right arrow to see all the tabs). Stop when you get to the SMTP Subsystem tab.
7. Explore the SMTP Subsystem tab.
  - a. Click the SMTP Subsystem tab.
  - b. In this tab, you configure an SMTP mail server to set up email notifications.
    - Mail services are not enabled on this domain.
8. Explore the Workflow Subsystem tab.
  - a. Click the Workflow Subsystem tab.
  - b. In this tab, you enable Workflow and Case Analyzer and adjust tuning parameters.

## ***Procedure 2: Explore the Global Configuration folder structure***

In this procedure, you explore the properties and objects located in the Global Configuration folder.

1. On the left, expand Global Configuration > Administration
2. Examine a database connection.
  - a. Expand Database Connections and click FNOSDS.
  - b. On the right, click the Properties tab.
    - Examine the properties displayed.

- c. Click the Object Stores tab.
    - The object stores that use this database connection are listed.
  - d. Click the object store, LoanProcess.
    - A new tab opens next to P8Domain. You explore the object store in another procedure.
    - Close the LoanProcess tab.
  - e. Close the FNOSDS tab, click Close, or click the x on the tab.
  - f. Close the Database Connections tab.
3. Explore the other nodes under Administration.
    - When you are done, collapse the Administration node.
  4. Expand the node, Data Design.
    - a. Click Add-ons.
      - The list of available Add-ons are listed.



### Information

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 Content Manager. For example, Thumbnail Extensions are required if your object store needs to support thumbnails.

---

- b. Click Marking Sets.
  - Marking Sets are primarily used for records management.
  - No Marking Sets are defined in this domain.

## ***Procedure 3: Explore the Object Stores folder structure***

In this procedure, you explore the objects and properties located in the Object stores folder.

1. On the left, expand the node, **Object Stores**.
  - a. The list of object stores that exist in the FileNet P8 Domain are listed.
2. Click the object store, **LoanProcess**.
  - a. A new tab is opened, next to the P8Domain tab.



### Note

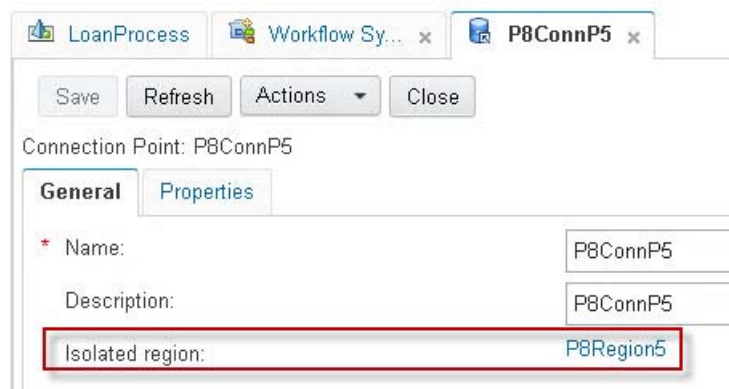
The view is the same view that displayed when you selected the object store, LoanProcess, from the Database Connections tab in the Global Configuration node.

---

3. Explore the folder, **Administrative**.
  - a. Expand the node, Administrative.



- b. Explore each of the nodes. Stop when you get to Workflow System.
4. Explore the subfolder, **Workflow System**.
  - a. On the left, click Workflow System.
  - b. On the right, explore the tabs available that contain properties that apply to the entire Workflow System.
  - c. On the left, expand Workflow system.
  - d. Expand **Connection Points** and click **P8ConnP5** to open it.
    - On the right, in the General tab, you see that P8ConnP5 is associated with isolated region, P8Region5.



- e. On the left, expand the node, Isolated Regions and expand P8Region5.
  - You see all the isolated region objects, such as Application Spaces, Component Queues, User Queues.



### Information

In previous versions of the software, these objects were configured with the Process Configuration Console.

- f. On the left, click P8Region5 to open it.
  - On the right, a series of tabs are displayed where you can adjust configuration properties for the isolated region.
  - Explore the tabs.



### Information

If you want to learn more about how to configure a workflow system, see the course, F231: IBM Case Foundation 5.2.1 - Configure the workflow system.

- g. Close all open tabs on the right.
- h. On the left, collapse the folder, Administrative

5. Explore the folder, **Browse**.
  - a. On the left, expand the node, Browse.
  - b. You see two nodes, Root Folder and Unfiled Documents.
  - c. Expand Root Folder to see all the folders that exist in the domain.
  - d. Click **Root Folder** to open it. The contents of the folder are displayed on the right.
    - Explore each of the tabs on the right.
  - e. On the left, click the folder, **Loans**, to open it.
    - Review the documents that are filed in the Loans folder.
    - Explore each of the tabs on the right.
    - Try opening one of the documents and exploring the tabs for the document.
  - f. On the left, click the node Unfiled Documents.
    - This FileNet P8 Domain does not have any documents that are not filed in a folder.
  - g. Close all open tabs on the right.
  - h. On the left, collapse the folder, **Browse**.
6. Explore the folder, **Data Design** (you explore a few of the more commonly used data design objects).
  - a. On the left, expand the node, Data Design.
    - Under this node, you find objects that are used to define metadata such as property definitions, classes, and choice lists.
  - b. Expand **Classes > Document** to see all the subclasses.
    - Expand the subclass, **Loan**. You see one sub-class, **HomeLoan**.
    - Click **Loan** to open it.
    - On the right, click the Property Definitions tab to see the property definitions defined for Loan.
  - c. On the left, expand the class, **Folder**. You see three sub-classes for the class Folder.
  - d. Expand the folder, **Property Templates**. Scroll down until you see **LoanAmount**.
    - Click LoanAmount to open it.
    - On the right, explore the tabs.
  - e. Close all open tabs on the right.
  - f. On the left, collapse the folder, **Data Design**.
7. Explore the folder, **Events, Actions, Processes**.
  - a. On the left, expand the node, **Event, Actions, Processes**.
  - b. Click Event actions.
    - Two event actions are displayed.
  - c. On the left, click Subscriptions.

- Two subscriptions display.
- Click each of the listed subscriptions.

**Note**

Only Loan Process Autolaunch has a workflow tab. Loan Process Autolaunch is a workflow subscription. Customer Creation subscription is an event subscription.

---

8. Explore the folder, **Sweep Management**.
  - a. On the left, expand the node, Sweep Management.
  - b. Explore each of the nodes listed.
  - c. Close all open tabs on the right.
  - d. On the left, collapse the folder, **Sweep Management**.
9. Log out of the administration console and close the browser.

## 3.2. Challenge - Find objects in the domain

### Scenario

Use Administration Console for Content Platform Engine to find specific objects in the FileNet P8 Domain.

### Data

- Object store to search in: Sales

### Challenge

- Find the document class, PriceQuote. How many property definitions are defined in the class?
- What are the two names of the workflows in the folder, Workflows?

### Verification

- The class, PriceQuote has three property definitions defined: customer\_name, Description, and price.
- The two names of the workflows are: Sample Workflow, and Test Subscription Workflow.

---

# Appendix A. Start and Stop System Components

## Appendix Overview

This image contains three WebSphere Application Server profiles. For this unit, you use the profile for server1, which hosts the following applications:

- Tivoli Directory Server Administration tool
- Content Platform Engine
- IBM Content Navigator
- Administration Console for Content Platform Engine

## List of procedures:

- [Procedure 1, "Start system components,"](#) on page A-1
- [Procedure 2, "Check system components,"](#) on page A-2
- [Procedure 3, "Stop system components,"](#) on page A-3

## Procedure 1: Start system components

There are start scripts to make starting the WebSphere Application Server profiles easier. The scripts are in the folder WebSphere Admin on the desktop.



### Important

If you just started the student system, ensure that the Windows 7 Operating System completes starting all the services before starting the WebSphere Application Server profile. Launch the Windows Task Manager and ensure that CPU usage is down to 0-1% CPU usage. It can take several minutes.

- 
1. Open the WebSphere Admin folder on the desktop.
  2. Double-click the *Start Server1.bat* to run the script.
  3. Wait for the command window to disappear. (Can take several minutes).



### Note

For your convenience, the WebSphere Admin folder also contains:

- A link to launch the WebSphere administrative console for each server profile.

- A shortcut to the location of the WebSphere Application Server logs for each profile.
- 
- Minimize the WebSphere Admin folder.
- 



### Information

The Start Server1.bat, starts the WebSphere Application Server, *server1*, which starts the following applications:

- Tivoli Directory Server Administration tool
  - Content Platform Engine
  - IBM Content Navigator
  - Administration Console for Content Platform Engine
- 

## Procedure 2: Check system components

An IBM FileNet P8 Workflow system consists of one main engine, the Content Platform Engine, with two primary services, content and process services. In addition to the Content Platform Engine, a client application is required for the users and databases are required to store configuration information and the object stores. The client that you use for these activities is IBM Content Navigator. You work with two IBM Content Navigator desktops that are configured for the workflow system administrator and for the workflow author. You need to verify that the Content Platform Engine and the IBM Content Navigator desktops are fully functional before you start your student exercises. 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.

1. Verify that the Content Platform Engine, content services are functioning properly by opening the Content Engine Startup Context (Ping Page).
    - a. Open a Mozilla Firefox browser window.
    - b. Go to the URL: `http://ecmedu01:9080/FileNet/Engine`
- 



### Hint

There is a bookmark in the Bookmarks menu under:

- *System Health > CE ping*
- 

Because the Content Platform Engine is running as an application inside the IBM WebSphere Application Server, successfully viewing the Content Platform Engine Ping Page indicates that the web application server is also running on your student system.

2. Verify that the Content Platform Engine process Services are functioning properly.
    - a. Open a new browser tab.
    - b. Go to the URL: `http://ecmedu01:9080/peengine/IOR/ping`
- 

**Hint**

There is a bookmark in the Bookmarks menu under:

- *System Health > PE ping*
- 
- c. Log in as the P8 administrator.
    - Username: p8admin
    - Password: IBMFileNetP8
  - d. If both ping pages display successfully, close the browser and all the tabs.

***Procedure 3: Stop system components***

1. Open the WebSphere Admin folder on the desktop.
2. Double-click the Stop Server1.bat to run the script.
  - a. Wait for the command window to disappear (Can take several minutes).



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