

Course Exercises Guide

# IBM Datacap 9.0.1 Administration

Course code F258 ERC 1.0



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# Unit 1. Administration of Production System

## Estimated time

05:00

## Unit overview

This unit contains these lessons.

### Lessons

[Lesson 1.1, "Create Shortcuts for Web Clients,"](#) on page 1-7

[Lesson 1.2, "Virtual Stations and Queuing of Tasks,"](#) on page 1-16

[Lesson 1.3, "Disaster Recovery,"](#) on page 1-26

[Lesson 1.4, "Configure DB2 Server,"](#) on page 1-28

[Lesson 1.5, "Application Globalization,"](#) on page 1-35

### Requirements

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

### Do this first



#### Windows

Do Steps 1-2 on the ECMEDU01 Server image.

---

1. If you are prompted to log in to the system, use:

Type	User ID	Password
Operating system	Administrator	passw0rd

2. In your server image, start WebSphere Application Server.
  - a. Open the "WebSphere Admin" folder on the Desktop.
  - b. Double-click the Start Server1.bat script file.

It starts the IBM FileNet Content Manager and the IBM Content Navigator.



## Windows

Do Step 3 on the DCCLIENT Client image.

3. If you are prompted to log in to the system, use:

Type	User ID	Password
Operating system	Administrator	class

## Image Preparation



## Windows

Do all the Image Preparation steps (Steps 1-5) on the ECMEDU01 Server image.



## Important

Configure NENU

- If you have completed the “System Configuration” and “Component Configuration” units on this same image or if you are continuing this unit as part of the Administration course (F262), then you can skip the Step 1.
- If you are working on this unit using a fresh image or if you are taking this unit as a standalone class (F258), then start with step 1.

1. In your server image, configure NENU for LLLDAP authentication.

In Unit 2 of this class (Components Configuration) there is lesson for Datacap Maintenance Manager which uses a sample application named NENU. This Application needs to be enabled for LLLDAP authentication. To do this, you copy the Admin Database from the ExpenseDemo application to the NENU application folder.

- Open the Datacap Server Manager and stop the Datacap Service, if is not stopped.
- In Windows Explorer, go to the C:\Datacap\ExpenseDemo folder. Right-click the ExpenseDemoAdm.mdb database and select Copy.
- Go to the C:\Datacap\NENU folder. Right-click and select Paste.
- Rename NENUAdm.mdb to NENUAdm-save.mdb
- Rename ExpenseDemoAdm.mdb to NENUAdm.mdb.



## Important

Switch to the LLLDAP Authentication Method and configure TravelDocs to use an LLLDAP enabled Database.

The Tivoli Directory Services database is already configured for LLLDAP group authentication. Because TravelDocs is setup as the default Datacap Navigator repository, it must be updated with the Datacap groups that are defined in the Tivoli Directory Services Database.

- If you have completed the “System Configuration” and “Component Configuration” units on this same image or if you are continuing this unit as part of the Administration course (F262), then in the “System Configuration” unit, you configured the TravelDocs application for LLDAP authentication already. You can skip step 2 to 4 and go to step 5.
- If you are working on this unit using a fresh image or if you are taking this unit as a standalone class (F258), then you must do Steps 2 - 4 to configure the TravelDocs application to Authenticate using LLDAP.

2. In your server image, copy the LLLDAP enabled Database Admin database for TravelDocs.

- a. In Windows Explorer, go to C:\DC9-Lab Exercises\TravelDocsDB.
- b. Right-click the TravelDocsAdm-LLLDAP.mdb file and select Copy.
- c. Go to C:\Datacap\TravelDocs.
- d. Right-click anywhere in the folder and select Paste.

3. In your server image, Connect to LLLDAP enabled Adm database file.

Configure the TravelDocs Admin Database connection string to point to an admin database that has the groups included.

- a. Click Start > All Programs > IBM Datacap Services > Datacap Application Manager.
- b. Scroll and select the TravelDocs application in the left pane.
- c. In the right pane, the database paths are on the Main tab.
- d. In the Main tab > for the “Administration” field, click the Ellipsis at the right of the field.
- e. In the “Database connection parameters” dialog box > “Database type or provider name” field, select Microsoft Access (Jet) from the list.
- f. Click the Database Ellipsis and browse and select the database:  
C:\Datacap\TravelDocs\TravelDocsAdm-LLLDAP.mdb
- g. Click Open.
- h. Click OK.
- i. Click “Save changes” and then close the Datacap Application Manager.

4. In your server image, select the LLLDAP Authentication Method.

- a. Click Start > All Programs > IBM Datacap Services > Datacap Server Manager. or use the shortcut on the desktop.

- b. In the “Service” tab, click Stop (Red rectangle).
  - c. Click the Datacap tab.
  - d. If the “Advanced settings” are not showing, then click “Show advanced”.
  - e. For the “Authentication System” field, select the LLLDAP option from the list.
  - f. In Windows Explorer, open the C:\DC-Lab Exercises\Authentication\DCServiceTemplates.txt file.
  - g. Copy LLLDAP Authentication path template string from the file.
  - h. Paste it in the Authentication path template field.
  - i. Click Save.
  - j. Leave the Datacap Server Manager window open for the next step.
5. In your server image, start the Datacap Server.
- a. If the Datacap Server Manager is already not opened, click Start > All Programs > IBM Datacap Services > Datacap Server Manager.
  - b. In the Datacap Server Manager window > Service tab, click Start to start the Datacap Server Service. The Start operation is disabled if it is already started.
  - c. Click Close to close the Datacap Server Manager window.

## System Check

The activities in this unit assume that all system services are running when you begin an activity session. Perform a system check whenever you start an IBM FileNet Content Manager system or start working on a system that is in an unknown state.



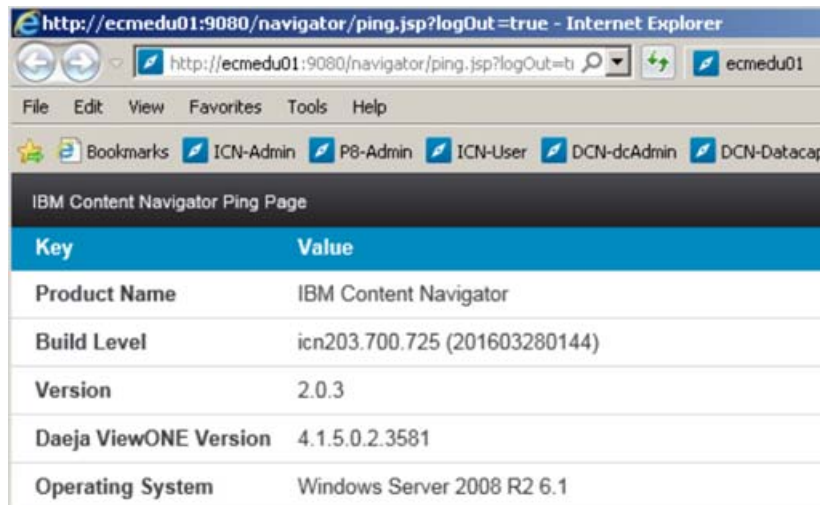
### Windows

Do Step 3 on the DCCLIENT Client image. Do all other System Check steps on the server image ECMEDU01.

---

1. Go to IBM Content Navigator Ping page:  
 URL: <http://ecmedu01:9080/navigator/Ping>  
 Or use the “ICN Ping page” shortcut in the Internet Explorer browser.
  - a. Log in using p8admin/IBMFileNetP8.
  - b. Verify that WebSphere resident services are running. You should see the following image,





Key	Value
Product Name	IBM Content Navigator
Build Level	icn203.700.725 (201603280144)
Version	2.0.3
Daeja ViewONE Version	4.1.5.0.2.3581
Operating System	Windows Server 2008 R2 6.1

This page displays the version information for Content Navigator and Operating system.

If you see the Content Navigator information this proves that WebSphere is running and that the P8 Content Manager is operational.

2. In your server image, open a command prompt window and ping the DCCLIENT student image.

Start > Accessories > Command Prompt

ping dcclient

Verify that the responding address is the same as the client IP address.

3. In your client image, open a command prompt window and ping the ECMEDU01 student image.

Start > Accessories > Command Prompt

ping ecmedu01

Verify that the responding address is the same as the ecmedu01 IP address.

4. In your server image, log in to the TravelDocs application with Datacap Studio as susan/class to verify that the Datacap Server is active and connected.

- a. Double-click the Datacap Studio icon on the desktop.

- b. Select the TravelDocs application and click Next.

- c. Use susan/class for User ID and Password, and 1 for the Station.

If you are able to login successfully, then the Datacap Server Manager service is started and it is servicing authentication requests.

- d. Click Exit in the upper right corner of the window to close Datacap Studio.

5. Check Tivoli Directory Services.

- a. Start > Administrative Tools > Services

- b. Check that the Tivoli services are Started:

DB2 - TDSV63DB2 - DB2TDS63-0

DB2 - TDSV63DB2 - DSRDBM01

also

IBM Tivoli Directory Admin Server V6.3 - dsrdbm01

IBM Tivoli Directory Server Instance V6.3 - dsrdbm01

6. Check the Tivoli Server is started.
    - a. Start > All Programs > IBM Tivoli Directory Server 6.3 > Web administration Tool
    - b. Login as cn=root/IBMFileNetP8
    - c. Click Server administration.
    - d. Click Start/stop/restart server.
    - e. Click Start if the server is not started.
    - f. In the left pane, scroll down and click Logout.
    - g. Close the “Tivoli Directory Server Web administration Tool” window.
  7. See Appendix A for procedures to Start, Check, and Restart components on the Student system.
-

# Lesson 1.1. Create Shortcuts for Web Clients

## Overview

### Why is this lesson important?

As an Administrator of an IBM Datacap capture system, you must be familiar with all configuration tasks for a functional IBM Datacap system.

You must configure shortcuts on the tmweb > Administrator > Shortcuts menu. These shortcuts define workstation and tmweb executable tasks for an application.

## Activities

- [Exercise 1: Configure Web Client Shortcuts](#), on page 1-8

## User Accounts

Table 1:

Type	User ID	Password
Server Administrator	Administrator	passw0rd
Workstation Administrator	Administrator	class
	erin	class
	sam	class
	susan	class
	vinny	class



### Note

Passwords are always case-sensitive.

## Exercise 1: Configure Web Client Shortcuts

### Introduction

In this activity, you configure a set of shortcuts for the ExpenseDemo application. Some of them are applicable to thin client, and some for thick client. Shortcuts are displayed as links in Taskmaster Web Operations tab. The shortcuts are also used in the Datacap Desktop client.

### Procedures

[Procedure 1, "Define LLLDAP Datacap Groups,"](#) on page 1-8

[Procedure 2, "Configure Shortcuts in Web Client,"](#) on page 1-9

[Procedure 3, "Verify Quiz Answers,"](#) on page 1-11

[Procedure 4, "Use the Web Client to scan and upload,"](#) on page 1-13

[Procedure 5, "Use Datacap Desktop to run Profiler,"](#) on page 1-14

[Procedure 6, "Use Datacap Desktop to run the verify task,"](#) on page 1-14



#### Important

For this activity, you use the ExpenseDemo application to do the lab activities.



#### Windows

For this activity, you complete the steps on the Windows 2008 Server system.

### ***Procedure 1: Define LLLDAP Datacap Groups***

1. Set authentication to LLLDAP.
  - a. Click Start > All Programs > IBM Datacap Services > Datacap Server Manager.
  - b. Click Stop.
  - c. Click the Datacap tab and select LLLDAP for Authentication System.
  - d. Verify and if needed set the Authentication path template to:

```
ecmedu01:389/BindUser:cn=p8admin,o=sample?BindPw:IBMFileNetP8?UserBaseDn:o=sample?UserSearchFilter:(amp(objectClass=person)(cn=ser%>))?UserShortNameAttr:cn?UserDisplayNameAttr:sn?GroupBaseDn:o=sample?GroupSearchFilter:(amp(objectClass=groupOfNames))?GroupShortNameAttr:cn?GroupDisplayNameAttr:cn?GroupMembershipSearchFilter:(amp(objectClass=groupOfNames)(member=ser%>))
```

**Note**

You can copy this string from: C:\DC9-Lab Exercises\Authentication\DCServiceTemplates.txt

- e. Click Save.
- f. Click the Service tab and click Start.
- g. Close the Datacap Server Manager Window.

## ***Procedure 2: Configure Shortcuts in Web Client***

1. Log in to the tmweb Client as the Administrator user.
  - a. Open Internet Explorer.
  - b. Click the tmweb link on the taskbar.
  - c. Select the ExpenseDemo application and select enter the credentials as follows:
 

User ID: susan  
 Password: class  
 Station: 1
  - d. Click Login.
2. Go to the shortcuts section.
  - a. Click Administrator and click Shortcuts.
  - b. For shortcuts that are already defined, click the shortcut ID link and verify or set the parameters as defined in the Shortcut Table for the selected shortcut.
  - c. For shortcuts that are not defined, click New to create a shortcut and set the parameters as defined in the Shortcuts table.

**Shortcut table**

Name	Mode	Permissions
VScan	Auto	Main Job - VScan
Web Scan	Auto	Web Job - iVScan
FixUp	Manual	Fixup Job - Fixup
Upload	Auto	Web Job - Upload
Profiler	Manual for Hold	Main Job - Profiler Web Job - Profiler
Verify/Fix	Manual for Hold	Main Job - Verify Web Job - Verify
Export	Auto	Main Job - Export Web Job - Export
Background	Auto	Main Job - Profiler, Export Web Job - Profiler, Export

## 3. Configure Shortcuts.

- Enter the Name from the Shortcut table and a description of the shortcut.
- Select the Mode as defined in the Shortcut table.
- The mode determines the behavior of the Datacap when a user clicks the shortcut in the Datacap clients like Datacap Desktop, FastDoc, tmweb, and Datacap Navigator.
- Under the Permissions section, click the check boxes that are listed in the Permissions column of the shortcut table. This entry maps the shortcut to the corresponding task.
- Click Save.

## 4. Repeat steps 2b - 2f for each entry in the Shortcuts table.

**Information**

Remember that for a shortcut that is defined on the Administrator > Shortcut tab to be visible, there are three criteria that must be met.

- The user must be configured with permission to do the task.
- The station must be configured to allow users that select that station to do the task.
- The task must be configured with a Program key that is an .aspx web page or set to Multiple.
- In a production environment, you configure each user or group to have permission to do only the tasks that are designated to that user or group.

## 5. Verify user permissions for each user in the User Permissions table.

**User Permissions**

Table 2.

User	Group	Permissions
erin	DCUsers	Main Job: Profiler, Export Web Job: Profiler, Export
susan	DCSupervisors	Main Job: All Web Job: All
sam	DCScanners	Main Job: VScan Web Job: iVScan, and Upload
vinny	DCVerifiers	Main Job: Verify Web Job: Verify

- Click Administrator and click Groups.
- Click the group that is defined in the User Permissions table.
- Scroll down to the permissions section and verify that only the permissions that are defined in the Permissions column of the User Permissions table are checked.
- Repeat steps 3b - 3c for each entry in the User Permissions table.



### Important

LLLPAD honors group authentication so the users are only defined in the Tivoli Directory System (TDS). Only groups are defined in the application.

#### 6. Verify Station Permissions.

##### Station Permissions

Table 3.

Station	Permissions
1	Main Job: All Web Job: All
2	Main Job: All Web Job: All
3	Main Job: All Web Job: All
4	Main Job: VScan Web Job: iVscan, and Upload

- a. Click Stations on the Administrator tab.
  - b. Click the station that is defined in the Station column of the Station Permissions table.
  - c. Verify or set the permissions defined for the station to match the Permissions column of the table.
7. Verify Web Job task configuration.
- a. Click Workflows on the Administrator tab.
  - b. Expand the Web Job.
  - c. Click each of the Web Job tasks and note the Program Key that is defined for each task.
    - iVScan \_\_\_\_\_
    - Upload \_\_\_\_\_
    - Profiler \_\_\_\_\_
    - Verify \_\_\_\_\_
    - Export \_\_\_\_\_

**Check your answers against the answers in the**  
[Lesson 1.1. Create Shortcuts for Web Clients](#), on page 1-45 of **Appendix 1**.
  - d. Logout out and close the Internet Explorer window.

### Procedure 3: Verify Quiz Answers

1. Do the Quiz at the end of this lesson.
  - a. If you have trouble answering the question, come back and do the rest of Procedure 3 Step 2-6 to check for the right answer.

**Quiz answers are provided in the [Lesson 1.1. Create Shortcuts for Web Clients](#), on page 1-45 of Appendix 1.**

2. Check the answer for Erin when logged in with station 1 selected.  
You are still logged in to the Server image desktop as susan.
  - a. Open Internet Explorer, click tmweb on the Bookmark bar.
  - b. Select ExpenseDemo, and enter the following credentials:  
User ID: erin  
Password: class  
Station: 1
  - c. Click Login.
  - d. Which tasks are listed? The listed tasks are the answer to quiz question 2 a.
  - e. Log out of tmweb.
3. Check the answer for susan when logged in with station 1 selected.
  - a. Open Internet Explorer, click tmweb on the Bookmark bar.
  - b. Select ExpenseDemo and complete credentials as follows:  
User ID: susan  
Password: class  
Station: 1
  - c. Click Login.
  - d. Which tasks are listed? The listed tasks are the answer to quiz question 2 b.
  - e. Log out of tmweb.
4. Check answer for sam when logged in with station 1.
  - a. Open Internet Explorer, click tmweb on the Bookmark bar.
  - b. Select ExpenseDemo and complete credentials as follows:  
User ID: sam  
Password: class  
Station: 1
  - c. Click Login.
  - d. Which tasks are listed? The listed tasks are the answer to quiz question 2 c.
  - e. Log out of tmweb.
5. Check answer for vinny when logged in with station 1.
  - a. Open Internet Explorer, click tmweb in the Bookmark bar.
  - b. Select ExpenseDemo and complete credentials as follows:  
User ID: vinny  
Password: class  
Station: 1
  - c. Click Login.



- d. Which tasks are listed? The listed tasks are the answer to quiz question 2 d.
- e. Log out of tmweb.
- 6. Check answer for susan when logged in with station 4.
  - a. Open Internet Explorer, click tmweb in the Bookmark bar.
  - b. Select ExpenseDemo and complete credentials as follows:
    - User ID: susan
    - Password: class
    - Station: 4
  - c. Click Login.
  - d. Which tasks are listed? The listed tasks are the answer to quiz question 2 e.
- 7. Log out of the web client, close the browser.

#### ***Procedure 4: Use the Web Client to scan and upload***

- 1. Log in to tmweb as Sam.
  - a. Open Internet Explorer, click tmweb in the Bookmark bar.
  - b. Select ExpenseDemo and complete credentials as follows:
    - User ID: sam
    - Password: class
    - Station: 1
  - c. Click Login.
- 2. Process the Scan task.
  - a. Click Operations and then click the Web Scan shortcut.
  - b. Click Browse and go to C:\Datacap\ExpenseDemo\images folder.
  - c. Select the air1\_part2.tif image and click Open.
  - d. Set the expected field to 1 and click Scan.
    - One image is scanned and shown in the Batch View pane.
  - e. Click OK and then click Done.
  - f. Click OK on the message for *Batch **date.number** finished with a status of finished.*
  - g. Click Stop.
- 3. Process the Upload task.
  - a. Click the Upload shortcut.
  - b. Click OK on the message for *Batch **date.number** finished with a status of finished.*
  - c. Click Stop.
  - d. Log out of the web client, close the Internet Explorer.

### ***Procedure 5: Use Datacap Desktop to run Profiler***

1. Log in to Datacap Desktop as Erin.
  - a. Click Start > All Programs > IBM Datacap Clients > Datacap Desktop.
  - b. Type credentials as follows:
    - User ID: erin
    - Password: class
    - Station: 1
  - c. Click Start. You might be forced to click Stop before you can continue.
  - d. In the left pane, select ExpenseDemo from the applications list.
2. Process the Profiler Task.
  - a. Click the Profiler shortcut.
  - b. Click OK on the message for *Batch **date.number** finished with a status of finished.*
  - c. Click Stop to complete the task.
  - d. Close the Datacap Desktop window.

### ***Procedure 6: Use Datacap Desktop to run the verify task***

1. Log in to Datacap Desktop as vinny.
  - a. Double-click the “Datacap Desktop” shortcut on the desktop.
  - b. Enter the following credentials and click Start.
    - User ID: vinny
    - Password: class
    - Station: 1
  - c. In the left pane, select ExpenseDemo from the applications list.
2. Process the Verify Task.
  - a. In the left pane, click “All”.
  - b. Check that there is a pending batch at the Verify task.
  - c. In the left pane, click “Verify”
  - d. Double-click your batch.
  - e. Click Submit.
  - f. If you are prompted “Validation failed. Override and continue”, click OK in the message window.
  - g. Continue to clicking “Next Problem” from the toolbar, until it a message shows that “End of batch reached” and click OK.
3. Log out and close Datacap Desktop.

---

### **End of exercise**

## Exercise 2: Configure Web Client Shortcuts: Quiz

Quiz Answers are provided in the [Lesson 1.1. Create Shortcuts for Web Clients](#), on page 1-45 of Appendix 1.

1. What would expect to see as the Program Key for each of the Web Job tasks?

iVScan \_\_\_\_\_  
 Upload \_\_\_\_\_  
 Profiler \_\_\_\_\_  
 Verify \_\_\_\_\_  
 Export \_\_\_\_\_

2. Which of these tasks would you expect to see on the Operations task list.

- a. If you log in to ExpenseDemo as erin with station 1 selected?

**Circle correct Answers = None, Web Scan, Upload, Fixup, Verify/Fix**

- b. If you log in to ExpenseDemo as susan with station 1 selected?

**Circle correct Answers = None, Web Scan, Upload, Fixup, Verify/Fix**

- c. If you log in to ExpenseDemo as sam with station 1 selected?

**Circle correct Answers = None, Web Scan, Upload, Fixup, Verify/Fix**

- d. If you log in to ExpenseDemo as vinny with station 1 selected?

**Circle correct Answers = None, Web Scan, Upload, Fixup, Verify/Fix**

- e. If you log in to ExpenseDemo as susan from station 4 selected?

**Circle correct Answers = None, Web Scan, Upload, Fixup, Verify/Fix**

---

**End of exercise**

# Lesson 1.2. Virtual Stations and Queuing of Tasks

## Overview

### Why is this lesson important?

As an Administrator of an IBM Datacap capture system, you must be familiar with all configuration tasks for a functional IBM Datacap system.

You need to know how to use the User ID and the Station ID to determine how jobs are queued for processing.

## Activities

- [Exercise 1: Control Queuing Tasks in a Workflow: Quiz](#), on page 1-17
- [Exercise 2: Control Queuing Tasks in a Workflow: Optional](#), on page 1-18

## User Accounts

Table 4:

Type	User ID	Password
Server Administrator	Administrator	passw0rd
Workstation Administrator	Administrator	class
	erin	class
	susan	class
	vinny	class



### Note

Passwords are always case-sensitive.

## Exercise 1: Control Queuing Tasks in a Workflow: Quiz

### Introduction

An application is configured with Store and Queue by options in the job tasks as follows:

1. At the VScan step, set **Store** to *Station ID and User ID*.
2. At the PageID step, set **Queue by** to *Station*
3. At the Profiler step, set **Queue by** to *User And Other Station*.
4. At the Verify step, set **Queue by** to *Other User Other Station*.
5. The **susan** user processes the VScan step while logged in to station 1.

Assume that users erin and susan both have permission to process any job step for the test application.

For each question, indicate the correct answer or the best answer. If the user station combination is allowed to process the step, then choose Pass otherwise choose Fail.

1. Which combination of user and station are allowed to process the PageID step.
  - a. User susan and station 2. Pass or Fail
  - b. User erin and station 2. Pass or Fail
  - c. User erin and station 1. Pass or Fail
2. Which combination of user and station are allowed to process the Profiler step.
  - a. User erin and station 1. Pass or Fail
  - b. User erin and station 2. Pass or Fail
  - c. User susan and station 2. Pass or Fail
3. Which combination of user and station are allowed to process the Verify step.
  - a. User erin and station 1. Pass or Fail
  - b. User susan and station 2. Pass or Fail
  - c. User erin and station 2. Pass or Fail
4. Which combination of User and station are allowed to process the Export step.
  - a. User erin and station 1. Pass or Fail
  - b. User susan and station 2. Pass or Fail
  - c. User erin and station 2. Pass or Fail



#### Note

If you had difficulty with these questions, then you can do the following optional activity.

Quiz Answers are provided in the [Lesson 1.2 Virtual Stations and Queuing of Tasks](#), on page 1-46 of Appendix 1.

---

## Exercise 2: Control Queuing Tasks in a Workflow: Optional

### Introduction

In this activity, you apply Store and Queue by options to job steps. You see how these options can control which user and station combination control who can process tasks.

### Procedures

[Procedure 1, "Configure Store and Queue by Options,"](#) on page 1-18

[Procedure 2, "Process the VScan Task,"](#) on page 1-19

[Procedure 3, "Test the Profiler Task,"](#) on page 1-20

[Procedure 4, "Test the Verify Task,"](#) on page 1-22

[Procedure 5, "Test the Export Task,"](#) on page 1-23

[Procedure 6, "Use Datacap Desktop to run the verify task,"](#) on page 1-14



#### Windows

For this activity, you complete the steps on the Server 2008 ECMEDU01 student system.

### ***Procedure 1: Configure Store and Queue by Options***

1. Log in to the web client on the Server 2008 student system.
  - a. Open Internet Explorer, and click the tmweb link on the taskbar.
  - b. Select Application: ExpenseDemo.
  - c. Enter the following credentials and click Login.
 

User ID: susan  
 Password: class  
 Station: 1
2. Delete all pending batches.
  - a. Click the Monitor tab.
  - b. Click the link in the batches column for any batch that is not in the "hold" or "Job done" state.
  - c. Click Delete batch in the lower right corner of the "Selected batch details" window.
  - d. Click OK to acknowledge delete operation.
  - e. Repeat Step 2.b and 2.c for each batch that is not in the "hold" or "Job done" state.
3. Access the Workflow > Main Job tab.
  - a. Click the Administrator tab.
  - b. If it is not Already selected, select Workflow in the ExpenseDemo >> menu bar.

- c. Expand the Main Job node.
- 4. On the VScan task set Store to Station ID and User ID.
  - a. Click the VScan task.
  - b. Select Station ID and User ID from the Store list.
 

The initiating user and the initiating station is stored for subsequent queuing decisions.
  - c. Click Apply.
- 5. On the Profiler task, set Queue by to User And Other Station.
  - a. Click the Profiler task.
  - b. Select User And Other Station from the Queue by list.
 

Only the initialing user who is also authorized to run the Profiler task can run Profiler from any station other than the initialing station.
  - c. Click Apply.
- 6. On the Verify task, set Queue by to Other Station And Other User.
  - a. Click the Verify task.
  - b. Select Other Station And Other User from the Queue by list.
 

The Verify task can be run from station other than the initialing station by any user other than the initialing user, provided the user is also authorized to run the Verify step.
  - c. Click Apply.
- 7. Select the VScan, Profiler, and Verify tasks again and verify that the selected options are set and saved as described in Step 4, 5, and 6.
- 8. Log out of the web client and close the Internet Explored window.

## ***Procedure 2: Process the VScan Task***

- 1. Verify that Rulerunner is stopped.
  - a. Click Start > All programs > IBM Datacap Services > Datacap Rulerunner Manager.
  - b. Click Stop if it is running.
  - c. Close the Datacap Rulerunner Manager window.
- 2. Log in to Datacap Desktop as susan and station 1 and scan a batch.
  - a. Log in to the desktop as user susan / class.
  - b. Click Start > All Programs > IBM Datacap Clients > Datacap Desktop.
  - c. Enter the following credentials and click Start.
 

User: susan  
Password: class  
Station: 1
  - d. Select ExpenseDemo from the application list if it is not already selected.

3. Use Datacap Desktop to process a batch through the VScan task.
  - a. Click the VScan shortcut.
  - b. Browse to the C:\Datacap\ExpenseDemo\Images folder, select the car1.tif image, and click Open.
  - c. Set the expected field to 1 and click Scan.  
One image is scanned and shown in the Batch View pane.
  - d. Click Submit.
  - e. Click OK to acknowledge the Datacap Desktop Batch finished message.
  - f. Click Stop to end the VScan task.
  - g. Click All and verify that there is not a batch at the Profiler task for Station1.
  - h. Close the Datacap Desktop window.

**Note**

The **initiating user is susan** and the **initiating station is station 1**.

---

### ***Procedure 3: Test the Profiler Task***

---

**Questions**

Profiler condition: Only the initialing user who is also authorized to run the Profiler task can run Profiler from any station other than the initialing station.

Do you expect to be able to run the Profiler task as erin from station 1? Yes / No

---

1. Test the **Profiler task** while you are logged in as **erin** from **station 1**.
    - a. Log in to Datacap Desktop as erin and station 1.
    - b. Click All. There appears to be no batch to run at the Profiler step.
    - c. Click the Profiler shortcut. There is nothing to run.
    - d. Click Stop and close the Datacap Desktop window.
- 

**Note**

Conclusion: user erin is not allowed to run the Profiler task from station 1.

Why? Erin is not the initiating user and station 1 is the initiating station so other station is also not a match.

---





## Questions

Profiler condition: Only the initialing user who is also authorized to run the Profiler task can run Profiler from any station other than the initialing station.

Do you expect to be able to run the Profiler task as erin from station 2? Yes / No

2. Test the **Profiler task** while you are logged in as **erin** from **station 2**.
  - a. Log in to Datacap Desktop as erin and station 2.
  - b. Click Stop. There appears to be no batch to run at the Profiler step.
  - c. Click the Profiler shortcut. There is nothing to run.
  - d. Click Stop.
  - e. Close the Datacap Desktop window.



## Note

Conclusion: user erin is not allowed to run the Profiler task from station 2.

Why? Erin is not the originating user.



## Questions

Profiler condition: Only the initialing user who is also authorized to run the Profiler task can run Profiler from any station other than the initialing station.

Do you expect to be able to run the Profiler task as susan from station 2? Yes / No

3. Test the **Profiler task** while you are logged in as **susan** from **station 2**.
  - a. Log in to Datacap Desktop as susan and station 2.
  - b. Click Stop if a step is active. You see the batch queued at the Profiler task.
  - c. Click the Profiler link.
  - d. Click OK when the profiler task is finished.
  - e. Click Stop and close the Datacap Desktop window.



## Note

Conclusion: user susan is Allowed to run the Profiler task from station 2.

Why? susan is the initiating user and station 2 is not the initiating station.

## Procedure 4: Test the Verify Task

---



### Questions

Verify condition: The Verify task can be run from any station other than the initialing station by any user other than the initialing user, provided the user is also authorized to run the Verify step.

Do you expect to be able to run the Verify task as vinny from station 1? Yes / No

---

1. Test the **Verify task** while you are logged in as **vinny** from **station 1**.
    - a. Log in to Datacap Desktop as vinny and station 1.
    - b. Click All. There appears to be no batch to run at the Verify step.
    - c. Click the Verify shortcut. There is nothing to run.
    - d. Click Stop and close the Datacap Desktop window.
- 



### Note

Conclusion: User vinny is not allowed to run the Verify task from station 1.

Why? vinny is not the initiating user but station 1 is the initiating station.

---



### Questions

Verify condition: The Verify task can be run from any station other than the initialing station by any user other than the initialing user, provided the user is also authorized to run the Verify step.

Do you expect to be able to run the Verify task as susan from station 2? Yes / No

---

2. Test the **Verify task** while you are logged in as **susan** from **station 2**.
    - a. Log in to Datacap Desktop as susan and station 2.
    - b. Click Stop.
    - c. Click All. There appears to be no batch to run at the Verify step.
    - d. Click the Verify shortcut. There is nothing to run.
    - e. Click Stop and close the Datacap Desktop window.
- 



### Note

Conclusion: user susan is not allowed to run the Verify task from station 2.

Why? susan is the initiating user (no match). station 2 is not the initiating station (match).

---



### Questions

Verify condition: The Verify task can be run from any station other than the initialing station by any user other than the initialing user, provided the user is also authorized to run the Verify step.

Do you expect to be able to run the Verify task as vinny from station 2? Yes / No

3. Test the **Verify task** while you are logged in as **vinny** from **station 2**.

- a. Log in to Datacap Desktop as vinny and station 2.
- b. Click All. The batch is at the Verify step.
- c. Click the Verify shortcut.
- d. Click Submit on the verify panel.
- e. Click OK on the message for *Validation failed. Override and continue?*
- f. Click OK on the message for *All documents are completed. Finish batch?*
- g. Click OK and click Stop to complete the verify step.
- h. Close the Datacap Desktop window.



### Note

Conclusion: user vinny is allowed to run the Verify task from station 2.

Why? vinny is not the initiating user (match). station 2 is not the initiating station (match).

## Procedure 5: Test the Export Task



### Questions

Export condition: There is no export condition defined.

Do you expect to be able to run the Export task as erin from station 1? Yes / No

1. Test the **Export task** while you are logged in as **erin** from **station 1**.

- a. Log in to Datacap Desktop as erin and station 1.
- b. Click All.

The batch is visible at the Export step. This observation means that Erin can run the Export step as a station 1 user.

- c. Don't run it. Leave the batch at this step for the next test.
- d. Close the Datacap Desktop window.

**Note**

Conclusion: user erin is allowed to run the Verify task from station 1.

---

**Questions**

Export condition: There is no export condition defined.

Do you expect to be able to run the Export task as susan from station 2? Yes / No

---

2. Test the **Export task** while you are logged in as **susan** from **station 2**.

- a. Log in to Datacap Desktop as susan and station 2.

The batch is visible at the Verify step. This observation means that susan can run the Export step as a station 2 user.

- b. Don't run it. Leave the batch at this step for the next test.
  - c. Close the Datacap Desktop window.
- 

**Note**

Conclusion: user susan is allowed to run the Export task from station 2.

---

**Questions**

Export condition: There is no export condition defined.

Do you expect to be able to run the Export task as erin from station 2? Yes / No

---

3. Test the **Export task** while you are logged in as **erin** from **station 2**.

- a. Log in to Datacap Desktop as erin and station 2.

The batch is visible at the Verify step. This status means that susan can run the Export step as a station 2 user.

- b. Click the Export shortcut, click OK and click Stop to complete the Export step.
  - c. Close the Datacap Desktop window.
- 

**Note**

Conclusion: user erin and susan are allowed to run the Export task from station 1 or 2 or any other station.

Why? The reason is because no Queue by option is set for the Export task.

---

## ***Procedure 6: Reset Store and Queue by Options***

1. Log in to the web client on the Server 2008 student system.
  - a. Open Internet Explorer, and click the tmweb link on the taskbar.
  - b. Select Application: ExpenseDemo.
  - c. Enter the following credentials and click Login.

User ID: susan  
Password: class  
Station: 1
2. Click the Administrator tab.
  - a. Select Workflow in the ExpenseDemo >> menu bar.
  - b. Expand the Main Job node.
3. On the VScan task set Store to None.
  - a. Click the VScan task.
  - b. Select None from the Store list.
  - c. Click Apply.
4. On the Profiler task, set Queue by to None.
  - a. Click the Profiler task.
  - b. Select None from the Queue by list.
  - c. Click Apply.
5. On the Verify task, set Queue by to None.
  - a. Click the Verify task.
  - b. Select None from the Queue by list.
  - c. Click Apply.
6. Log out of the web client and close the Internet Explored window.



### **Troubleshooting**

If the Status is aborted, then the password for the p8admin account probably needs to be corrected in the Datacap Application Manager > ExpenseDemo > Custom values > Advanced values > FileNetPassword set it to IBMFileNetP8.

---

## **End of exercise**

# Lesson 1.3. Disaster Recovery

## Overview

### Why is this lesson important?

As an Administrator of an IBM Datacap capture system, you must be familiar with all configuration tasks for a functional IBM Datacap system.

You are required to make sure that a regular backup is made of both Production and Development systems. This action makes sure that if a failure occurs, you have a recovery point to revert to.

## Activities

- [Exercise 1: Backup Strategy: Quiz](#), on page 1-27

## Exercise 1: Backup Strategy: Quiz

### Introduction

Quiz Answers are provided in the [Lesson 1.3 Disaster Recovery](#), on page 1-47 of Appendix 1.

For each question, indicate the correct answer or the best answer.

1. For each of the server types listed, indicate which fit the description of a Stateless server. Indicate servers that are stateless by marking the True response.
  - a. Rulerunner Servers. **True or False**
  - b. Fingerprint Servers. **True or False**
  - c. Datacap Server. **True or False**
  - d. Database Servers. **True or False**
  - e. File Server. **True or False**
  - f. Web Servers. **True or False**
2. How often must Datacap servers with volatile data be backed up. Indicate your answer by marking True or False.
  - a. Datacap servers must be backed up at a period that the corporate backup strategy determines. **True or False**
  - b. Datacap servers must be backed up every month. **True or False**
  - c. Datacap servers must be backed up every week. **True or False**
  - d. Datacap servers must be backed up every day. **True or False**
  - e. Datacap servers must be backed up when the volume of data capture activity warrants a backup of the volatile data to prevent data loss. **True or False**
3. Which of the following statements are accurate for a valid backup practice for a Datacap Capture system? There is more than one correct answer.
  - a. All servers in the system must be backed up at least weekly and while system activity is at a minimum. **True or False**
  - b. All Stateless servers must be backed up weekly and Data servers (non-stateless) every day at least system performance. **True or False**
  - c. Stateless servers must be backed up one time and thereafter only when system configuration changes occur or service packs are applied. **True or False**
  - d. Servers that hold volatile data (non-stateless) must be backed up in accordance the corporate backup strategy document. **True or False**
  - e. Before a backup of the Web server, make sure that remote scanned batches are uploaded and purged. **True or False**

---

### End of exercise

# Lesson 1.4. Configure DB2 Server

## Overview

### Why is this lesson important?

As an Administrator of an IBM Datacap capture system, you must be familiar with all configuration tasks for a functional IBM Datacap system.

In this lesson, you configure the DB2 Server database. You then migrate the contents of default Admin, Engine, and Fingerprint Access databases to the DB2 database.

## Activities

- [Exercise 1: Convert Access Database to DB2 Database](#), on page 1-29

## User Accounts

Table 5:

Type	User ID	Password
Server Administrator	Administrator	passw0rd
Workstation Administrator	Administrator	class
	erin	class
	sam	class
	vinny	class
DB2 Database	p8admin	IBMFileNetP8



### Note

Passwords are always case-sensitive.



# Exercise 1: Convert Access Database to DB2 Database

## Introduction

In this activity, you configure a DB2 9.7 Server database on the Server 2008 student image. You define three database structures for the Admin, Engine, and Fingerprint databases in DB2 Server. You migrate the data from the Access databases to the new DB2 Server databases. You configure the application to use the new DB2 Server databases, and then test the new configuration.

## Procedures

[Procedure 1, "Define Database Structures,"](#) on page 1-29

[Procedure 2, "Migrate Data from Access to the DB2 Server,"](#) on page 1-30

[Procedure 3, "Configure the Application for DB2 Server,"](#) on page 1-31

[Procedure 4, "Configure the DB2 client connection,"](#) on page 1-32

[Procedure 5, "Verify the DB2 database installation,"](#) on page 1-33





### Windows

In this activity, you complete the steps on the Server 2008 ECMEDU01 student system.

Only procedure 4 is done on the DCClient Student system.

## Procedure 1: Define Database Structures

1. Log in to DB2.
  - a. On the Server 2008 student system login to the desktop as Administrator / passw0rd.
  - b. Click Start > All Programs > IBM DB2 > TDSV63DB2 (Default) > General administration Tools > Control Center.
  - c. Click OK on the Control Center View window.
2. Define databases for the ExpenseDemo tables.
  - a. Right-click All Databases, select Create Database, and select Standard.
  - b. Type or select parameters:
    - Database name: DCEDDB2
    - default path: c:\ (Leave the default value)
    - Alias: <blank>
    - Comment: DC ExpenseDemo DB2
    - Default bufferpool and tab space page size: 32K
  - c. Click Next on the next two screens.
  - d. For Country/Region select "United States of America" and click Next.
  - e. Click Finish. Wait for the process to complete.

- f. Click Close to complete the process.
3. Open Command Editor.
  - a. Click the Command Editor icon  on the toolbar.
  - b. Click Add to select and connect to the target database.
  - c. Select the DCEddb2 database.
  - d. Leave the “Use implicit credentials” check box set.
  - e. Click OK. This logs you in as administrator.
4. Create the Database tables with the three DB2 scripts.
  - a. Click Open (the folder icon  ) in the commands toolbar.
  - b. Go to the C:\datacap\support\DBScript folder.
  - c. Select DB2\_Adm\_base.sql and click OK.
  - d. Repeat step 2.f-2.h and select the other two DB2 scripts, DB2\_Eng\_base.sql, and DB2\_FP\_base.sql.

**Note:** When you click Open, click No on the DB2 Message window so that the scripts are appended.



### Information

The update scripts that are labeled as “Upd9.0.1” are for updating 9.0 database to 9.0.1 database. For this lab exercise, select the ones without the “Upd9.0.1” label.

- e. Click the green arrow in the upper left corner of the command window to run the loaded scripts.
- f. Scan through the activity pane and make sure that no errors are reported.
5. Click Command Editor menu and Select Exit to close the command editor window.
6. Click Control Center menu and select Exit to close the Control Center window.

## ***Procedure 2: Migrate Data from Access to the DB2 Server***

1. Click Start > All Programs > IBM Datacap Developer Tools > Datacap Application Copy Tool.
2. Select the Application that you want to convert to use the DB2 database.
3. In the Copy from pane select:  
 Application name: ExpenseDemo  
 Note: The application folder, administration database, and Fingerprint database are automatically selected for copying.
4. In the Copy to pane:
  - a. Clear the “Copy application files” check box.
5. Define the Destination DB2 connections.

**Attention**

Do Not attempt to define your own connection string here by using the ellipsis [...].

- a. Copy and Paste the Connection string for the administration database from the Application Manager Generated Connection String from:  
C:\DC9-Lab-Exercises\Authentication\DB2ConnectStrings.txt
 

```
Provider=IBMDADB2;Hostname=ecmedu01;Data Source=Xtreme Sample
Database 2008;Database=DCEDDB2;User
ID=administrator;Password=passw0rd;
```
- b. Repeat steps 5.a for the Fingerprint databases.
- c. Select the Clear Engine database check box.
- d. Click OK to acknowledge that the all existing batches are cleared by selecting this option.
- e. Repeat steps 5.a for the Engine databases.
6. Click OK to activate the database copy step.
  - a. Click OK on the Datacap Application Copy Tool results window that states the “copy was successful”.
7. Click Exit to close the Database Application Copy Tool.

### ***Procedure 3: Configure the Application for DB2 Server***

1. Start the Datacap Application Manager and select the application.
  - a. Click Start > All Programs > IBM Datacap Services > Datacap Application Manager.
  - b. Select ExpenseDemo application.
2. Select the database.

#### **Database Table**

Database	Name	User	Password
Administrator			
Engine	DCEDDB2	Administrator	passw0rd
Fingerprint			

- a. Click the Main tab.
- b. Click [...] for the database that is defined in the Database column of the Database Table.
- c. Select or type:
 

```
Database type or provider name: Select IBM DB2
Host: ECMEDU01
Database source: Xtreme Sample Database 2008
Database: DCEDDB2
```

- d. Set authentication credential.  
 User ID: Click User ID check box and type `Administrator`.  
 Password: Click the Password check box and type `passw0rd`.
  - e. Click Test Connection and verify that the connection was successful.
  - f. Click OK.
3. Repeat steps 2b - 2d for each database in the Database table.
  4. Click Save Changes and close the Datacap Application Manager.
- 



## Windows

In Procedure 4, you complete the steps on the Windows 7 DCCLIENT student system.

---

### ***Procedure 4: Configure the DB2 client connection***

The DB2 client software must be installed on all systems that require direct access to the transferred application databases. These systems include the Datacap Server if it is on a different system than the DB2 server, all workstations that process batches or are used for development tasks. The Client Software is already installed on your Windows 7 workstation DCCLIENT.

1. Open the DB2 Configuration Assistant application on the Workstation.
  - a. Click Start > All Programs > IBM DB2 COPY1 (default) > Set-up Tools > Configuration Assistant.
  - b. Click No for the DB2 message question “Would you like to add a database now?”
  - c. Click the Selected menu option and then click Add Database Using Wizard...
  - d. Click Search the Network and then click Next.
  - e. Click Add System and type ECMEDU01 for System Name and then click OK.
  - f. Expand the ECMEDU01, DB2TDS63, and Local databases nodes.
  - g. Click the DCEDDB2 database and click Finish.

The Add Database Confirmation - DCEDDB2 window opens.

2. Test the database connection.
  - a. Click Test Connection.
  - b. Click the Standard check box to set it.
  - c. Clear the CLI checkbox.
  - d. Enter database credentials.  
 User ID: `administrator`  
 Password: `passw0rd`
  - e. Click Test connection.

- f. Verify that you get a message in the results screen that indicates the Standard connection tested successfully.
- g. Click Cancel to close the Test Connection window.
- h. Click Close to close the Add Database Confirmation window.
- i. Click Configure and Exit to close the Configuration Assistant window.

## Windows

If you are doing this administration unit as part of a combined administration course and if you already completed the “System Configuration” and “Component Configuration” units on this image, then the systems are configured for you to run the following procedures on either on the Windows 7 DCCLIENT student system or the Server 2008 ECMEDU01 student system.

If you are doing this administration unit on a fresh image, then additional configuration is required to run this procedure on Windows 7 DCCLIENT image. In this case, you should just run this procedure on the Server 2008 ECMEDU01 student image.

In a production environment, you should run on all workstations that are used for development or processing batches.

### **Procedure 5: Verify the DB2 database installation**

To verify the installation, process a document batch through each step of the Document capture process.

1. Start Datacap Desktop and login as the susan user. susan is a supervisor user and is authorized to do all tasks.
  - a. Click Start > All Programs > IBM Datacap Clients > Datacap Desktop.
  - b. Enter the following credentials for LLDAP authentication mode for Datacap:
 

User: `susan`  
 Password: `class`  
 Station: 1

## Note

If your system is in TMA authentication mode for Datacap, then log on as user: `admin` and password: `admin`

- c. Click Start.
  - d. Click Stop if necessary to stop task and get back to the main window.
  - e. Select ExpenseDemo from the application list.
2. Use Datacap Desktop to run the VScan Task.
  - a. Select the VScan shortcut.

- b. Browse to the C:\Datacap\ExpenseDemo\Images folder and select the car1.tif image.
    - c. Click Open.
    - d. Set the expected field to 1.
    - e. Click Scan. One images are scanned and shown in the Batch View pane.
    - f. Click Submit.
    - g. Click OK to acknowledge the Datacap Desktop Batch finished message.
    - h. Click Stop to end the VScan task.
  3. Use Datacap Desktop to run the Profiler Task.
    - a. Select the Profiler shortcut.
    - b. Click OK to acknowledge the Datacap Desktop Batch finished message.
    - c. Click Stop to end the Profiler task.
  4. Use Datacap Desktop to run the Verify Task.
    - a. Click the Verify/Fix shortcut.
    - b. Click Submit to accept the first image.
    - c. Click OK to acknowledge the "Validations failed."Override and continue?" message.
    - d. Click OK to acknowledge the "All documents are complete. Finish batch?" message.
    - e. Click OK and click Stop to complete the process.
    - f. Close the Datacap Desktop window.
- 

## End of exercise

# Lesson 1.5. Application Globalization

## Overview

### Why is this lesson important to you?

As a Datacap business analyst, you build and deploy applications with the Datacap Capture system and communicate solution details to the solution architect, administrator, and users.

If you are upgrading to Datacap 9.0,1 you must be familiar with the changes that occurred and how to transfer your procedures and applications.

## Activities

[Exercise 1: Configure Globalization](#), on page 1-36

## User accounts

Type	User ID	Password
Operating system	Administrator	passw0rd
Datacap	admin	admin



### Note

Passwords are always case-sensitive.

---

# Exercise 1: Configure Globalization

## Introduction

In this exercise, you configure an application to render the Datacap Navigator and Datacap Desktop client interfaces in a globalization language.

## Procedures

[Procedure 1, "Create a Resource.json translation file,"](#) on page 1-36

[Procedure 2, "Check the Globalized UI in Datacap Desktop,"](#) on page 1-37

[Procedure 3, "Check the Globalized UI in Datacap Navigator,"](#) on page 1-39



### Windows

Do all the procedures in this lab exercise using the server ECMEDU01 image.

### ***Procedure 1: Create a Resource.json translation file***

1. Copy and edit the default resources.json globalization file.
  - a. Open Windows Explorer and go to C:\Datacap\TravelDocs\ dco\_TravelDocs
  - b. Create a folder named en.
  - c. Copy the dco\_TravelDocs\resources.json file to the en folder.
  - d. Open the en\resources.json file with a text editor (Notepad).
  - e. Make some edits to the jobs and job description group in the resources.json file.
    - Sample changes you can make are:
      - Change "Navigator Job" to "Nav Job".
      - For the job description entries change process to Travel Documents.

```
// jobs and job descriptions
"job.Main Job":"Main Job",
"jobdescription.Main Job":"vscan Travel Documents",
"job.Web Job":"web Job",
"jobdescription.Web Job":"web vscan Travel Documents",
"job.Navigator Job":"Nav Job",
"jobdescription.Nav Job":"Navigator scan Travel Documents",
"job.Fixup Job":"Fixup Job",
"jobdescription.Fixup Job":"Document fixup and rescan",
```



- f. Make some edits to the shortcut and shortcut description group in the resources.json file.

- Sample changes you can make are:
  - Add “Doc” in front of each shortcut value. Example; “Verify” to “Doc Verify”.

```
// shortcuts and shortcut descriptions
"shortcut.Verify": "Doc Verify",
"shortcutdescription.Verify": "Data verification with rules validation",
"shortcut.Export": "Doc Export",
"shortcutdescription.Export": "Export data",
```

- g. Make some edits to the tasks group in the resources.json file.

- Sample changes you can make are:
  - Add “EN” in front of some task values. Example; “Verify” to “EN Verify”

```
"task.PageID": "EN-Page ID",
"task.FixUp": "Fixup",
"task.Verify": "EN-Verify",
"task.Export": "EN-Export",
```

- h. Make some edits to the fields group in the resources.json file.

- Sample changes you can make are:
  - Change “Car pick-up date” to “Pick-up date”.
  - Change “Car pick-up location” to “Pick-up location”.
  - Change “Car return date” to “Return date”.
  - Change “Car return location” to “Return location”.

```
// fields (includes batch-level fields)
"field.Pickup_Date": "Pick-up date",
"field.Pickup_Location": "Pick-up location",
"field.Return_Date": "Return date",
"field.Return_Location": "Return location",
```

- i. Save and close the edited Resources.json file.

## ***Procedure 2: Check the Globalized UI in Datacap Desktop***

- Login to Datacap Desktop and select the TravelDocs application.
  - Double-click the Datacap Desktop icon on the Desktop.
  - Type susan/class for the User and Password and 1 for Station.



### **Note**

If your system is in TMA authentication mode for Datacap, then log on as user: `admin` and password: `admin`

---

- Click Start.
- Click the Applications link and select TravelDocs.

2. Verify that you see your changes to the English alternative resources.json file.
  - a. Notice that the task shortcuts you changed now are preceded by “Doc”.
  - b. Click the All link at the top of the links.
3. Start Rulerunner.
  - a. Double-click the Datacap Rulerunner Manager icon on the desktop.
  - b. Click Start.
  - c. Close the Datacap Rulerunner Manager window.
  - d. Wait for one or more batches to advance to the EN-Verify step.
  - e. If there is at least one batch in the Monitor list at the EN-Verify step, then **go to step 5**.
4. Scan a batch and allow Rulerunner to advance it to the EN-Verify step.
  - a. Click the Doc Virtual Scan link.
  - b. Click the Browse for files to scan icon, select a car image and click open.
  - c. Set the expected field to 1, click Scan, and then click Submit.
  - d. Click OK and then click stop to complete the scan task.
  - e. Click All to display the monitor view.
  - f. Notice that the Batch is at the EN-Page ID task.
  - g. Rulerunner advances any batches at the EN-Page ID or Batch Profiler step to the EN-Verify step.



### Hint

If you don't see all of the translations correctly, try closing the Datacap Desktop client and restart it.

---

5. Verify the Jobs and Tasks columns of the Monitor view.
  - a. Notice that any “Navigator Jobs” are displayed as “Nav Jobs” in the Job column.
  - b. If there are any batches at the Page ID, Verify, or Export step, the Task name is preceded by “EN”.
  - c. Double-click the batch at the EN-Verify task to open the Verify panel.
  - d. Notice that the field names for “Car pick-up date” and “Car pick-up location” are “Pick-up date” and “Pick-up location”.
  - e. Correct any verify errors and complete the verify step.
  - f. Close the Datacap Desktop window.
6. Switch Datacap Desktop to use a completely different language.
 

The Datacap thick clients use the windows desktop language setting to determine which language to use.

  - a. Click “Start” and select “Control Panel”.

- b. In the window that opens, click “Region and Language”.
  - c. In the “Region and Language” window, select the “Formats” tab.
  - d. Select German (Germany) for the Format field.
  - e. Click OK and close the Control Panel window.
7. Verify that the German Language translation is being used.
- a. Double click the Datacap Desktop icon on the Desktop.
  - b. Notice that the text on the login screen is in German.
  - c. Type susan/class for the User and Password and 1 for Station.

**Note**

If your system is in TMA authentication mode for Datacap, then log on as user: `admin` and password: `admin`

- d. Notice that the Desktop is also being displayed with German headings.
  - e. Select the TravelDocs Application in the “Anwendungen” field.
  - f. Notice that all of the shortcuts are displayed in German.
  - g. Click the All shortcut and Verify that the batches are displayed with German names for the Jobs and Task names.
  - h. Click one of the batches and notice that the image and properties panel opens on the right side of the screen. Notice also that the property names in the right side panel are in German.
8. Close the Datacap Desktop window.

### ***Procedure 3: Check the Globalized UI in Datacap Navigator***

1. Verify and reset the Inter Explorer settings.
  - a. Open the Internet Explorer browser and from the menu, click Tools > Internet Options.
  - b. In the “Internet Options” window > “General” tab, click “Languages”.
  - c. In the “Language Preference” window, verify that no language is listed. skip to step 2.
  - d. If you find any entry, Example: German (Germany) [de-DE] do the following steps:
  - e. Select the entry, and then click “Remove”.
  - f. Make sure the entry is removed and click OK.
  - g. In the “Internet Options” window, click OK.
  - h. Close the Internet Explorer browser window.

2. Open the Datacap Navigator desktop.
  - a. Open the Internet Explorer browser and click the DCN-Datacap link.
  - b. Login. User: `susan` and password: `class`

**Note**

If your system is in TMA authentication mode for Datacap, then log on as user: `admin` and password: `admin`

---

- c. Notice first that everything is still displayed in English. This is because the thin clients that run in the browser are not affected by the Windows desktop language setting. The browsers have their own language setting control.
    - d. Notice that the Shortcuts for "Upload", "Verify", and "Fixup" are displayed as "Doc Upload", "Doc Verify", and "Doc Fixup"
    - e. Notice that the "Navigator Jobs" displayed in the Jobs column are displayed as "Nav Job".
3. Scan a new car batch and allow it to advance to the Verify task.
  - a. Click the Doc Navigator scan shortcut.
  - b. Click Browse and select a single car image to scan and click Open.
  - c. Click Scan and then when the image appears click Submit.
  - d. Wait for a minute until that batch is advanced by Rulerunner to the Verify task.  
Note you might have to click refresh before you see the batch status change.
  - e. When it is at the EN-Verify task, click the batch and then click the Doc Verify shortcut.
  - f. Notice that the field names for "Car pick-up date" and "Car pick-up location" are "Pick-up date" and "Pick-up location".
4. Switch the browser to use a different language.
  - a. Log out of Datacap Navigator.
  - b. While the Internet Explorer Browser window is still open, click Tools > Internet Options.
  - c. In the "Internet Options" window > "General" tab, click Languages.
  - d. In the "Language Preference" window, click Add.
  - e. In the "Add Language" window, select any language other than an English option. Example: German (Germany) [de-DE]
  - f. Click OK.
  - g. In the "Language Preference" window, verify that German is now listed in the "Language:" text box and click OK.
  - h. In the "Internet Options" window, click OK.
  - i. Close the Internet Explorer browser window.

5. Open the Datacap Navigator desktop and verify the new language setting.
  - a. Open the Internet Explorer browser and click the DCN-Datacap link.
  - b. Notice that the text on the login screen is in German.
  - c. Login as susan/class for the User and Password.

**Note**

If your system is in TMA authentication mode for Datacap, then log on as user: `admin` and password: `admin`

---

- d. Notice that the Desktop is also being displayed with German headings.
- e. Notice that all of the shortcuts are displayed in German.
- f. Verify that the batches are displayed with German names for the Jobs and Task names.
- g. Click one of the batches and notice that the image and properties panel opens on the right side of the screen.
- h. Click the Systemeigenschaften heading to open the properties.
- i. Notice also that the property names in the right side panel are in German.
- j. Log out of Datacap Navigator Desktop.
- k. Close the browser window.

### ***Procedure 4: Restore the globalization settings***

1. Restore the globalization settings back to US English for web clients.
  - a. Open the Internet Explorer Browser window, click Tools > Internet Options.
  - b. In the "Internet Options" window > "General" tab, click "Languages".
  - c. In the "Language Preference" window, Select the German (Germany) [de-DE] and then click "Remove".
  - d. Make sure the entry is removed and click OK.
  - e. In the "Internet Options" window, click OK.
  - f. Close the Internet Explorer browser window.
2. Restore the globalization settings back to US English for thick clients.
  - a. Click "Start" and select "Control Panel".
  - b. In the window that opens, click "Region and Language".
  - c. In the "Region and Language" window, select the "Formats" tab.
  - d. Select English (United States) for the Format field.
  - e. Click OK and close the Control Panel window.

3. Restore the default resources.json file.
  - a. Open windows Explorer.
  - b. Go to C:\Datacap\TravelDocs\dco\_TravelDocs\en and rename your resources.json file. This deactivates it and you will default to the ...\dco\_TravelDocs\resources.json file.
4. Stop Rulerunner.
  - a. Double-click the Datacap Rulerunner Manager icon on the desktop.
  - b. Click Stop.
  - c. Close the Datacap Rulerunner Manager window.

### ***Procedure 5: Check that Datacap Desktop is restored***

1. Login to Datacap Desktop and select the TravelDocs application.
  - a. Double-click the Datacap Desktop icon on the Desktop.
  - b. Type susan/class for the User and Password and 1 for Station.



#### **Note**

If your system is in TMA authentication mode for Datacap, then log on as user: `admin` and password: `admin`

---

- c. Click Start.
  - d. Click the Applications link and select TravelDocs.
2. Verify that your edited English resources.json file is no longer in use.
  - a. Notice that there is no longer any German text.
  - b. Notice that the task shortcuts you changed are not preceded by "Doc".
  - c. Click the All link at the top of the links.
  - d. Verify that the task names are not preceded by EN-.

### ***Procedure 6: Check that Datacap Navigator is restored***

1. Open the Datacap Navigator desktop.
  - a. Open the Internet Explorer browser and click the DCN-Datacap link.
  - b. Type susan/class for the User and Password.



#### **Note**

If your system is in TMA authentication mode for Datacap, then log on as user: `admin` and password: `admin`

---

- c. Notice that the Shortcuts are not preceded by Doc”
  - d. Notice that the “Nav Jobs” are displayed in the Jobs column are displayed a “Navigator Job”.
- 

## **End of exercise**

# Appendix 1. Answer keys to quiz

[Lesson 1.1. Create Shortcuts for Web Clients](#), on page 1-45

[Configure Web Client Shortcuts: Quiz](#), on page 1-45

[Lesson 1.2 Virtual Stations and Queuing of Tasks](#), on page 1-46

[Control Queuing Tasks in a Workflow: Quiz](#), on page 1-46

[Lesson 1.3 Disaster Recovery](#), on page 1-47

[Backup Strategy: Quiz](#), on page 1-47



## Lesson 1.1. Create Shortcuts for Web Clients

### Configure Web Client Shortcuts: Quiz

1. What would you expect to see as the Program Key for each of the Web Job tasks?

iVScan \_\_\_\_\_ **VScancl.aspx** \_\_\_\_\_  
 Upload \_\_\_\_\_ **UpIBFcl.aspx** \_\_\_\_\_  
 Profiler \_\_\_\_\_ **Rulerunner** \_\_\_\_\_  
 Verify \_\_\_\_\_ **Multiple** \_\_\_\_\_  
 Export \_\_\_\_\_ **Rulerunner** \_\_\_\_\_

2. Which tasks would you expect to see on the Operations task list

- a. If you log in to ExpenseDemo as erin with station 1 selected?

**Answer = None**

- b. If you log in to ExpenseDemo as susan with station 1 selected?

**Answer = VScan, Web Scan, Upload, Fixup, and Verify/Fix**

- c. If you log in to ExpenseDemo as sam with station 1 selected?

**Answer = VScan, Web Scan, and Upload**

- d. If you log in to ExpenseDemo as vinny with station 1 selected?

**Answer = Verify/Fix**

- e. If you log in to ExpenseDemo as susan from station 4 selected?

**Answer = Vscan, Web Scan and Upload**

---

## Lesson 1.2 Virtual Stations and Queuing of Tasks

### Control Queuing Tasks in a Workflow: Quiz

#### Introduction

An application is configured with Store and Queue by options in the job tasks as follows:

1. At the VScan step, set **Store** to *Station ID and User ID*.
2. At the PageID step, set **Queue by** to *Station*
3. At the Profiler step, set **Queue by** to *User And Other Station*.
4. At the Verify step, set **Queue by** to *Other User Other Station*.
5. The **susan** user processes the VScan step while logged in to station **1**.

Assume that users erin and susan both have permission to process any job step for the test application.

For each question, indicate the correct answer or the best answer. If the user station combination is allowed to process the step, then choose Pass otherwise choose Fail.

1. Which combination of user and station are allowed to process the PageID step.
    - a. User susan and station 2. Pass or Fail **Answer = Fail**
    - b. User erin and station 2. Pass or Fail **Answer = Fail**
    - c. User erin and station 1. Pass or Fail **Answer = Pass**
  2. Which combination of user and station are allowed to process the Profiler step.
    - a. User erin and station 1. Pass or Fail **Answer = Fail**
    - b. User erin and station 2. Pass or Fail **Answer = Fail**
    - c. User susan and station 2. Pass or Fail **Answer = Pass**
  3. Which combination of user and station are allowed to process the Verify step.
    - a. User erin and station 1. Pass or Fail **Answer = Fail**
    - b. User susan and station 2. Pass or Fail **Answer = Fail**
    - c. User erin and station 2. Pass or Fail **Answer = Pass**
  4. Which combination of User and station are allowed to process the Export step.
    - a. User erin and station 1. Pass or Fail **Answer = Pass**
    - b. User susan and station 2. Pass or Fail **Answer = Pass**
    - c. User erin and station 2. Pass or Fail **Answer = Pass**
-

## Lesson 1.3 Disaster Recovery

### Backup Strategy: Quiz

For each question, indicate the correct answer or the best answer.

1. For each of the server types listed, indicate which fit the description of a Stateless server. Indicate servers that are stateless by marking the True response.

- a. Rulerunner Servers. True or False

**Answer = True**

- b. Fingerprint Servers. True or False

**Answer = True**

- c. Datacap Server. True or False

**Answer = False**

- d. Database Servers. True or False

**Answer = False**

- e. File Server. True or False

**Answer = False**

- f. Web Servers. True or False

**Answer = True (after scan batches are uploaded)**

2. How often must Datacap servers with volatile data be backed up. Indicate your answer by marking True or False.

- a. Datacap servers must be backed up at a period that the corporate backup strategy determines. True or False

**Answer = True**

- b. Datacap servers must be backed up every month. True or False

**Answer = False**

- c. Datacap servers must be backed up every week. True or False

**Answer = False**

- d. Datacap servers must be backed up every day. True or False

**Answer = False**

- e. Datacap servers must be backed up when the volume of data capture activity warrants a backup of the volatile data to prevent data loss. True or False

**Answer = False**

3. Which of the following statements are accurate for a valid backup practice for a Datacap Capture system? There is more than one correct answer.
- a. All servers in the system must be backed up at least weekly and while system activity is at a minimum. True or False

**Answer = False**

- b. All Stateless servers must be backed up weekly and Data servers (non-stateless) every day at least system performance. True or False

**Answer = False**

- c. Stateless servers must be backed up one time and thereafter only when system configuration changes occur or service packs are applied. True or False

**Answer = True**

- d. Servers that hold volatile data (non-stateless) must be backed up in accordance the corporate backup strategy document. True or False

**Answer = True**

- e. Before a backup of the Web server, make sure that remote scanned batches are uploaded and purged. True or False

**Answer = True**

---

---

# Unit 2. Maintenance

## Estimated time

02:00

## Unit overview

This unit contains these lessons.

### Lessons

[Lesson 2.1, "System Maintenance,"](#) on page 2-2

[Lesson 2.2, "Maintenance Manager,"](#) on page 2-7

[Lesson 2.3, "Event Logs,"](#) on page 2-17

### Requirements

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

### System check

Refer to the system check section at the beginning of unit 1 if your image has been restarted for any reason.

# Lesson 2.1. System Maintenance

## Overview

### Why is this lesson important?

As an Administrator of an IBM Datacap capture system, you must be familiar with all configuration tasks for a functional IBM Datacap 9.0 system.

You must be able to implement routine maintenance procedures to ensure smooth operation of the data capture system.

## Activities

- [Exercise 1: Maintenance Topic Quiz](#), on page 2-3
- [Exercise 2: Synchronize Job Monitor and Batch Folders](#), on page 2-5

## User Accounts

Type	User ID	Password
Server Administrator	Administrator	passw0rd



### Note

Passwords are always case-sensitive.

---

## Exercise 1: Maintenance Topic Quiz

### Introduction

Each of the topics that is listed fall into one of three Maintenance categories; Routine Maintenance, Preventive Maintenance, or Corrective Maintenance. For each topic, select the Maintenance category that describes the topic best.

1. Release resources.  
**Routine, Preventive, or Corrective?**
2. Monitor system performance to ensure consistent throughput.  
**Routine, Preventive, or Corrective?**
3. Monitor component throughput.  
**Routine, Preventive, or Corrective?**
4. Analyze errors that are reported by System Operators and take corrective action.  
**Routine, Preventive, or Corrective?**
5. Delete processed batches to ensure that the disk resources are recycled.  
**Routine, Preventive, or Corrective?**
6. Check load-sharing across duplicate resources to maximize throughput.  
**Routine, Preventive, or Corrective?**
7. Flush event logs to make sure that they do not grow too large.  
**Routine, Preventive, or Corrective?**
8. Check logs to make sure that errors are not occurring.  
**Routine, Preventive, or Corrective?**
9. Analyze errors that are detected in error logs and take corrective action.  
**Routine, Preventive, or Corrective?**
10. Make sure that Service Level Agreements (SLAs) that stipulate throughput expectations are met.  
**Routine, Preventive, or Corrective?**
11. Producing periodic reports, daily, weekly, monthly, year end.  
**Routine, Preventive, or Corrective?**
12. Configure NENU to detect and handle exceptions.  
**Routine, Preventive, or Corrective?**
13. Use RV2 to produce reports.  
**Routine, Preventive, or Corrective?**
14. Schedule services to mechanical devices like, scanners, printers, filters fans, or air conditioners. Release resources.

**Routine, Preventive, or Corrective?**

15. Reassign scanners when mechanical failures occur.

**Routine, Preventive, or Corrective?**

---



**Note**

Refer to [Lesson 2.1.System Maintenance](#), on page 2-28 for the answers to the quiz.

---

**End of exercise**



## Exercise 2: Synchronize Job Monitor and Batch Folders

### Introduction

In this activity, you do a manual comparison between the jobs that are listed in the Job Monitor view and the Application Batch folders. The Job Monitor view is in the tmweb client. If you discover any discrepancies between the two lists, then synchronize them. You either delete Batch folders or deleting jobs from the Job Monitor list.

### Procedures

[Procedure 1, "Synchronize Jobs with Batches,"](#) on page 2-5

#### ***Procedure 1: Synchronize Jobs with Batches***

1. Log in to the Server 2008 ECMEDU01 student system and run the Unit 2L1.bat initialization task.
  - a. If not already logged in to the server, then log in to the Server 2008 student system desktop as Administrator / passw0rd.
  - b. Open Windows Explorer and browse to C:\DC9-LabExercises\MaintenanceLabfiles and double-click Unit2L1.bat.
  - c. Click Run.
  - d. Browse to C:\Datacap\ExpenseDemo\batches.
  - e. Verify that there are some folders with names that start with 20121107, 08 or perhaps the current date. The number of folders depends on how many batches you have run.
2. Open the Datacap Navigator desktop.
  - a. Open the Internet Explorer browser and click the DCN-Datacap link.
  - b. Login. User: susan and password: class
  - c. Select the "ExpenseDemo" application from the list in the banner.
  - d. If prompted, log in as User: susan and password: class
  - e. In the Job Monitor, verify that some jobs are listed.
3. Compare the Job Monitor list with the batches folders.
  - a. Compare the Batches column on the Job Monitor view with the folders displayed in the C:\Datacap\ExpenseDemo\batches folder on the ECMEDU01Server.
  - b. If there are any folders in the C:\Datacap\ExpenseDemo\batches folder that do not have corresponding entries in the Job Monitor list, then delete the extra folders.
    - Right-click the folder and select Delete from the menu.
    - Click Yes on the Delete Folder warning message.
  - c. If there are job entries in the Job Monitor list that do not have corresponding folders in the C:\Datacap\ExpenseDemo\batches folder, then delete unmatched jobs.

- Click the link for the job you want to delete in the Batch column of the Job Monitor view.
  - Click “Delete” in the top toolbar.
  - When prompted, click “Delete” on the confirmation window.
4. Repeat step 3 until you have a one-to-one correspondence between the Jobs that are listed in the Job Monitor view and the C:\Datacap\ExpenseDemo\batches folder.
  5. Log out of the Datacap Navigator and close the Internet Explorer window.
- 

## **End of exercise**

# Lesson 2.2. Maintenance Manager

## Overview

### Why is this lesson important?

As an Administrator of an IBM Datacap capture system, you must be familiar with all configuration tasks for a functional IBM Datacap 9.0 system.

You must be able to Configure Datacap Maintenance Manager (NENU) to monitor the status of batches and do the appropriate cleanup activities to automate maintenance procedures.

## Activities

- [Exercise 1: Create a NENU Application](#), on page 2-8
- [Exercise 2: Configure an Auto Start Schedule](#), on page 2-14

## User Accounts

Type	User ID	Password
Server Administrator	Administrator	passw0rd



### Note

Passwords are always case-sensitive.

---

## Exercise 1: Create a NENU Application

### Introduction

In this activity, you configure and run the NENU application that is installed on the student image. You configure Windows Task Scheduler to run NENU automatically, and configure NENU to delete batches that are completed.

### Procedures

[Procedure 1, "Set a Batch to the Job Done State,"](#) on page 2-8

[Procedure 2, "Login to Datacap Studio for NENU,"](#) on page 2-9

[Procedure 3, "Configure the AutoDelete Ruleset,"](#) on page 2-9

[Procedure 4, "Run the AutoDelete Rule with NENU Manager,"](#) on page 2-11



#### Windows

In this activity, you complete the steps on the Server 2008 ECMEDU01 student system.

---



#### Important

The NENU application is created on the Student system for your convenience. Check that you did the procedure in the Image preparation section at the beginning of Unit 1. This preparation sets up user groups so that NENU can use the LLDAP Authentication.

---

### ***Procedure 1: Set a Batch to the Job Done State***

1. Log in to tmweb.
  - a. In the Internet Explorer browser, click the tmweb link in the Favorite bar, then:
  - b. Type or Select:

Application: ExpenseDemo  
User ID: susan  
Password: class  
Station: 1.
  - c. Click Login. Taskmaster Web Client opens to the Operations menu.
2. Verify or Set a Batch to the Job done Status.
  - a. Click the Monitor tab.
  - b. If there are batches in the Job Done state, then skip the rest of step 2 and proceed to procedure 2.

- c. Click the link under the Batch column for any job in the list, that was completed during the class.
- d. Select Job Done from the Status field list.
- e. Scroll down if necessary and click Apply.  
You now have one batch in the Job Done state that was completed in the last 5 days.
- f. Log out of the tmweb client and close the Internet Explorer window.

## **Procedure 2: Login to Datacap Studio for NENU**

The Student image is already equipped with a NENU application. In this procedure, you use the supplied AutoDelete Ruleset and Profile that is defined in the NENU application.


1. Open the NENU application in Datacap Studio.
  - a. Click Start > All Programs > Datacap > Developer > Datacap Studio.
  - b. If necessary scroll down and select NENU on the Applications window and click Next.
  - c. Type the user credentials and click Finish.
 

User ID: susan  
Password: class  
Station: 1

## **Procedure 3: Configure the AutoDelete Ruleset**

Configure the Ruleset to include the actions and action parameters in the following table.

Note: You need to make seven changes to the AutoDelete Ruleset.

1. Lock the AutoDelete ruleset.
  - a. On the Rulesets tab, click the AutoDelete Ruleset under the NENU Workflow.
  - b. Click the Lock/Unlock Ruleset for editing icon  .
2. Set the SetServer parameter.
  - a. Expand the AutoDelete Ruleset.
  - b. Expand Rule1 and expand Function1.
  - c. Select the SetServer action.



### **Note**

The parameter for SetServer should use the name of the server that is specified in the application file expensedemo.app. In the following case, it would be **tms**, which is the default. You do not need to call this action at all unless you want to use a specific server other than tms.

```
<k name="ecmedu01s">
  <k name="tms" ip="127.0.0.1" port="2402" retry="3"/>
</k>
```

**AutoDelete Action table**


Activity	Parameters
SetServer	<b>tms</b>
SetApplication	<b>ExpenseDemo</b>
SetUser	<b>susan</b>
SetPassword	<b>class</b>
SetStation	<b>1</b>
SetupOpenApplication	Leave blank, no value required.
QuerySetStatus	<b>Job done</b>
QuerySetAge	<b>432000, False</b>
ProcessRunSqlQuery	Leave blank, no value required.
LogWrite RecordSet	Leave blank, no value required.
ProcessDeleteBatches	Leave blank, no value required.

3. Set the SetApplication action.
  - a. Click the SetApplication action.
  - b. Enter the application name (ExpenseDemo) in the Properties pane.
4. Set the SetUser action.
  - a. Click the SetUser action.
  - b. Type the user in the Properties pane.
5. Set the SetPassword action.
  - a. Click the SetPassword action.
  - b. Type the password in the Properties pane.

**Note:** When you are using LDAP or ASDI Authentication, the SetPassword action is not required. It is also **NOT** acceptable to use the SetPassword action and leave the password blank.

6. Set the QuerySetAge parameter to 432000.
  - a. Click the QuerySetAge action.
  - b. Edit the server parameter in the properties pane to change it to **432000**.

Note: 432000 represents all batches run in the last five days 5x24x60x60. The False parameter indicates that the batch end date is used for evaluating the query. True parameter would indicate that the batch start date is used to evaluate the Query. Using an exclamation point !432000, represents batches older than 5 days

7. Unlock and Publish the edited Ruleset.
  - a. Click  Save changes on the Rulesets tab.

- b. Click  Lock/Unlock ruleset and select the Publish ruleset.

The orange locked icon changes to unlocked.

8. Configure the DCO.

- In the Document Hierarchy pane Expand the top batch level of the DCO (NENU), and expand the Open node.
- Verify that the AutoDelete: Rule 1 rule is defined.

9. Configure the Profile.

- Click Task Profiles tab at the top of the upper right pane.
- Verify that the AutoDelete Profile is defined.
- Verify that the AutoDelete ruleset is defined in the profile.
- Click Exit to close Datacap Studio.

### ***Procedure 4: Run the AutoDelete Rule with NENU Manager***

1. Configure AutoDelete with NENU Manager.

- On the Server 2008 ECMEDU01 student system, click Start > All Programs > IBM Datacap Development Tools > Datacap Maintenance Manager. The Datacap Maintenance Manager window opens.
- Click Create on the NENU Manager.

NENU Manager generates a Settings file.

- Click in the empty field to the right of the lib label to modify the Settings. Then, either select a value from the list, or enter a value. Modify the following NENU options:

#### **Default Setting Options**

Option	Value	Description
lib	NENU	Select the name of the NENU application. This value is the application that contains the NENU Task Profile.
tprofile	AutoDelete	Select the name of the NENU Task Profile.
action_log_level	0	Select the logging level for action messages; 0 provides maximum information.
log_override	True	Select True to create a log file; False to append to the existing log file.
log_reflush	False	Select False to ensure that all messages are written to the log even in the case of an exception; runs slower but easier to debug.
service_log	0	Select the logging level for service messages; 0 provides maximum information.

- Select the “Place settings file in the batch directory” option. This setting creates a sub folder beneath the Batches folder of the application for the AutoDelete working files.

- e. Click Save to generate the Settings file.
  - f. Click Yes if you get a message that indicates that the settings file exists.
  - g. The Settings.xml file is saved in the AutoDelete folder in the Batches folder of the selected application.
2. Run NENU to test the AutoDelete task profile.
    - a. Click Run Profile to test the task profile.
 

A message confirms that the task was completed and instructs you to check the log file.
    - b. Click OK.
    - c. Close the Datacap Maintenance Manager window.

3. View the log file.

Using Windows Explorer, open the NENU folder under the batches folder of the application C:\Datacap\NENU\batches\NENU\_AutoDelete.

- a. Open the log file, autodelete\_rrs.log in WordPad to see the results of the profile run.
- b. Scroll down and verify that a record in Job Done status was found.
- c. Find the record that starts with *Running LogWriteRecordSet Action*.
- d. Verify that a record with all of the information for the batch in the Job done state is written to the log file.

```
13:36:30.72 (16)      t:159C p:56A48D0 Running LogWriteRecordSet
Action...
13:36:30.72 (0) t:159C p:56A48D0 WriteRecordSet
returned:'<rs:data xmlns:rs="urn:schemas-microsoft-com:rowset">
<z:row PB_BATCH="20150712.000000" PB_EXPECTPGS="1" PB_NDOCS="1"
PB_BATCHDIR="C:\Datacap\ExpenseDemo\batches\20150712.000000"
```

- e. Verify that the ProcessDeleteBatches action deleted the batch that the LogWriteRecordSet action logged.

```
13:36:30.87 (15)      t:159C p:56A48D0 Running
ProcessDeleteBatchesEx Action...
13:36:30.103 (16)      t:159C p:56A48D0 Delete Queue ID 1
13:36:30.353 (250)     t:159C p:56A48D0 Running
ProcessDeleteBatchesEx Action...
13:36:30.353 (0)      t:159C p:56A48D0 C:\Datacap\ExpenseDemo
\batches\20150712.000000
```

4. Close the log file.
5. Close the Windows Explorer browser window.
6. Log into tmweb for ExpenseDemo.
  - a. Verify that all batches that you saw at the beginning of the activity with the Job Done status are deleted.



- b. Log out of tmweb and close the Internet Explorer browser window.

---

## **End of exercise**

## Exercise 2: Configure an Auto Start Schedule

### Introduction

In this activity, you configure Windows Task Scheduler to run NENU automatically at predefined times to do system maintenance tasks.

### Procedures

[Procedure 1, "Set a Batch to the Job Done State,"](#) on page 2-14

[Procedure 2, "Configure Windows Task Scheduler to Run NENU,"](#) on page 2-14

---



#### Windows

In this activity, you complete the steps on the DCCLIENT student client system.

---

#### ***Procedure 1: Set a Batch to the Job Done State***

1. Log in to tmweb.
  - a. In Internet Explorer, click the tmweb-server link in the Favorite bar.
  - b. Type or Select  
Application: ExpenseDemo  
User ID: susan  
Password: class  
Station: 1.
  - c. Click Login.  
Taskmaster Web Client opens to the Operations menu.
2. Verify or Set a Batch to the Job done Status.
  - a. Click the Monitor tab.
  - b. If there are batches in the Job done state, then skip the rest of step 2 and proceed to procedure 2.
  - c. Click the link under the Batch column for any job in the list.
  - d. Select Job Done from the Status field list.
  - e. Click Apply. You now have at least one batch in the Job Done state.
  - f. Logout of tmweb and Close the Internet Explorer window.

#### ***Procedure 2: Configure Windows Task Scheduler to Run NENU***

1. Open the Windows task Scheduler.
  - a. Click Start > Administrative Tools > Task Scheduler.

2. Define a Datacap folder.
  - a. Select Task Scheduler Library under Task Scheduler (Local), and choose New Folder from the Actions pane on the far right.
  - b. Enter Datacap and click OK.
  - c. The new folder is created for your Datacap Scheduled Tasks.
  - d. Expand the Task Scheduler Library and select the Datacap folder.
3. Create a Basic Task.
  - a. Click Create Basic Task in the Actions pane.
  - b. Enter a name (NENU Test) for the task in the Create a Basic Task dialog and click Next.
  - c. Select *One time* in the Task Trigger dialog and click Next.
  - d. Enter the Start date and time in the Daily dialog. Make it 10 minutes from now and click Next.
  - e. Select Start a program in the Action dialog and click Next.
  - f. Browse and select C:\Datacap\Taskmaster\NENU.exe in the Program/script field, then click Open.
  - g. In the Add arguments field, enter the path and file name for the NENU settings file, for example: C:\Datacap\NENU\Batches\NENU\_AutoDelete\Settings.xml



### Hint

You can go to this folder in Windows Explorer and copy the path.

---

- h. Click Next. In the Summary dialog, select *"Open the Properties dialog for this task when I click Finish."*
  - i. Click Finish. The NENU Properties dialog opens.
4. Setup Security options.
  - a. Click Change User or Group under Security options.
  - b. Type `Administrator`, click Check Names and click OK.
  - c. Select Run whether user is logged on or not.
  - d. Select Run with highest privileges option and click OK.
  - e. Ensure that the NENU account (user name) is correct.
  - f. Enter the password, `class` and click OK.
  - g. Click OK to close the Properties window.
5. Close the Task Scheduler.
6. Give the scheduler time to run then view the log file.
7. View the log file.

Using Windows Explorer, open the NENU folder under the batches folder of the application C:\Datacap\NENU\batches\NENU\_AutoDelete.

- a. Open the log file, autodelete\_rrs.log in WordPad to see the results of the profile run.
- b. Scroll down and verify that a record in Job Done status was found.
- c. Find the record that starts with *Running LogWriteRecordSet Action*.
- d. Verify that a record with all of the information for the batch in the Job done state is written to the log file.

```
14:40:39.400 (0)      t:158C p:37A2090 Running LogWriteRecordSet
Action...
14:40:39.415 (15)    t:158C p:37A2090 WriteRecordSet
returned: '<rs:data xmlns:rs="urn:schemas-microsoft-com:rowset">
<z:row PB_BATCH="20150715.000000" PB_EXPECTPGS="1" PB_NDOCS="1"
PB_BATCHDIR="C:\Datacap\ExpenseDemo\batches\20150715.000000"
```

- e. Verify that the ProcessDeleteBatches action deleted the batch that the LogWriteRecordSet action logged.

```
14:40:39.415 (0)      t:158C p:37A2090 Running
ProcessDeleteBatchesEx Action...
14:40:39.431 (16)    t:158C p:37A2090 Delete Queue ID 41
14:40:39.681 (250)   t:158C p:37A2090 Running
ProcessDeleteBatchesEx Action...
14:40:39.681 (0)      t:158C p:37A2090 C:\Datacap\ExpenseDemo
\batches\20150715.000000
```

8. Close the browser.
9. Go to the tmweb-server, which is still open. Verify that all batches that you saw at the beginning of the activity with the Job Done status are deleted.
10. Log out of tmweb and close the Internet Explorer browser window.

---

## End of exercise

## Lesson 2.3. Event Logs

### Overview

### Why is this lesson important?

As an Administrator of an IBM Datacap capture system, you must be familiar with all configuration tasks for a functional IBM Datacap 9.0 system.

You must be able configure event logs, know where to locate them and how to interpret them for system performance and maintenance purposes.

### Activities

- [Exercise 1: Configure Rulerunner for ExpenseDemo](#), on page 2-18
- [Exercise 2: Use Quick Log Settings to Analyze Event Log Content](#), on page 2-20

### User accounts

Type	User ID	Password
Server Administrator	Administrator	passw0rd
Workstation Administrator	Administrator	class



#### Note

Passwords are always case-sensitive.

---

## Exercise 1: Configure Rulerunner for ExpenseDemo

### Introduction

This lesson required Rulerunner to be configured to run the ExpenseDemo Profiler and Export tasks automatically in the background. This activity configured Rulerunner to do the required background processing.

### Procedures

[Procedure 1, "Create a Rulerunner Station for Expense Demo,"](#) on page 2-18

[Procedure 2, "Configure Rulerunner to run your applications,"](#) on page 2-19

---



#### Windows

In this activity, you complete the steps on the DCCLIENT student client system.

---

### ***Procedure 1: Create a Rulerunner Station for Expense Demo***

1. Log in to Datacap Web Client as the Administrator user.

- a. Open Internet Explorer.
  - b. Click the tmweb-server link on the taskbar.

Type or Select the ExpenseDemo application.

User ID: susan

Password: class

Station: 1

- c. Click Login.

2. Add Datacap Station.

- a. Click the Administrator tab and click Stations.
  - b. Click New, and enter:

Name: ECMEDU01

Description: Rulerunner Station

Maximum: 9999

Select Permissions.

Main Job - Profiler, and Export

Web Job - Profiler, and Export

- c. Click Save.
  - d. Log out and close the Internet Explorer window.

## ***Procedure 2: Configure Rulerunner to run your applications***

1. Start the Datacap Rulerunner Manager and connect to the application.
  - a. From the Rulerunner Server Start menu, select All Programs > IBM Datacap Services > Datacap Rulerunner Manager.
  - b. Click the Rulerunner Login tab to display it.
  - c. Verify or select Taskmaster Authentication.
 

Type:  
User ID: susan  
Password: class  
Station ID: 1
  - d. Click Save.
 

It is critical that these credentials are saved because they are used at runtime.
  - e. Click Connect.
  - f. Click the Workflow:Job:Task tab.
2. Configuring Rulerunner to run Expense Demo tasks.
 

The names of the applications from the datacap.xml file are displayed in the left pane.

  - a. In the right pane, expand the <Thread> node. If there is already an Expense Demo entry, delete it.
  - b. In the left pane, click the ExpenseDemo check box.
  - c. The application tree expands with the Server, Administrator, and Engine databases selected.
  - d. Click the check boxes under the “Main Job”, “Web Job”, and “Navigator Job” for the Profiler, and Export tasks.
  - e. Click the application name Expense Demo and drag it to the thread0 node in the right pane. Release the mouse key while the cursor is hovering over thread0.
  - f. Verify that Main Job Profiler, and Export appear under thread0.
  - g. Click Save (or CTRL+S) to save your changes.
  - h. If you see a warning message “File does not exist”, click Yes to acknowledge the warning and to save the configuration file.
  - i. Make sure that the thread0 check box in the right pane is selected.
3. Disconnect from the application and close the Datacap Rulerunner Manager.
  - a. Click the Rulerunner Login tab.
  - b. Click Disconnect.
  - c. Close the Datacap Rulerunner Manager window.

---

### **End of exercise**

## Exercise 2: Use Quick Log Settings to Analyze Event Log Content

### Introduction

In this activity, you disable the Datacap Server logs and the Rulerunner Service log. You process a batch and review if any log output is produced. You then enable certain log options, process batches and review the log output that is produced.

### Procedures

[Procedure 1, "Disable the Datacap Server and Rulerunner Server Log,"](#) on page 2-20

[Procedure 2, "Process a Batch,"](#) on page 2-22

[Procedure 3, "Verify That NoLog Files Are Produced,"](#) on page 2-23

[Procedure 4, "Activate Datacap Server Logging,"](#) on page 2-23

[Procedure 5, "Process a Batch,"](#) on page 2-24

[Procedure 6, "Verify that the tms log is produced,"](#) on page 2-24

[Procedure 7, "Activate Rulerunner Server Logging,"](#) on page 2-24

[Procedure 8, "Process a Batch,"](#) on page 2-25

[Procedure 9, "Verify That Rulerunner Logs Are Produced,"](#) on page 2-26



### Windows

In this activity, you complete the steps on the Server 2008 ECMEDU01 student system.

### ***Procedure 1: Disable the Datacap Server and Rulerunner Server Log***

1. Open the Datacap Server Manager and stop the Server.
  - a. Click Start > All Programs > IBM Datacap Services > Datacap Server Manager.
  - b. Click the Service tab.
  - c. Click Stop (Red rectangle) to stop the Datacap Taskmaster Server Service.
2. Set minimal Datacap Server Manager logs.
  - a. Click the Logging tab.
  - b. Click the System event log tab.
  - c. Slide the Message level Slider to the Critical only position at the left of the scale.
  - d. Click the Datacap log tab.
  - e. Clear the "Output to file(s)" check box to disable logging.
  - f. Slide the Number of messages Slider to the left to the None position on the scale.
  - g. Click Save to preserve the settings.



- h. Leave the Datacap Server Manager window open.
- i. Click the Service tab.
- j. Click Start (Right green arrow) to start the Datacap Server Service.
3. Start the Rulerunner Manager and stop the Service.
  - a. Click Start > All Programs > IBM Datacap Services Datacap Rulerunner Manager.
  - b. Click the Rulerunner tab.
  - c. If the Rulerunner Server is running, click Stop to stop the Server.
  - d. Click the Rulerunner Login tab.
  - e. Select Taskmaster Authentication.
 

Type credentials as follows:  
 User ID: susan  
 Password: class  
 Station ID: 1
  - f. Click Connect.
4. Set minimal Rulerunner logging with the Quick Log Control.
  - a. Click the Logging tab at the top of the screen.
  - b. Click the Quick Log sub-tab.
  - c. Slide the Number of Messages Slider to the No position on the left of the scale.
  - d. Clear the following check boxes on the ATM Log, Rulerunner Log, and RRS Log views one at a time. Verify that all logging options are disabled and the sliders are all on the left.
 

On the ATM Log tab, clear Enable ATM Log  
 On the Rulerunner Log tab, clear Output to folder checkbox  
 On the RRS Log tab, clear the Batch Log checkbox.
  - e. Click Save to preserve the settings.
  - f. Leave the Rulerunner Manager window open. You return to start the server again later.
5. Open Windows Explorer and delete the log files.
  - a. Open Windows Explorer.
  - b. Delete the log files listed in the Log Files table.

If Rulerunner has never processed any batches you will not see the Rulerunner log files.

**Log Files table**

Location	Log files
C:\Datacap	tms.log.0.log
	rulerunner0.log
	rulerunner_thread_0_atm.0.log
C:\Datacap\RRS\Logs	wrrs-*.log (delete all files)

- c. Close Windows Explorer.
- 6. Start the Datacap Server Service.
  - a. Go to the Datacap Server Manager window that is still open on the Server 2008 student system.
  - b. Click the Service tab.
  - c. Click Start (Right green arrow) to start the Datacap Server Service.
  - d. Click Close to close the Datacap Server Manager window.
- 7. Start the Rulerunner Server.
  - a. Go to the Rulerunner Server Manager window that is still open on the Server 2008 student system.
  - b. Click the Rulerunner Login tab and click Disconnect.
  - c. Click the Rulerunner tab.
  - d. Click Start (Right green arrow) to start the Datacap Rulerunner Server.
  - e. Click Close to close the Datacap Rulerunner Manager window.

## ***Procedure 2: Process a Batch***

- 1. Start Datacap Desktop and login as the Scanner user.
  - a. Click Start > All Programs > IBM Datacap Clients > Datacap Desktop.
  - b. Enter field data:
    - User: *sam*
    - Password: *class*
    - Station: *1*
  - c. Click Start.
  - d. Select the ExpenseDemo application from the application list if it is not already selected.
- 2. Use Datacap Desktop to process a batch through the VScan Task.
  - a. Click the VScan shortcut and click OK to run the next pending batch.
  - b. Browse to the C:\Datacap\ExpenseDemo\images folder, select the car1.tif image, and click Open.
  - c. Set the expected field to 1.
  - d. Click Scan. One image is scanned and shown in the Batch View pane.
  - e. Click Submit. Click OK to acknowledge the Datacap Desktop Batch finished message.
  - f. Click Stop to end the VScan task and close the Datacap Desktop window.

3. Log in to the Taskmaster Web Client as the Supervisor user.
  - a. In Internet Explorer, click the tmweb-server link on the taskbar.
 

Type or Select the ExpenseDemo application.  
 User ID: susan  
 Password: class  
 Station: 1
  - b. Click Login.
4. View Jobs in the Job Monitor.
 

Monitor your batches with the Taskmaster Web Job Monitor. Watch batches change status as Rulerunner processes them.

  - a. Click Monitor.
  - b. View the Job Status as Rulerunner processes the Profiler task.
  - c. The Task processing stops when the task reaches the Verify Task.
  - d. Log out of the tmweb.
  - e. Close the Internet Explorer window.

### ***Procedure 3: Verify That NoLog Files Are Produced***

1. Open Windows Explorer and verify that log files are not created.
  - a. Open Windows Explorer.
  - b. Verify whether any of the log files that are listed in the Log Files table are created.

**Log Files table**

Location	Log files
C:\Datacap	tms.log.0.log rulerunner0.log rulerunner_thread_0_atm.0.log
C:\Datacap\RRS\Logs	wrrs-*.log
C:\Datacap\ExpenseDemo\batches\<yyyymmdd><number>	vscan_rrs.log profiler_rrs.log

- c. Close Windows Explorer.

### ***Procedure 4: Activate Datacap Server Logging***

1. Open the Datacap Server Manager and stop the Server.
  - a. Click Start > All Programs > IBM Datacap Services > Datacap Server Manager.
  - b. Click the Service tab.
  - c. Click Stop (Red rectangle) to stop the Datacap Taskmaster Server Service.

2. Set minimal Datacap Service Manager logs.
  - a. Click the Logging tab.
  - b. Click the Datacap log tab.
  - c. Click the *Output to file(s)* check box to enable logging.
  - d. Slide the Number of messages Slider to the middle of the scale.
  - e. Click Save to preserve the settings.
3. Start the Datacap Taskmaster Server Service.
  - a. Click the Service tab.
  - b. Click Start (Right green arrow) to start the Datacap Taskmaster Server Service.
  - c. Click Close to close the Datacap Server Manager window.

### **Procedure 5: Process a Batch**

1. Repeat procedure 2 to process a VScan task with Datacap Desktop and then watch Rulerunner process the Profiler Tasks from tmweb > Monitor.

### **Procedure 6: Verify that the tms log is produced**

1. Open Windows Explorer and verify that log files are created.
  - a. Open Windows Explorer.
  - b. Verify that the log files with Yes in the Status column of the Log Files table were created.

**Log Files table**

Location	Log files	Status
C:\Datacap	tms.log.0.log	<b>Yes</b>
	rulerunner0.log	No
	rulerunner_thread_0_atm.0.log	No
C:\Datacap\RRS\Logs	wrrs-*.log	No
C:\Datacap\ExpenseDemo\batches\<yyyymmdd><number>	profiler_rrs.log	No

- c. Close Windows Explorer.

### **Procedure 7: Activate Rulerunner Server Logging**

1. Start the Rulerunner Manager and stop the Service.
  - a. Click Start > All Programs > IBM Datacap Services > Datacap Rulerunner Manager.
  - b. Click the Rulerunner tab.
  - c. If the Rulerunner Server is running, click Stop to stop the Server.
  - d. Click the Rulerunner Login tab.

- e. Select Taskmaster Authentication.
  - Type credentials as follows:
  - User ID: susan
  - Password: class
  - Station ID: 1
- f. Click Connect.
2. Set minimal Rulerunner logging with the Quick Log Control.
  - a. Click the Logging tab at the top of the screen.
  - b. The Quick Log sub-tab is displayed.
  - c. Slide the Number of Messages slider to the Maximum position on the scale.
  - d. Click ATM Log and verify:
    - All log options are enabled.
    - The slider is set to all, to the far right of the scale.
  - e. Click Rulerunner Log and verify:
    - The Thread Log Level Slider is set to All.
    - All except the “Reflush buffer on each message” options are enabled.
    - The Application Event Log Level is set to Serious and critical.
  - f. Click RRS Log views and verify:
    - The *Level of detail that is written to the RRS logs* Slider is set to All.
    - All options except the “Log Reflush” option are enabled.
    - The Severity level of messages that are logged is set to All.
  - g. Click Save to preserve the settings.
3. Start the Rulerunner Server.
  - a. Click the Rulerunner Login tab and click Disconnect.
  - b. Click the Rulerunner tab.
  - c. Click Start (Right green arrow) to start the Datacap Taskmaster Server Service.
  - d. Click Close to close the Datacap Rulerunner Manager window.

### **Procedure 8: Process a Batch**

1. Repeat procedure 2 to process a VScan task with Datacap Desktop and then watch Rulerunner process the Profiler tasks from tmweb > Monitor.



#### **Windows**

In this activity, you complete the steps on the Server 2008 ECMEDU01 student system.

---

## ***Procedure 9: Verify That Rulerunner Logs Are Produced***

1. Open Windows Explorer and verify that log files are not created.
  - a. Open Windows Explorer.
  - b. Verify that the log files with Yes in the Status column of the Log Files table were created.

**Log Files table**

Location	Log files	Status
C:\Datacap	tms.log.0.log	Yes
	rulerunner0.log	<b>Yes</b>
	rulerunner_thread_0_atm.0.log	<b>Yes</b>
C:\Datacap\RRS\Logs	wrrs-*.log	Yes
C:\Datacap\ExpenseDemo\batches\<yyyymmdd><number>	profiler_rrs.log	<b>Yes</b>

- c. Close Windows Explorer.
2. Log out of tmweb and close the Internet Explorer window.

---

## **End of exercise**

## Appendix 2. Answer keys to quiz

[Lesson 2.1.System Maintenance](#), on page 2-28

[Maintenance Topic Quiz](#), on page 2-28

## Lesson 2.1.System Maintenance

### Maintenance Topic Quiz

#### Introduction

Each of the topics that is listed fall into one of three Maintenance categories; Routine Maintenance, Preventive Maintenance, or Corrective Maintenance. For each topic, select the Maintenance category that describes the topic best.

1. Release resources.

Routine, Preventive, or Corrective? **Answer = Preventative**

2. Monitor system performance to ensure consistent throughput.

Routine, Preventive, or Corrective? **Answer = Routine**

3. Monitor component throughput.

Routine, Preventive, or Corrective? **Answer = Routine**

4. Analyze errors that are reported by System Operators and take corrective action.

Routine, Preventive, or Corrective? **Answer = Corrective**

5. Delete processed batches to ensure that the disk resources are recycled.

Routine, Preventive, or Corrective? **Answer = Preventative**

6. Check load-sharing across duplicate resources to maximize throughput.

Routine, Preventive, or Corrective? **Answer = Routine**

7. Flush event logs to make sure that they do not grow too large.

Routine, Preventive, or Corrective? **Answer = Preventative**

8. Check logs to make sure that errors are not occurring.

Routine, Preventive, or Corrective? **Answer = Routine**

9. Analyze errors that are detected in error logs and take corrective action.

Routine, Preventive, or Corrective? **Answer = Corrective**

10. Make sure that Service Level Agreements (SLAs) that stipulate throughput expectations are met.

Routine, Preventive, or Corrective? **Answer = Routine**

11. Producing periodic reports, daily, weekly, monthly, year end.

Routine, Preventive, or Corrective? **Answer = Routine**

12. Configure Maintenance Manager to detect and handle exceptions.

Routine, Preventive, or Corrective? **Answer = Corrective**



13. Use Report Viewer to produce reports.

Routine, Preventive, or Corrective? **Answer = Routine**

14. Schedule services to mechanical devices like, scanners, printers, filters fans, or air conditioners. Release resources.

Routine, Preventive, or Corrective? **Answer = Preventative**

15. Reassign scanners when mechanical failures occur.

Routine, Preventive, or Corrective? **Answer = Corrective**

---

**End of exercise**

---

# Appendix A. System Check for Your Student System

## Appendix overview

This appendix contains the following activities.

## Activities

[Start student system components](#), on page A-2

[Check the WebSphere Application Server](#), on page A-4

[Restart the student system](#), on page A-7

## System Components

The server image is a Microsoft Server 2008 with an IBM FileNet P8 Platform 5.2.1, IBM Content Navigator, and IBM Datacap 9.0.1. The server image also has Tivoli, DB2, WebSphere Application Server, Visual Studio, installed.

All files that are required for the student activities are on the image.

# Start student system components

## Procedures

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

[Procedure 2, "Start Datacap Server,"](#) on page A-2

### ***Procedure 1: Start student system components***

1. Start your Server 2008 system:
  - a. Log in as administrator user (password: passw0rd)

2. Start the WebSphere hosted system components.

There is a WebSphere Admin folder on the image desktop. This folder contains scripts to start stop and manage the WebSphere components. There are WebSphere instances but you use only Server 1 in this class.

Start the WebSphere components by running the start script.

- a. From the image desktop, double-click the WebSphere Admin Folder.
- b. Double-click the Start Server1.bat script.
- c. A Windows command window opens while the script is running. Wait for the command window to close, which signifies that the WebSphere components are started.

The start process can take several minutes.

- d. The Terminal window closes when the services started.




#### **Information**

The following components are hosted on WebSphere Server1:

- DatacapEDSService
  - FileNetEngine
  - IDSWebApp
  - SampleEDSServices
  - WorkplaceXT
  - Navigator
- 

### ***Procedure 2: Start Datacap Server***

1. Click Start > All Programs > IBM Datacap Service > Datacap Server Manager.  
The Taskmaster Server Manager window is shown.
2. Click the Service tab.

3. Click the Start icon  to start the The Datacap Taskmaster Server Service if it is not already started. The Start operation is disabled if it is already started.
  4. Click Close to close the Taskmaster Server Manager window.
-

# Check the WebSphere Application Server

## Procedures

[Procedure 1, "Check the WebSphere Application Server,"](#) on page A-4

[Procedure 2, "Check the Content Engine,"](#) on page A-4

[Procedure 3, "Check the Process Engine,"](#) on page A-5

[Procedure 4, "Check the Administration Console,"](#) on page A-5

[Procedure 5, "Check the IBM Navigator,"](#) on page A-5

[Procedure 6, "Check the Datacap Components,"](#) on page A-5

### **Procedure 1: Check the WebSphere Application Server**

1. On your image desktop, double-click the WebSphere Admin folder if it is not already open.
2. Double-click the Administrative console server1 shortcut to go to the WebSphere login window at <https://ecmedu01:9043/ibm/console/logon.jsp>.
3. Log in as p8admin user with IBMFileNetP8 as the password.  
If the WebSphere server is running, the page shows the Integrated Solution Console.  
a. Log out of the Integrated Solutions Console.
4. If an error page is shown instead, the WebSphere is not running. Start it as directed in the procedure [Start student system components](#), on page A-2.
5. Leave the browser open for the next procedure.

### **Procedure 2: Check the Content Engine**

1. In the Internet Explorer browser click Bookmarks > P8 CPE-Ping or enter the following URL:  
<http://ecmedu01:9080/FileNet/Engine>.

Log in using User = p8admin Password = IBMFileNetP8

The Content Engine is running if you get the *Content Engine Startup Context (Ping Page)* page as shown in the following screen capture.

Content Engine Startup Context (Ping Page)	
Key	
Product Name	P8 Content Platform Engine - 5.2.1
Build Version	dap521.234
Operating System	Windows Server 2008 R2 6.1

2. If an error page is shown instead, the Content Engine is not running. Start it as directed in the procedure [Start student system components](#), on page A-2.

### Procedure 3: Check the Process Engine

1. In the Internet Explorer browser click Bookmarks > PE Server-Ping or enter the following URL: <http://ecmedu01:9080/peengine/IOR/ping>.
2. Log in as p8admin with password IBMFileNetP8.

The Process Engine is running if you get the *Process Engine Server Information (Ping Page)* page as shown in the following screen capture.

Process Engine Server Information (Ping Page)	
Key	
Product Name	P8 Content Platform Engine - 5.2.1
Build Version	dap521.234 pe.jar:dap521.234, 10/06/2014 09:32:10
Operating System	Windows Server 2008 R2 6.1 amd64

3. If an error page is shown instead, the Process Engine is not running. Start it as directed in the procedure [Start student system components](#), on page A-2.

### Procedure 4: Check the Administration Console

1. In the Internet Explorer browser click the ACCE-CPE shortcut or enter the following URL: <http://ecmedu01:9080/acce>.
2. Log in as p8admin with password IBMFileNetP8.
3. The Administrative Console for Content Platform Engine is running if the Browse page opens. The page shows a list of Object Stores.
4. If Administrative Console for Content Platform Engine does not open, start it as directed in the procedure [Start student system components](#), on page A-2.

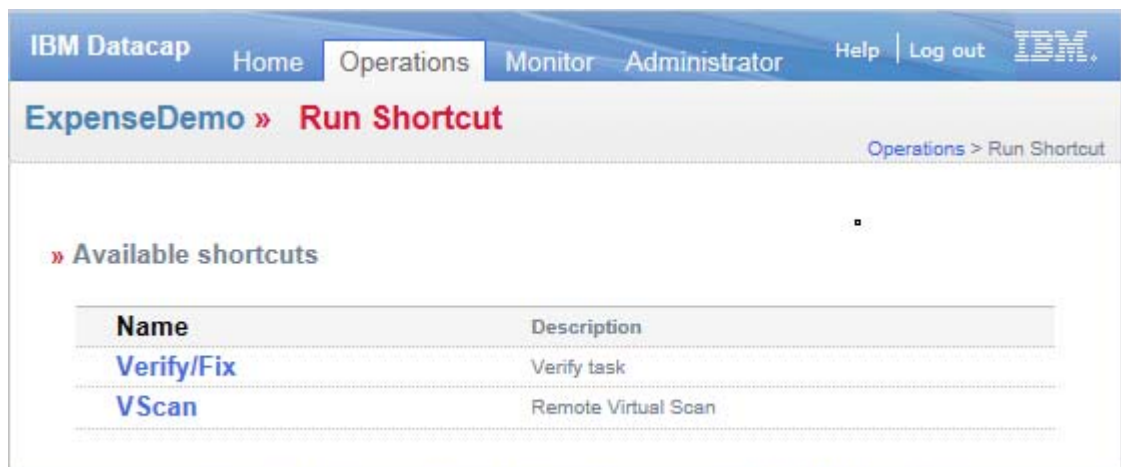
### Procedure 5: Check the IBM Navigator

1. In the Internet Explorer browser click the ICN-ADMIN shortcut or enter the following URL: <http://ecmedu01:9080/navigator>.
2. Log in as p8admin with password IBMFileNetP8.
3. The IBM Content Navigator is running if you get the IBM Content Navigator page.
4. If IBM Content Navigator does not open, start it as directed in the procedure [Start student system components](#), on page A-2.

### Procedure 6: Check the Datacap Components

1. Check Datacap Navigator.
  - a. In Internet Explorer browser click the DCN-Datacap shortcut or enter the following URL: <http://ecmedu01:9080/navigator/?desktop=datacap>.

- b. Log in as `admin` with password `admin`.
  - c. The Datacap Navigator is running if the Datacap Navigator page opens.
2. Check the `tmweb` client.
- a. In the Internet Explorer browser click the `tmweb` shortcut or enter the following URL:  
`http://ecmedu01/tmweb.net`.  
Select the TravelDocs Application.  
User ID: `admin`  
Password: `admin`  
Station 1
  - b. Click Login.
  - c. The `tmweb` page opens showing the Operations tab view.



- d. If the login fails, it is possible that the Datacap Server Service was not started.
  - e. Click log out and close the explorer window.
-

# Restart the student system

## Procedures

[Procedure 1, "Restart the student system \(if needed\),"](#) on page A-7

[Procedure 2, "Start the Content Engine \(use only if required\),"](#) on page A-7

### ***Procedure 1: Restart the student system (if needed)***


If you need to reboot your student system, do the following steps.

1. Stop the WebSphere hosted system components.

Stop the WebSphere components by running the stop script from the WebSphere Admin folder on the image desktop.

- a. On the desktop, double-click the WebSphere Admin Folder.
- b. Double-click the StopServer1.bat script.
- c. A Windows command window opens while the script is running. Wait for the command window to close.
- d. The Terminal window closes when the components are stopped.

2. Stop the Datacap Server service.

- a. Click Start > All Programs > IBM Datacap Service > Datacap Server Manager.
- b. The Taskmaster Server Manager window is shown.
- c. Click the Service tab.
- d. Click the Stop icon  to start the The Datacap Taskmaster Server Service if it is not already started.
- e. Click Close to close the Taskmaster Server Manager window.

3. Restart the windows server.

- a. Click Start > Restart.
- b. Do [Procedure 1, "Start student system components,"](#) on page A-2
- c. Do [Procedure 2, "Start Datacap Server,"](#) on page A-2



#### **Important**

Perform the following procedures **only** if you need to manually start individual components. After starting your Server 2008 system, and running Procedure 1, the script should start all of the required components on your student system. If you need to check or start individual WebSphere components do the following procedure.

---

### ***Procedure 2: Start the Content Engine (use only if required)***

1. On your system desktop, double-click the WebSphere Admin folder.



2. Double-click the Administrative console server1 shortcut to go to the WebSphere login window at <https://ecmedu01:9043/ibm/console/logon.jsp>.
3. Log in as p8admin user with IBMFileNetP8 as the password.
4. Expand the Applications > Application Types node in the left pane, and then click WebSphere enterprise applications.

In the right pane, the Content Engine application is listed as FileNetEngine.

5. Check the status of the application. If a red X is shown in the Application Status column, the application is stopped.
  6. If the FileNetEngine application is stopped, select the check box for FileNetEngine and click Start.
  7. Log out of the console and close the browser.
-

# Configure Datacap Rulerunner for TravelDocs

## Procedures

### ***Procedure 1: Stop and Connect***

1. Open the Rulerunner Server Service properties.
  - a. Double-click the Rulerunner Server Manager on the desktop.
  - b. Click Stop if the Rulerunner is already started.
  - c. Click the Rulerunner Login tab to display it.
  - d. Select Taskmaster Authentication.
 

Type:  
User ID: admin  
Password: admin  
Station ID: 1
  - e. Click Save if you changed the User ID or Station ID. If you only entered the password the Save control will not be active.
 

It is critical that these credentials are saved because they are used at runtime.
  - f. Click Connect.

### ***Procedure 2: Configure TravelDoc tasks***

2. Configuring Rulerunner to run tasks.
  - a. Click the Workflow:Job:Task tab to display it.
 

The names of the applications from the datacap.xml file are displayed in the left pane. The right pane does not contain threads the first time you use Rulerunner Manager.
  - b. If you don't see a list of application in the top left pane, click the full screen icon in the top right corner.



#### **Note**

This server image is used for multiple Datacap classes. You can see in the right pain that tasks have already been configured for Rulerunner to run the Navigator Job tasks for the TravelDocs application.

---

- c. If a thread did not already exist or if you want to create a new thread then right-click in the right pane, select Threads, then select Add Thread.
 

A new thread is created in the right pane. For this exercise you use the existing thread.
- d. In the left pane, click the TravelDocs check box.

- e. The application tree expands with the Server, Administrator, and Engine databases selected.
  - f. Click the check boxes under the Main Job, Web Job and the Navigator Job for the PageID, Profiler, and Export tasks.
  - g. Click the Main Job text and drag it to the thread0 node in the right pane. Release the mouse key while the cursor is hovering over thread0.
  - h. Verify that PageID, Profiler, and Export tasks appear under thread0 for the Main Job, Web Job and the Navigator Job.
  - i. Click Save (or CTRL+S) to save your changes.
  - j. If you see a warning that the file does not exist, click Yes acknowledge the warning and to save the configuration file.
  - k. Make sure that the thread0 check box in the right pane is selected.
3. Disconnect from the application
- a. Click the Rulerunner Login tab.
  - b. Click Disconnect.
  - c. Close the Datacap Rulerunner Manager Window.
-

## Enable Datacap Rulerunner logging

1. If Rulerunner is connected then do [Procedure 1, "Stop and Connect,"](#) on page A-9 to open and connect to Datacap Rulerunner Manager.
  2. Configure Logging.
    - a. Click the Settings tabs and click *Write to Debug. Log Queuing activity in debug table.*
    - b. Click Save or CTRL+S to save your changes.
    - c. Click the Logging tab.
    - d. Click the Quick Log tab.
    - e. Slide the Number of Messages slider to No.
    - f. The Quick Log setting sets the ATM Rulerunner, and RRS log logging options.
  3. Disconnect from the application
    - a. Click the Rulerunner Login tab.
    - b. Click Disconnect.
    - c. Close the Datacap Rulerunner Manager Window.
-

## Start the Datacap Rulerunner Manager Service

### ***Procedure 1: Start the Rulerunner service***

1. Double-click the Datacap Rulerunner Manager icon on the Desktop.
  2. Click the Rulerunner tab.
  3. Click Start.
  4. Close the Datacap Rulerunner Manager window.
-

# Appendix B. Check Database Connection Strings



## Windows

In Procedure 1, you complete the step on the Windows 7 DCCLIENT student system.

### ***Procedure 1: Check the Database Connection Parameters***

1. Check the database connection parameters.
  - a. Click Start > All Programs > IBM Datacap Services > Datacap Application Manager.
  - b. Select the application to which you want to set the location, for example TravelDocs. The paths display in the fields on the Main tab.
2. Configure the database connection parameters for five databases.

Tab	Variable Name	Database
Main	administration	TravelDocsAdm
	Engine	TravelDocsEng
	Lookup database	TravelDocsLook
	Fingerprint database	TravelDocsFingerprint
	Export database	TravelDocsExport

- a. Click the Ellipsis at the right of the field.
  - b. Select Microsoft Access (Jet) from the Database Type list.
  - c. Click the Database Ellipsis and browse and select the database:  
Network\TMSERVER\Datacap\TravelDocs\ <database>
  - d. Click Open.
3. Repeat steps 2.a.i-v for the all databases on the Main tab.



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