Course Guide

IBM Datacap 9.0.1 Administration

Course code F258 ERC 1.0

IBM Training

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Contents

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Course description

IBM Datacap 9.0.1 Administration

Duration: 8 hours

Overview

This course shows you how to administer and maintain an IBM Datacap system. Topics: Virtual stations, Queueing of tasks, Disaster recovery, DB2 database configuration, Globalization, and event logs

You work with a fully functioning IBM FileNet Content Manager system configured with IBM Content Navigator and IBM Datacap for students to practice the skills that are required to implement and configure data capture solutions.

Audience

- Administrators who are responsible for administering and maintaining Datacap system
- Anyone who needs to know the Datacap system administration and maintenance

Prerequisites

The following courses or equivalent knowledge are required:

- IBM Datacap 9.0.1: Introduction (F251)
- Recommended: IBM Datacap 9.0.1: Configuration (F256)
- Recommended: IBM Datacap 9.0.1: Datacap Navigator Configuration (F257)

Course objectives

Upon completion of this course, participants will be able to:

- Create shortcuts for Web Client tasks
- Configure store and queue by options
- Identify Disaster Recovery concepts
- Migrate Data from Access to DB2 database
- Configure Application Globalization
- Synchronize Job Monitor and Batch Folders for system maintenance
- Create and configure a Maintenance Manager Application
- Configure Event Logs

Course Topics

Refer to the “Contents” section (TOC) for course content.

Curriculum relationship

Prerequisite for this course

- F251 IBM Datacap 9.0.1: Introduction

For anyone involved in Datacap Configuration, Maintenance, or Administration, the following classes should be taken as a set.

- F256 IBM Datacap 9.0.1: Configuration
- F257 IBM Datacap 9.0.1: Datacap Navigator Configuration
- F258 IBM Datacap 9.0.1: Administration

Agenda

Note

The following lesson durations are estimates, and might not reflect every class experience.

Day 1

Unit 1. Administration of Production System

- (01:15) Lesson 1 - Create Shortcuts to Web Clients
- (01:00) Lesson 2 - Virtual Stations and Queuing of Tasks
- (00:30) Lesson 3 - Disaster Recovery
- (01:15) Lesson 4 - Configure DB2 Server
- (01:00) Lesson 5 - Application Globalization

Unit 2. Maintenance

- (01:00) Lesson 1 - System Maintenance
- (01:00) Lesson 2 - Maintenance Manager

Day 2

Unit 2. Component Configuration

- (01:00) Lesson 3 - Event Logs

Unit 1. Administration of Production System

What this unit is about

In this unit, you learn about the concepts of virtual stations and queuing tasks. You also learn how to create shortcuts to run tasks from the Web Client tmweb, disaster recovery and migrate Datacap application databases between other database platforms.

What you should be able to do

- Add Shortcuts to Web Client
- Understand Virtual Stations and Queuing of Tasks
- Plan for Disaster Recovery
- Convert and Migrate Datacap Databases.
- Configure Globalization

How you will check your progress

- Successfully complete the activities in the Student Workbook.

References

- Knowledge Center

  http://www.ibm.com/support/knowledgecenter/SSZRWV_9.0.1/com.ibm.dc.install.doc/dcpov007.htm
- Redbooks: Implementing Document Imaging and Capture Solutions with IBM Datacap

  http://www.redbooks.ibm.com/abstracts/sg247969.html?Open

Unit objectives

- Understand Virtual Stations and Queuing of Tasks
- Add Shortcuts to Web Client
- Plan for Disaster Recovery
- Convert and Migrate Datacap Databases.
- Configure Globalization

Figure 1-1. Unit objectives F2581.0

Notes:

Lesson 1.1. Create Shortcuts to Web Clients

Figure 1-2. Create Shortcuts to Web Clients F2581.0

Notes:

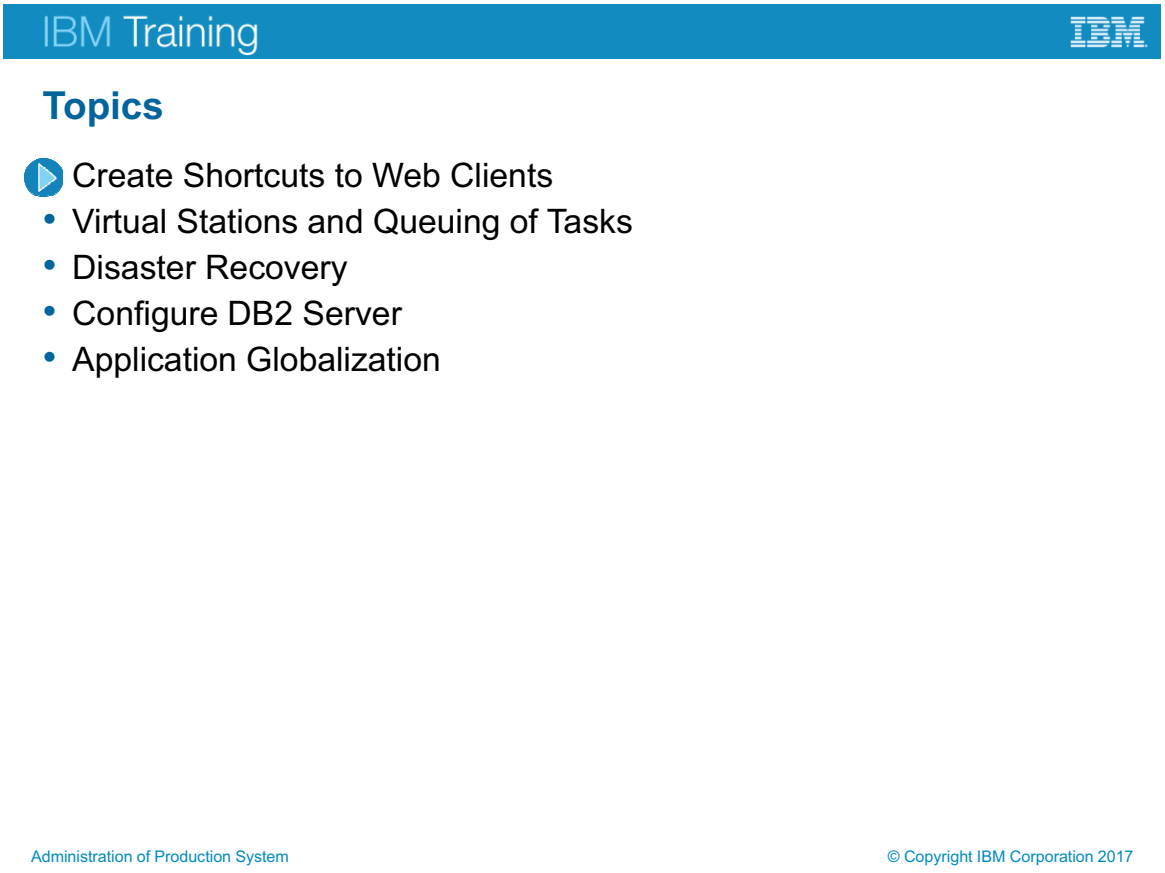

Figure 1-3. Topics F2581.0

Notes:

Why is this lesson important to you?

- 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 configure shortcuts on the Web client Administrator > Shortcuts menu. These shortcuts define workstation and Web client executable tasks for an application.

Administration of Production System

Figure 1-4. Why is this lesson important to you? F2581.0

Notes:

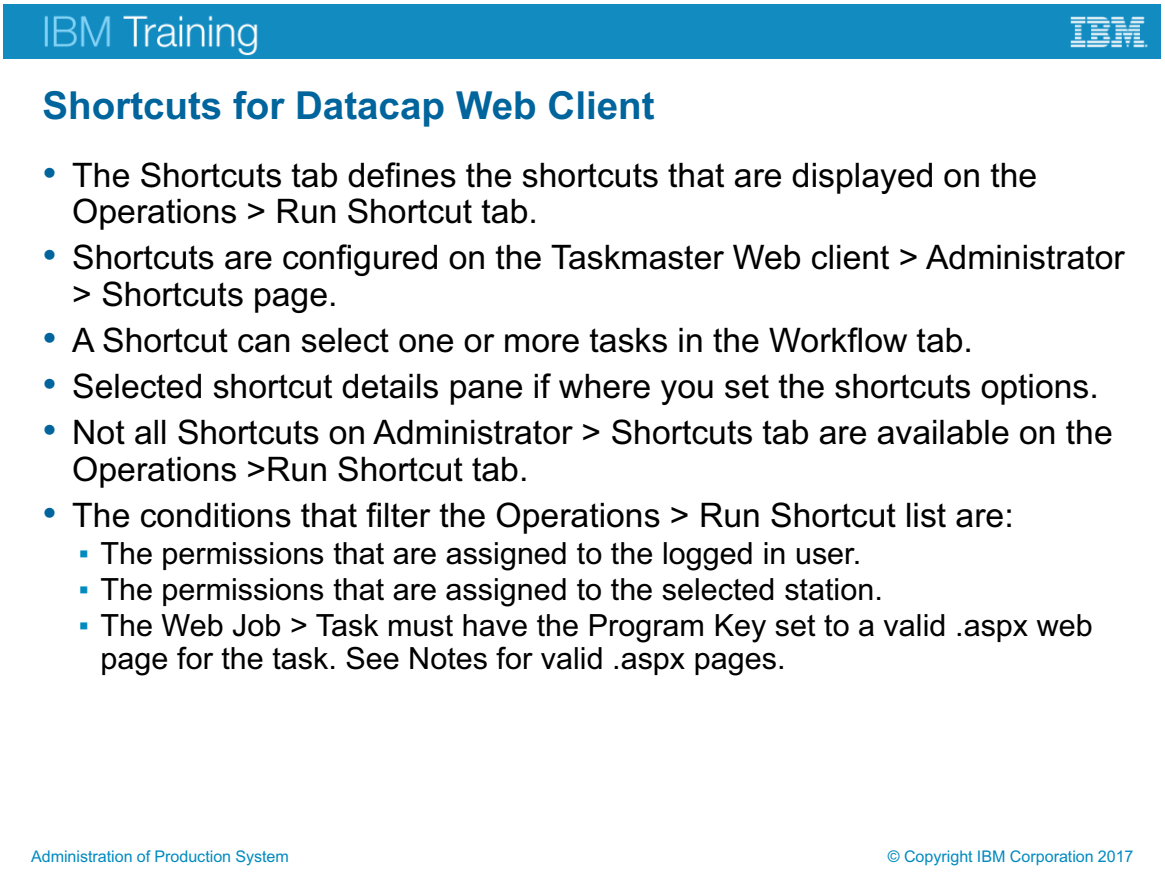

Figure 1-5. Shortcuts for Datacap Web Client F2581.0

Notes:

Run Shortcut filter examples:

- For user scott to run the iVscan task and the Upload task from a web client:
  - The scott users must have the iVScan task and the Upload task check boxes that are checked in the user Permission section.
  - The **Web Job iVscan task** must have the Program key under Parameters set to **VScancl.aspx**.
  - The **Web Job Upload task** must have the Program key under Parameters set to **UplBFcl.aspx**.

    Note: In general, for a web client task, the Program key must be set to a valid .aspx for processing the task.

Web Client .aspx pages

Function and web page

Remote Scanning - Scancl.aspx

Virtual Scanning - VScancl.aspx

Image upload - UplBFcl.asx

Verification - verifine.aspx aVerify.aspx imgEnter.aspx

Verification manual page ID and manual registration- aIndex.aspx

Manual page ID and fixup - ProtoID.aspx

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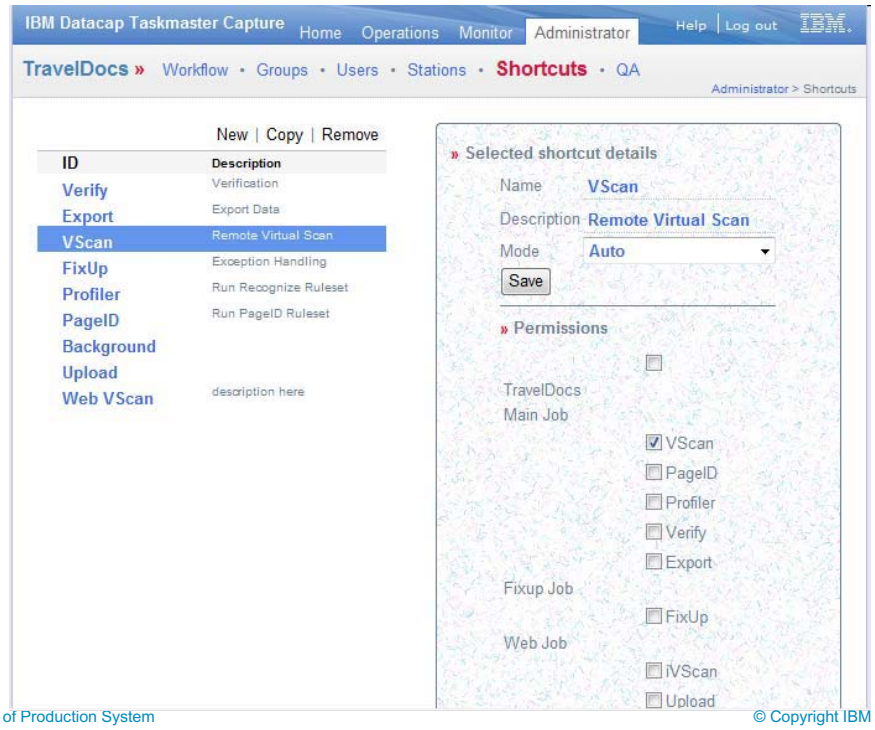
Shortcuts for Datacap Web Client Tab



Administration of Production System

Figure 1-6. Shortcuts for Datacap Web Client Tab F2581.0

Notes:

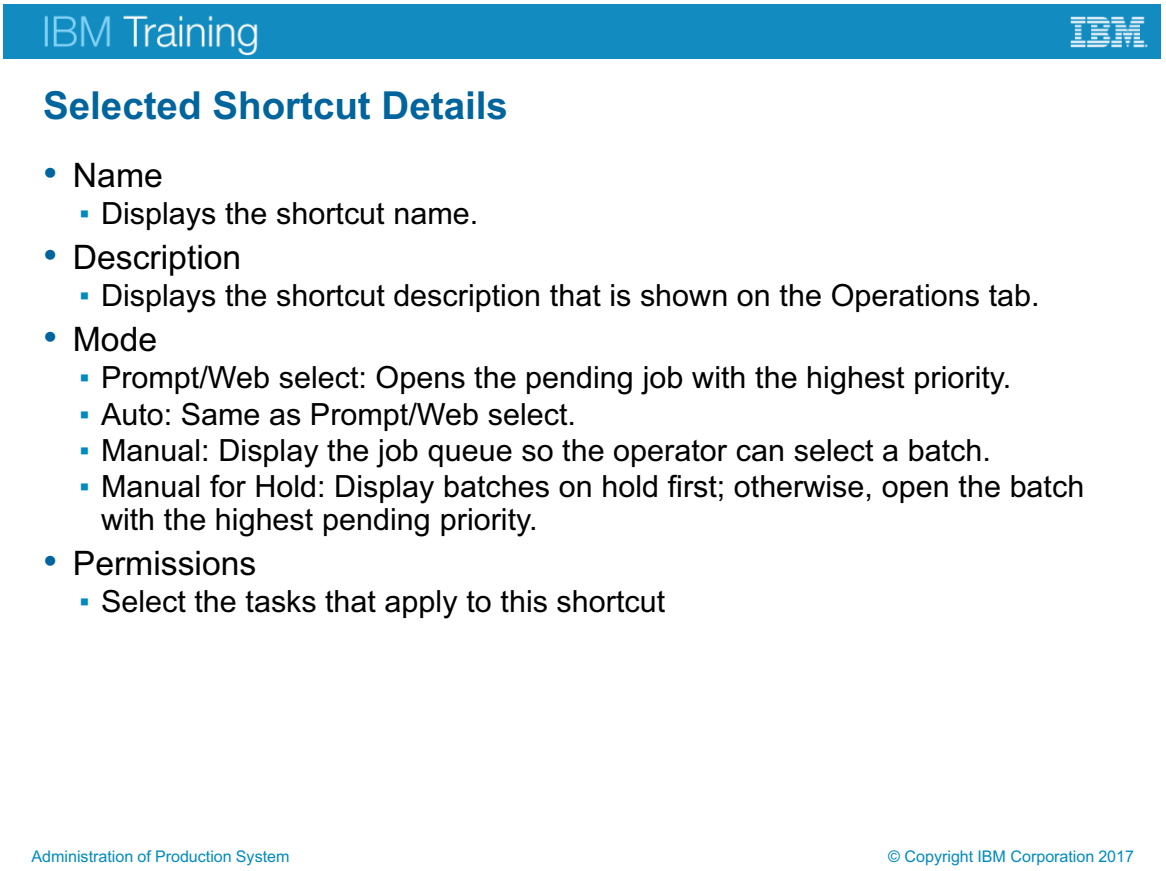


Figure 1-7. Selected Shortcut Details F2581.0

Notes:

Selected Shortcut Details

Used to change the settings for the selected shortcut. Click Save after you change settings.

Name

Displays the shortcut name.

Description

Displays the shortcut description that is shown on the Operations tab. Enter a description that tells an operator about the task that is associated with the shortcut.

Mode

The Mode determines the Datacap behavior when an operator runs the shortcut:

- Prompt/Web select: Datacap opens the highest priority job in the queue that is in the pending state. Datacap does not open any job on hold, even if there are no pending batches.
- Auto: Same as Prompt/Web select.

- Manual: Datacap displays the job queue so the operator can select a batch (either pending or on hold).
- Manual for Hold: If there are batches on hold, Datacap displays the job queue with the jobs that are on hold. If there are no jobs on hold, Datacap opens the highest priority batch in the queue that is in the pending state.

The Mode setting does not apply to batch creation tasks (such as Scan or VScan).

Permissions

This section shows all of the jobs and tasks that are defined on the Workflow tab. Select the tasks that apply to this shortcut.

When an operator runs the shortcut, Datacap checks the job queue for batches that are ready for processing by any of the selected tasks. For example, the application has a Main Job and a Web Job, each with a Verify task. When you select both of the Verify tasks (one in the Main Job and one in the Web Job), the operator can verify batches that are started from either job.

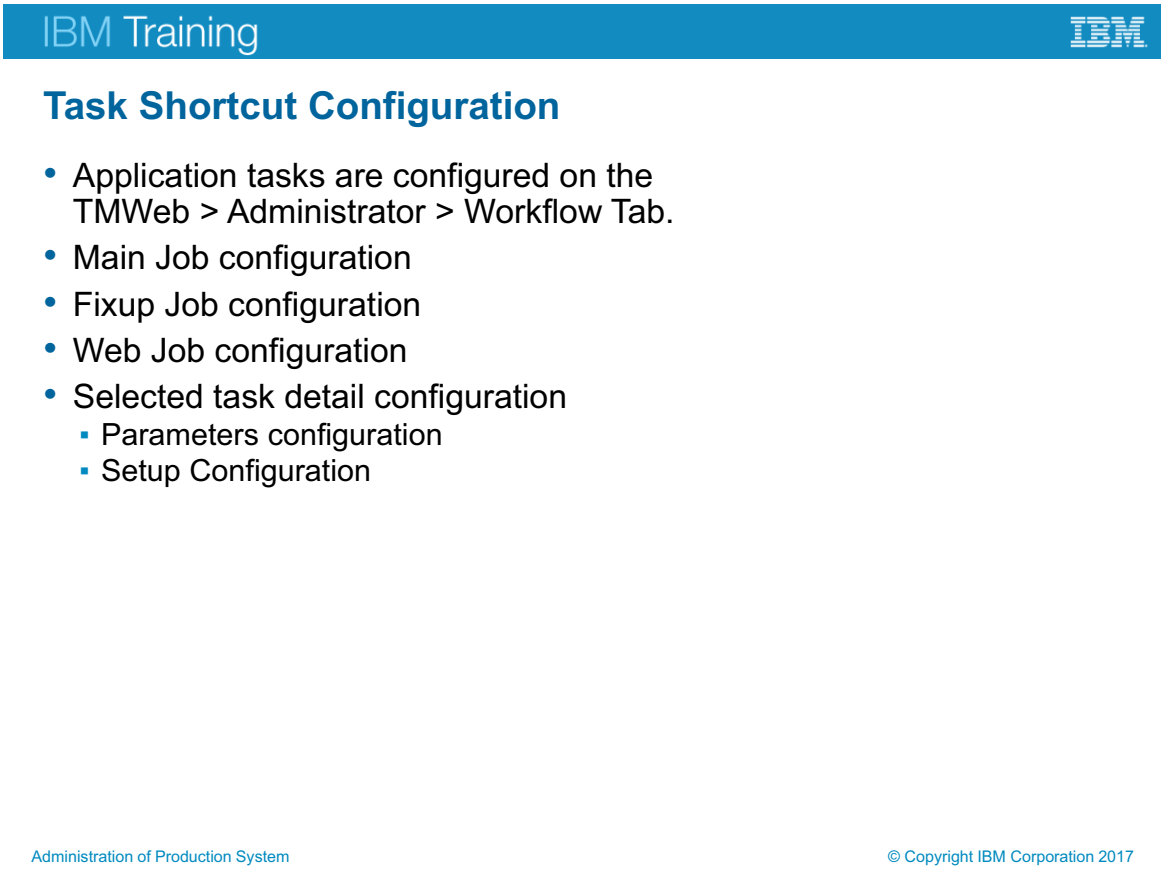


Figure 1-8. Task Shortcut Configuration F2581.0

Notes:

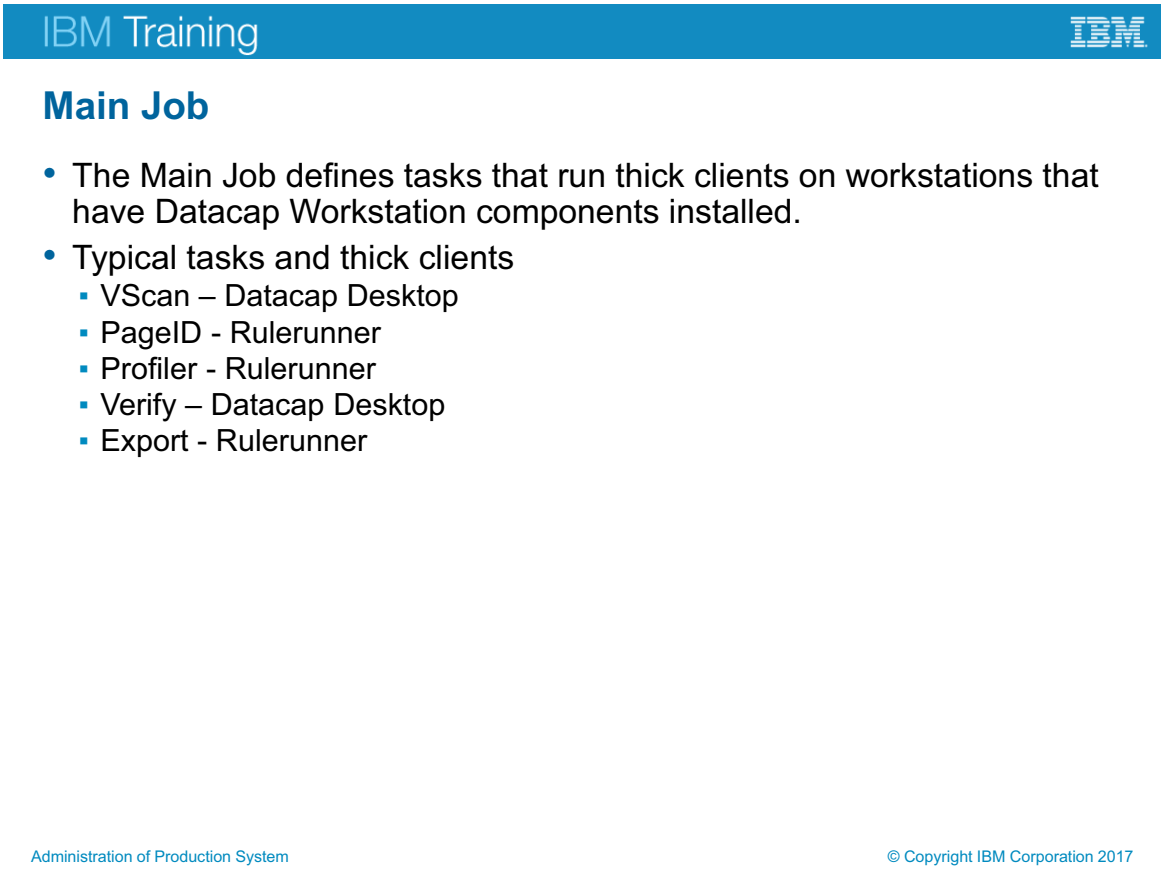


Figure 1-9. Main Job F2581.0

Notes:

Fixup Job

- The FixUp task is for processing the image to make it more readable before the capture process continues.
- Typical task and thick client
  - Fixup - Multiple

Figure 1-10. Fixup Job F2581.0

Notes:

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Web Job

- The Web Job defines tasks that can be run with a web browser on a web client that has no Datacap Workstation components installed.
- Except for the iVScan, Upload, and Verify task the processing is done on the Rulerunner server.
- Typical tasks and thick clients
  - iVScan - VScancl.aspx
  - Upload - UplBFcl.aspx
  - PageID - Rulerunner
  - Profiler - Rulerunner
  - Verify - VeriFine.aspx or aVerify.aspx
  - Export - Rulerunner

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Figure 1-11. Web Job F2581.0

Notes:

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Selected Task Details Window

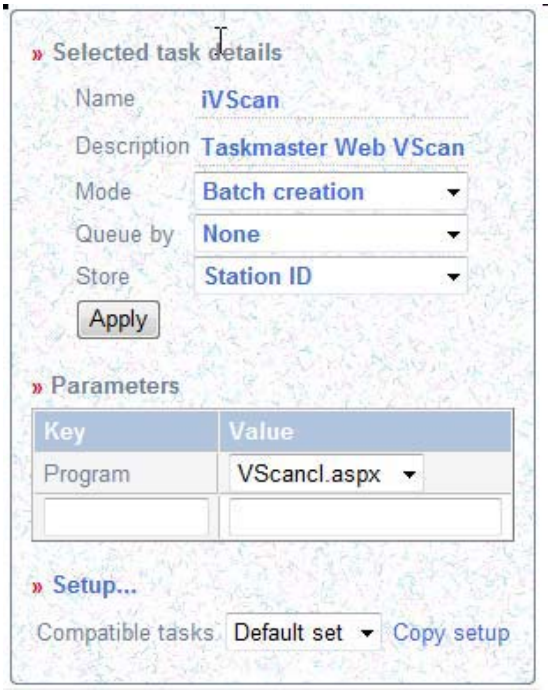

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Figure 1-12. Selected Task Details Window F2581.0

Notes:

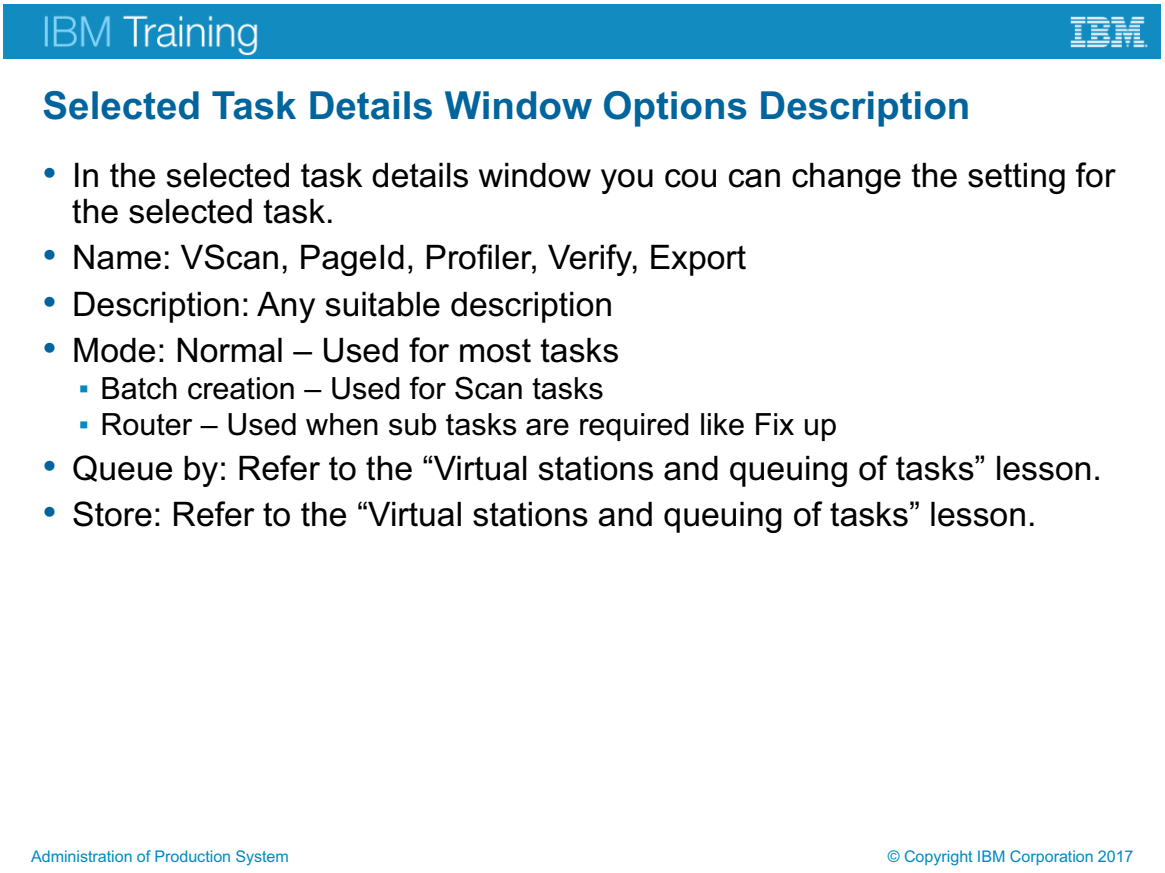

Figure 1-13. Selected Task Details Window Options Description F2581.0

Notes:

Selected Task Details

Select a task to open the Selected task details pane and change the settings for the selected task. Click Apply after you change settings.

Name

Displays the task name.

Description

Displays the task description.

Mode

Each task must be linked to a mode. The mode specifies the behavior of the task. The mode list displays the modes that are available for selection and includes:

- Batch Creation: Select this mode for use with VScan, or if you are creating a task to scan hardcopy documents in Datacap desktop or in Taskmaster Web or Datacap Navigator web interfaces.

- Important: A job can contain only one Batch Creation task. If the job that you are modifying already includes a batch creation task, you must remove that task.
- Router: Select this mode if the task routes the batch to a different task or job when the criteria of a condition are met. One example of a condition is a document integrity failure that requires a supervisor intervention. When you select this mode, Datacap automatically inserts a Return Conditions key under the Parameters section.
- Normal: This mode is for all other tasks that are not used for Batch Creation or that do not require special handling.

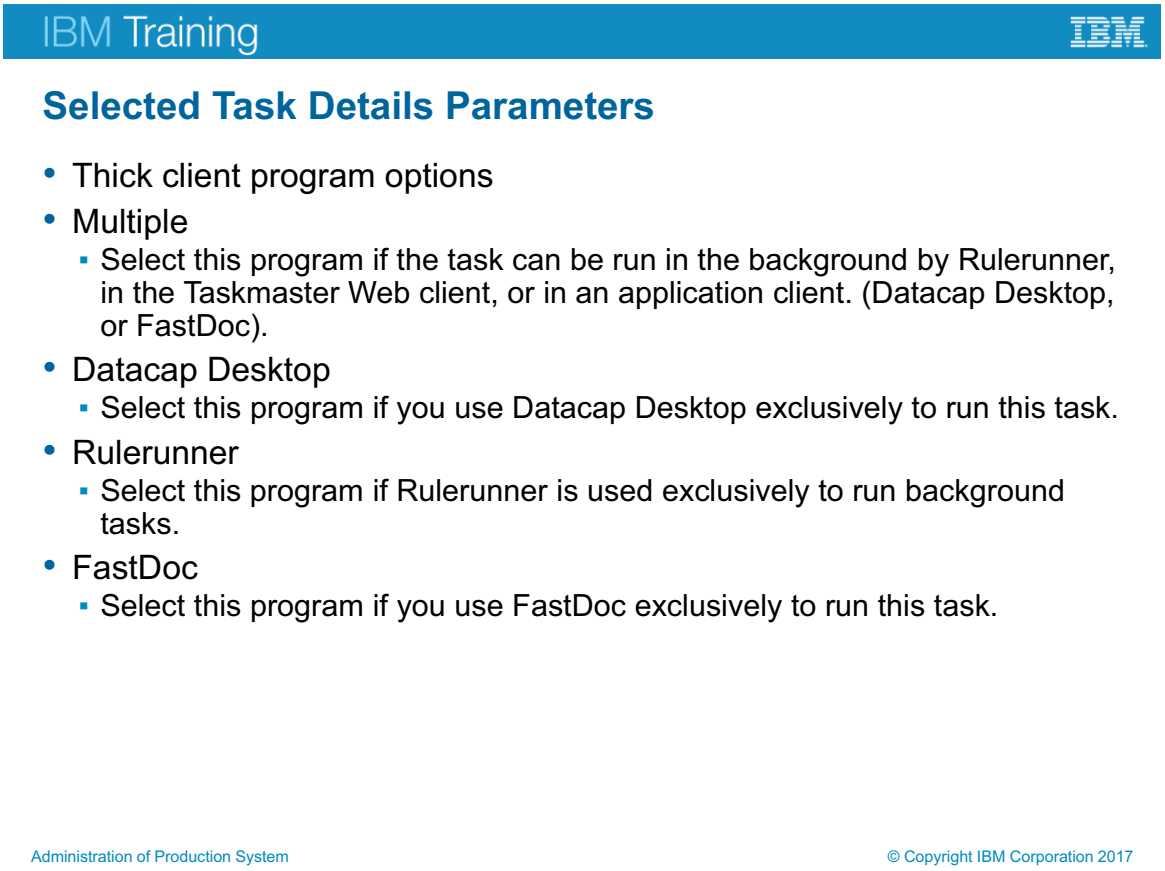

Figure 1-14. Selected Task Details Parameters F2581.0

Notes:

Selected Task Details

Select a task to open the Selected task details pane and change the settings for the selected task. Click Apply after you change settings.

Name

Displays the task name.

Description

Displays the task description.

Mode

Each task must be linked to a mode. The mode specifies the behavior of the task. The mode list displays the modes that are available for selection and includes:

- Batch Creation: Select this mode for use with VScan, or if you are creating a task to scan hardcopy documents in Datacap desktop or in Taskmaster Web or Datacap Navigator web interfaces.

- Important: A job can contain only one Batch Creation task. If the job that you are modifying already includes a batch creation task, you must remove that task.
- Router: Select this mode if the task routes the batch to a different task or job when the criteria of a condition are met. One example of a condition is a document integrity failure that requires a supervisor intervention. When you select this mode, Datacap automatically inserts a Return Conditions key under the Parameters section.
- Normal: This mode is for all other tasks that are not used for Batch Creation or that do not require special handling.

Datacap Web Components

Function	Web Page
Remote Scanning	Scancl.aspx
Virtual Scanning	VScancl.aspx
Image upload	UplBFcl.asx
Verification	verifine.aspx aVerify.aspx imgEnter.aspx
Verification, manual page ID, and manual registration	aIndex.aspx
Manual page ID and fixup	ProtoID.aspx
Application administration Job monitoring	Standard tmweb.net interface Standard tmweb.net interface

Figure 1-15. Datacap Web Components F2581.0

Notes:

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Setup Configuration

- Different setup layouts are used for different Tasks.
  - The task name selects the .xml file that is used to display the setup layout.
  - Verify -> C:\Datacap\<app>\dco<app>\Verify.set.xml
- Implement a start panel for the VScan task.
  - In the Setup page scroll to the Scan or Disk Scan panel.
  - Select the Show the Start Batch Panel check box.
  - The start panel displays a data entry field for each batch level field that you defined in the document hierarchy.
- In the Datacap Desktop section, name the verify panel.
  - In the Setup page scroll to the Datacap Desktop panel.
  - Define a Panel name for each DCO type.

Administration of Production System

Figure 1-16. Setup Configuration F2581.0

Notes:

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Review questions

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

   a. iVScan _____

   b. Upload _____

   c. Profiler _____

   d. Verify _____

   e. Export _____

Administration of Production System

Figure 1-17. Review questions F2581.0

Notes:

IBM Training

Review answers

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

   a. iVScan . VScancl.aspx .

   b. Upload . UplBFcl.aspx .

   c. Profiler . Rulerunner .

   d. Verify . Multiple .

   e. Export . Rulerunner .

Administration of Production System

Figure 1-18. Review answers F2581.0

Notes:

IBM Training

Review questions

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

   Options : None, VScan, Web Scan, Upload, and Verify/Fix

   a. If you log in to ExpenseDemo as erin with station 1 selected?
      Answer =
   b. If you log in to ExpenseDemo as susan with station 1 selected?
      Answer =
   c. If you log in to ExpenseDemo as sam with station 1 selected?
      Answer =
   d. If you log in to ExpenseDemo as vinny with station 1 selected?
      Answer =
   e. If you log in to ExpenseDemo as susan from station 4 selected?
      Answer =

Administration of Production System

Figure 1-19. Review questions F2581.0

Notes:

IBM Training IBM

Review answers

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

   Options : None, VScan, Web Scan, Upload, and Verify/Fix

   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, 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

Administration of Production System

Figure 1-20. Review answers F2581.0

Notes:

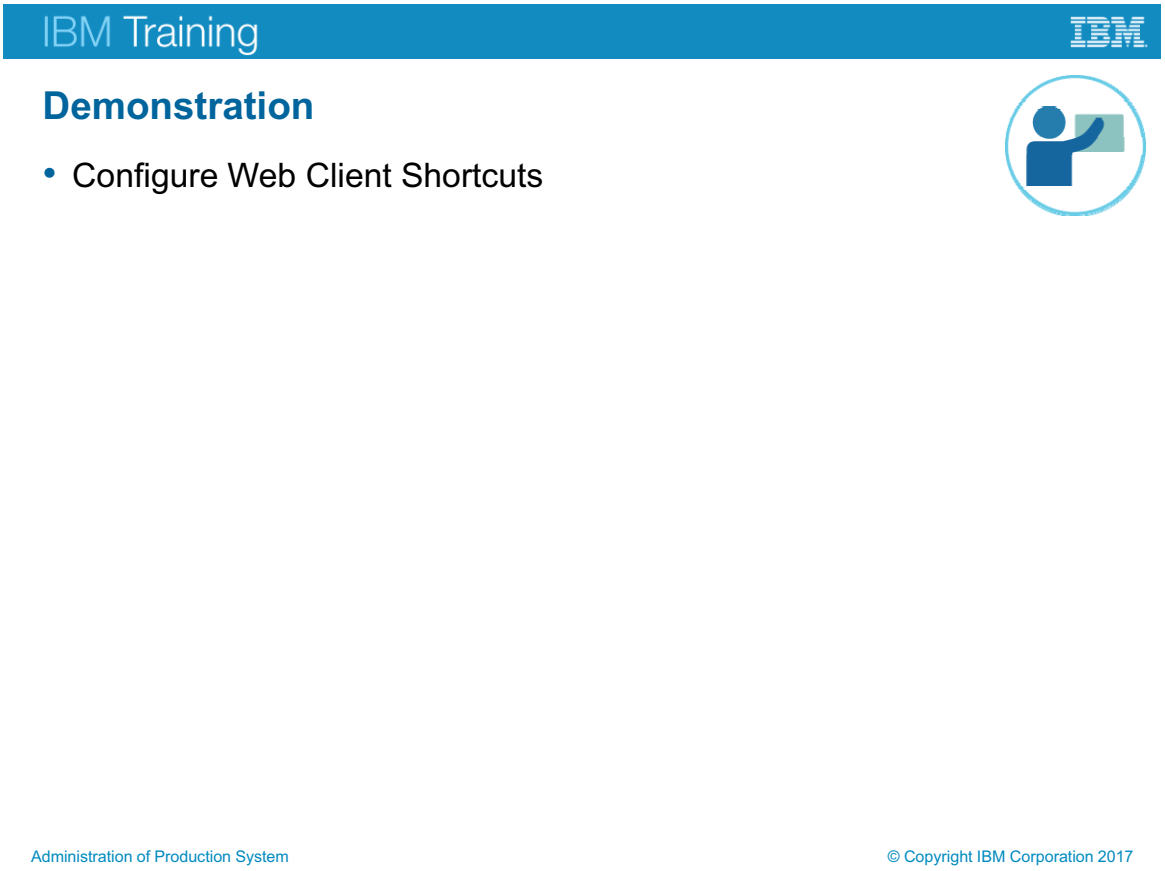

Figure 1-21. Demonstration F2581.0

Notes:

If you are taking this course as a self-paced virtual course, return to the main course menu to play the pre-recorded demonstrations.

Figure 1-22. Exercise: Create Shortcuts to Web Clients F2581.0

Notes:

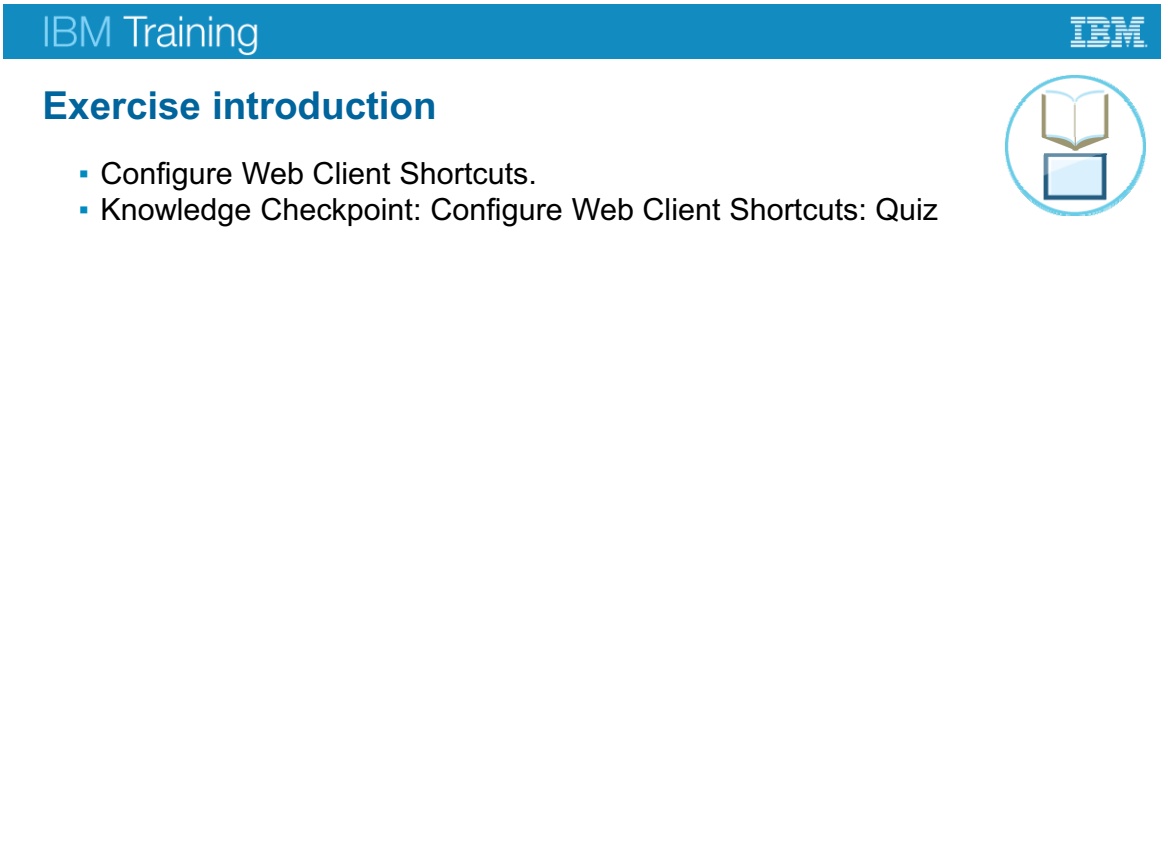

Figure 1-23. Exercise introduction F2581.0

Notes:

Lesson 1.2. Virtual Stations and Queuing of Tasks

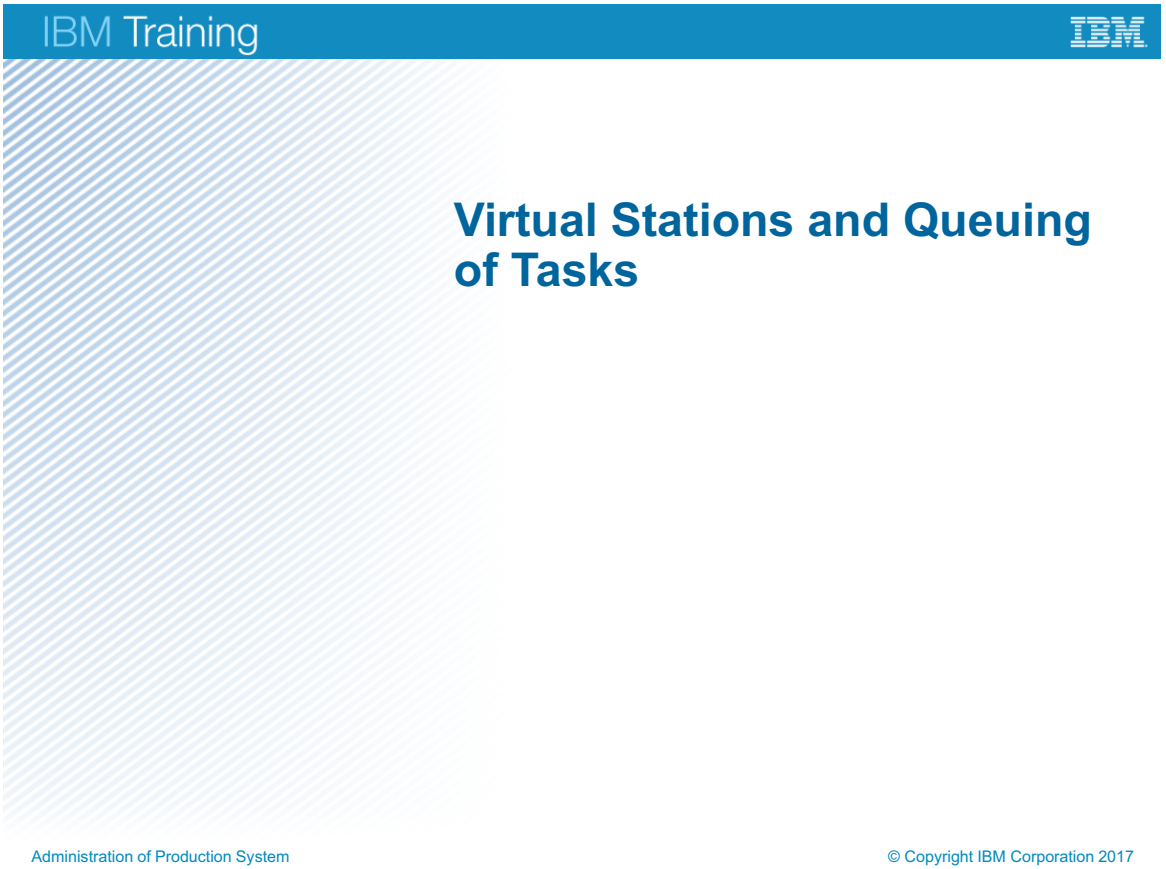

Figure 1-24. Virtual Stations and Queuing of Tasks F2581.0

Notes:

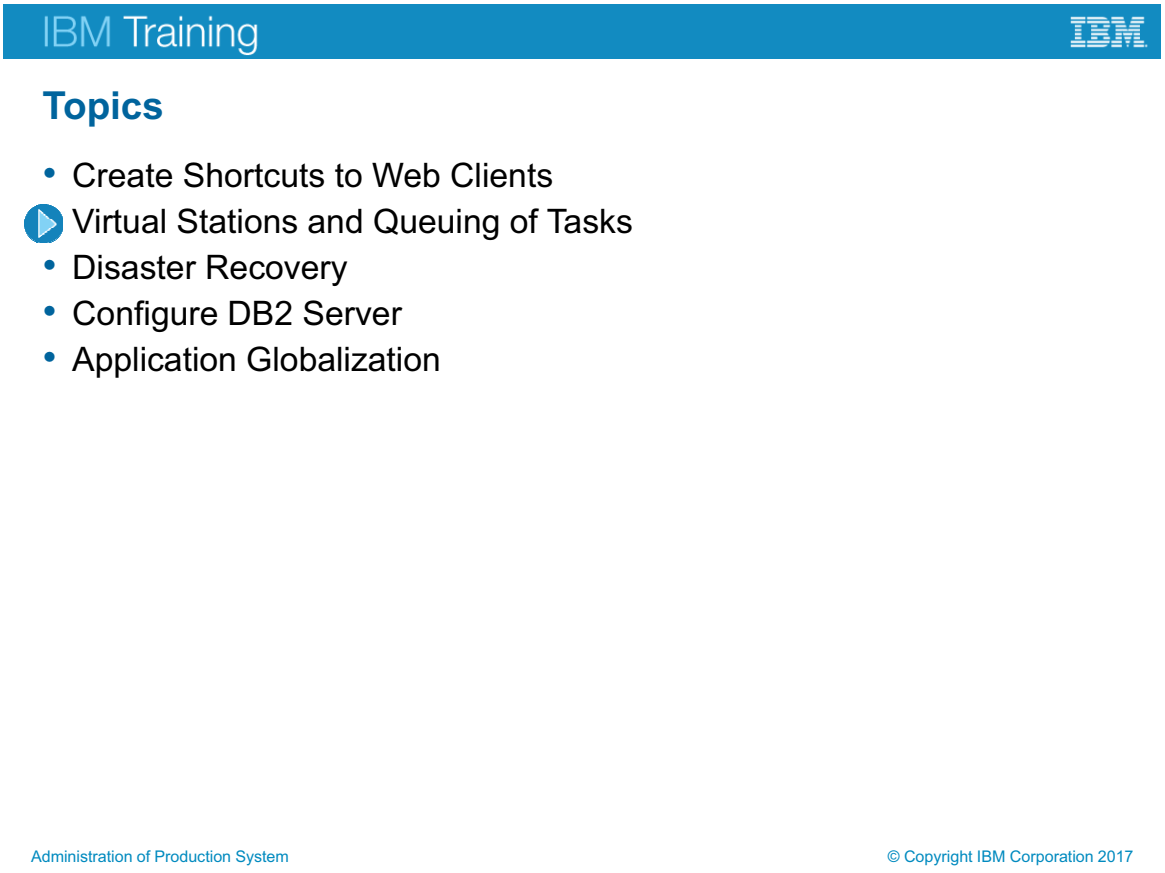

Figure 1-25. Topics F2581.0

Notes:

Why is this lesson important to you?

- 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 need to know how to use the user ID and the station ID to determine how jobs are queued for processing as they move through the job tasks.

Figure 1-26. Why is this lesson important to you? F2581.0

Notes:

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Understand Queuing of Batches

- Queuing definition.
  - Queuing is the ability to control which users or stations can open and process a batch through a task.
- The use of queuing is optional.
- The parameters that control queuing are:
  - Queue by
  - Store
- Queue by sets the combination of user ID and station ID that can open a batch.
- Store sets the user ID and station ID required by a later task.
- These parameters are set on the Datacap Web Workflow tab.

Administration of Production System

Figure 1-27. Understand Queuing of Batches F2581.0

Notes:

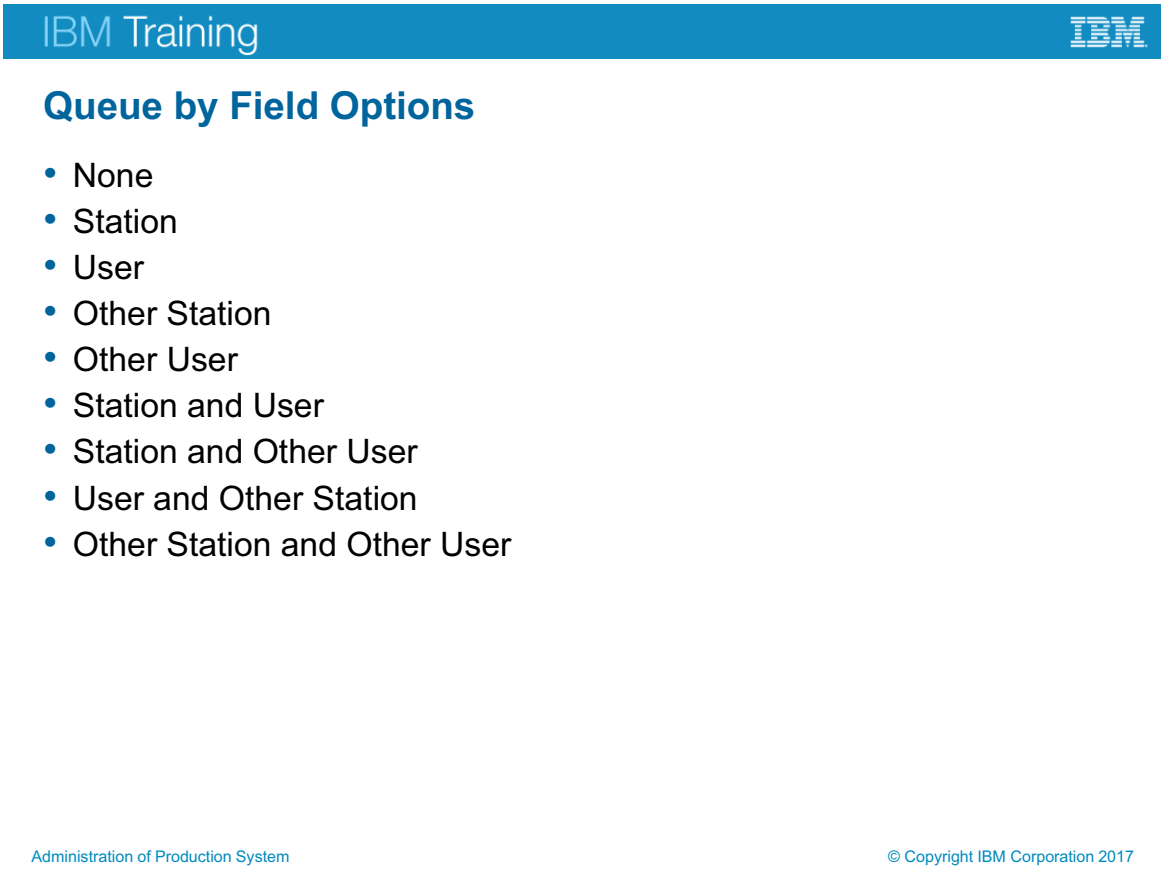

Figure 1-28. Queue by Field Options F2581.0

Notes:

None: Any user on any station can open the batch (default setting).

Station: Only the station that stored the batch can open the batch.

User: Only the user that stored the batch can open the batch.

Other Station: The station that stored the batch cannot open the batch.

Other User: The user that stored the batch cannot open the batch.

Station and User: Only the same station and the same user that stored the batch can open the batch.

Station and Other User: Only a different user on the station that stored the batch can open the batch.

User and Other Station: Only the same user on a different station can open the batch.

Other Station and Other User: Only a different user on a different station can open the batch.

Store Field Options

- Ensure that the option you choose for the Store field provides the information that the task require that occurs later in the workflow.
- Store field options are:
  - None: No user ID or station ID is stored (default setting).
  - Station ID: Stores the station ID with the batch.
  - User ID: Stores the user ID with the batch.
  - Station ID and user ID: Stores the station ID and the user ID with the batch.

Figure 1-29. Store Field Options F2581.0

Notes:

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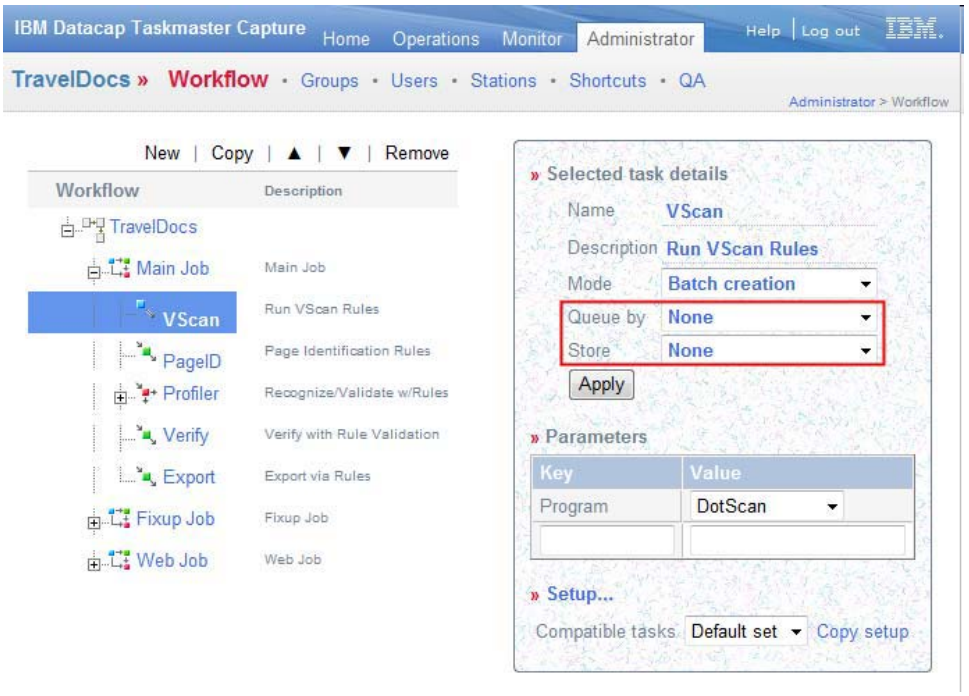
Datacap Web Interface



Administration of Production System

Figure 1-30. Datacap Web Interface F2581.0

Notes:

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Review 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 and station combination is allowed to process the step, then choose Pass otherwise choose Fail.

Administration of Production System

Figure 1-31. Review introduction F2581.0

Notes:

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Review questions

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.
   User erin and station 1. Pass or Fail
   User susan and station 2. Pass or Fail
   User erin and station 2. Pass or Fail

Administration of Production System

Figure 1-32. Review questions F2581.0

Notes:

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Review answers

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.
   User erin and station 1. Pass or Fail **Answer = Fail**
   User susan and station 2. Pass or Fail **Answer = Fail**
   User erin and station 2. Pass or Fail **Answer = Pass**

Administration of Production System

Figure 1-33. Review answers F2581.0

Notes:

IBM Training

Review questions

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

Administration of Production System

Figure 1-34. Review questions F2581.0

Notes:

IBM Training IBM

Review answers

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**

Administration of Production System

Figure 1-35. Review answers F2581.0

Notes:

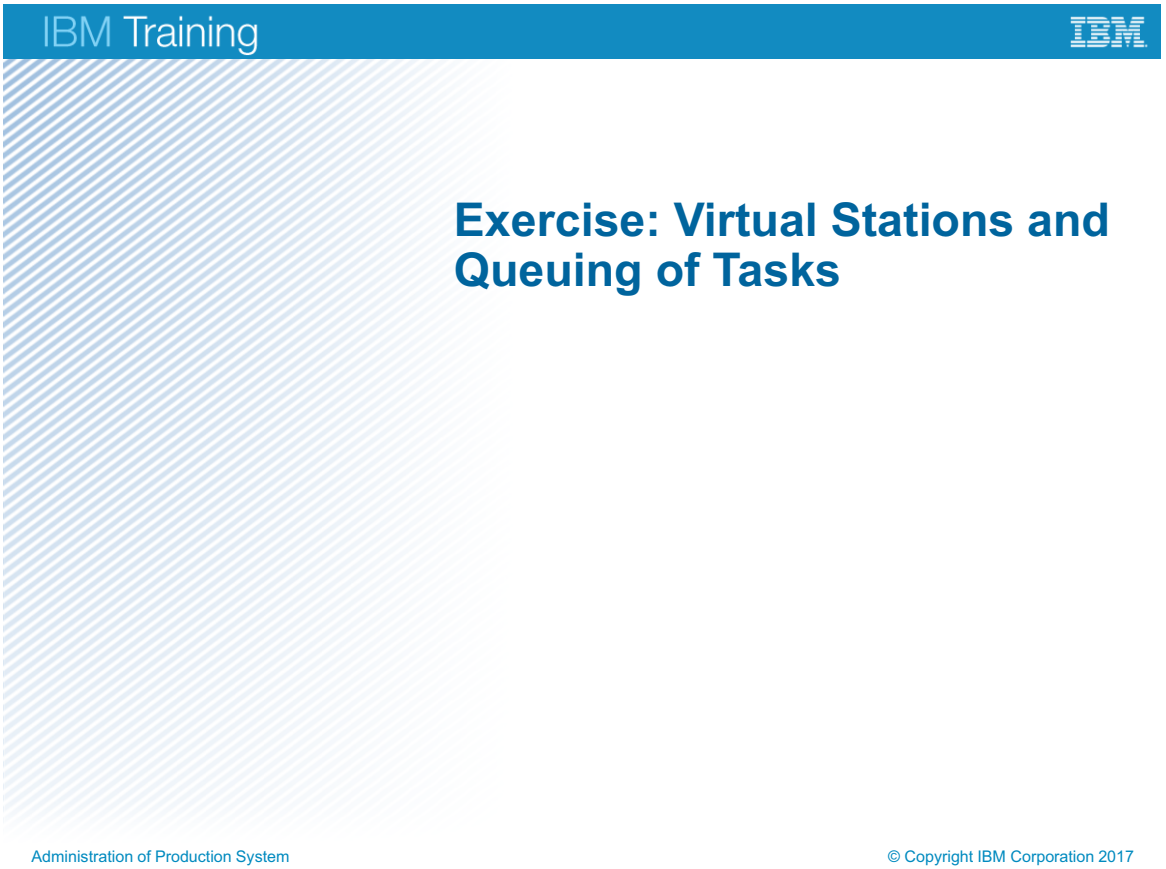

Figure 1-36. Exercise: Virtual Stations and Queuing of Tasks F2581.0

Notes:

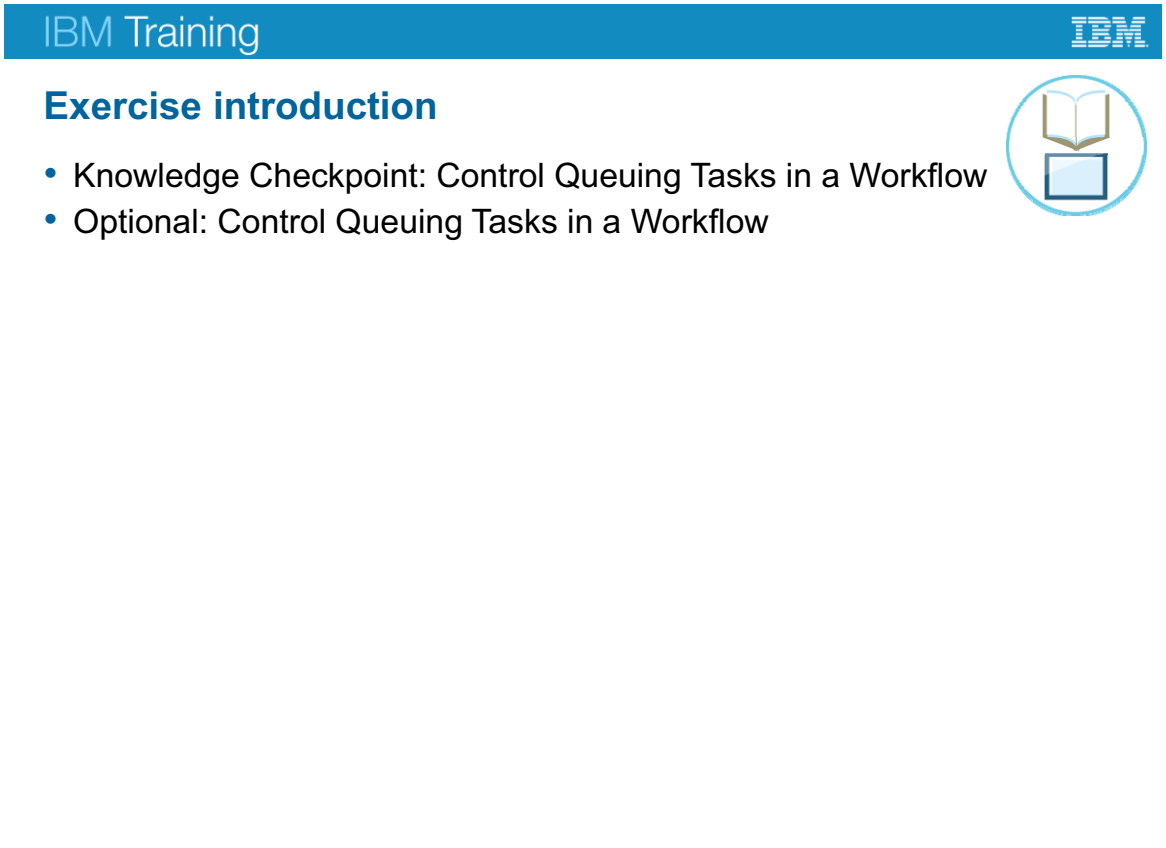

Figure 1-37. Exercise introduction F2581.0

Notes:

Lesson 1.3. Disaster Recovery

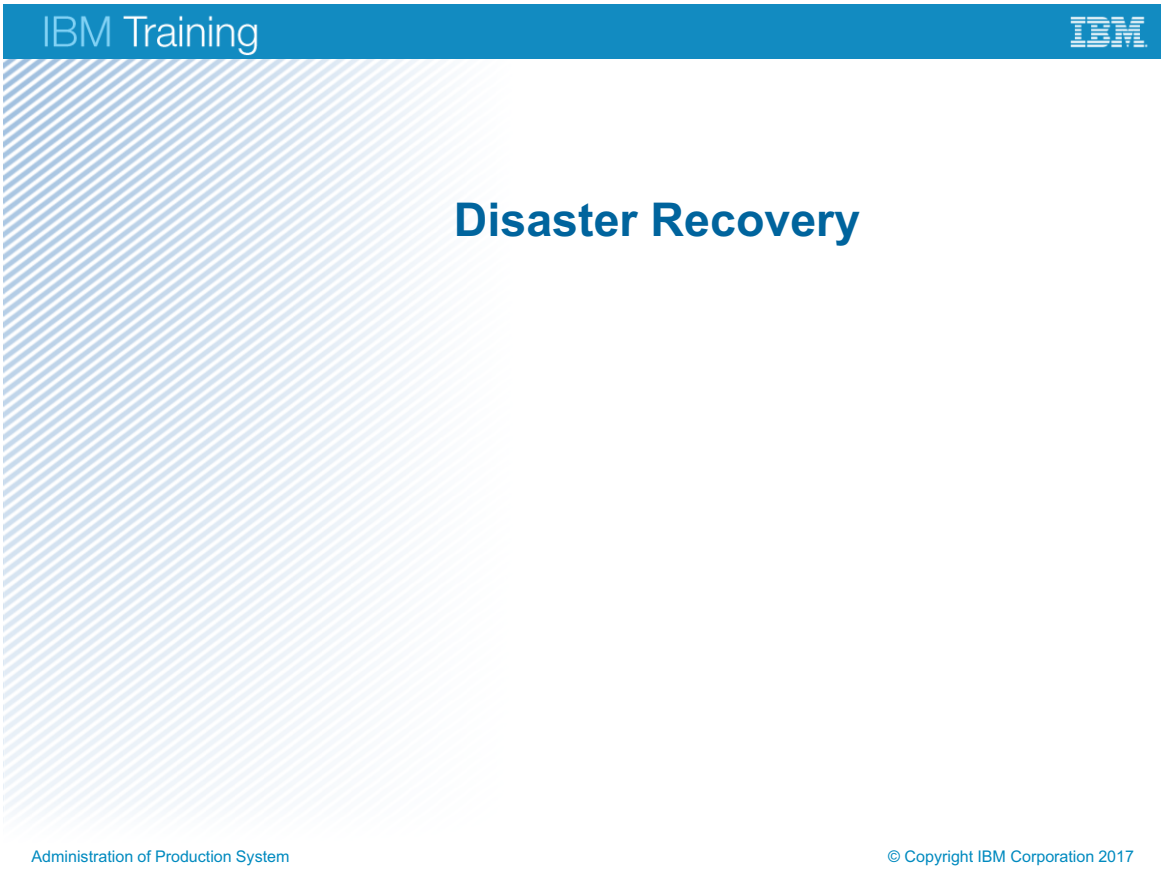

Figure 1-38. Disaster Recovery F2581.0

Notes:

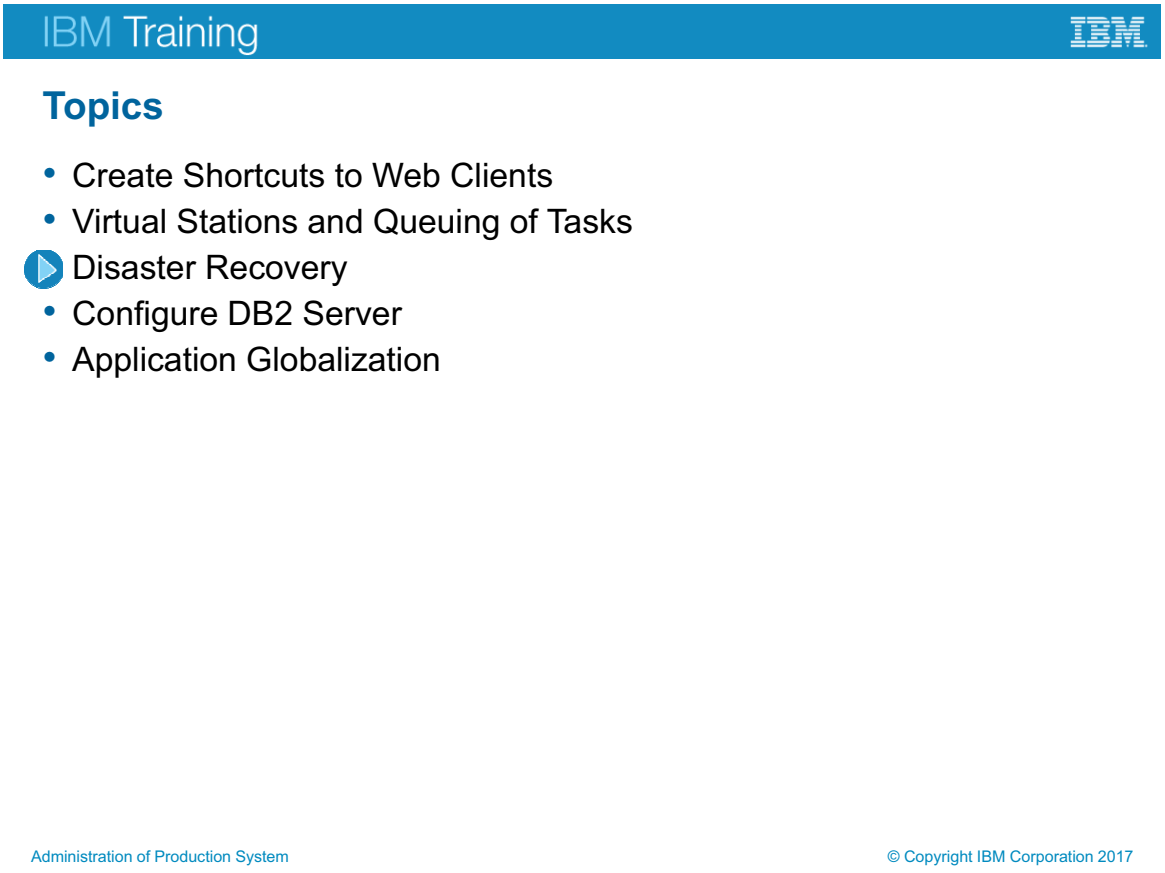

Figure 1-39. Topics F2581.0

Notes:

IBM Training

Why is this lesson important to you?

- 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 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.

Figure 1-40. Why is this lesson important to you? F2581.0

Notes:

IBM Training

Backup and Restore Strategy

- Back up both production and development systems.
- Do full mirror backup of each server that is in the system.
- The site backup policy determines backup Frequency.
- When all servers are backed up, they need only to be backed up again after service pack application or other configuration change. (site policy determines frequency)
- Back up practice to make sure that there is no system activity during backup.
  - Close connected clients if possible.
  - Stop all services.
  - Shut down the Datacap Server Service.
- System downtime is the best time to do backups.

Administration of Production System

Figure 1-41. Backup and Restore Strategy F2581.0

Notes:

Backup and Restore for Stateless Servers

- Stateless severs are:
  - Rulerunner servers.
  - Fingerprint servers.
  - Web servers.
- Stateless servers:
  - Provide services but data is held elsewhere.
  - Web servers can temporarily hold scanned batches until they are uploaded to the file share.
- For Web servers Backup, make sure that the scanned batches are uploaded and purged before starting the backup.

Figure 1-42. Backup and Restore for Stateless Servers F2581.0

Notes:

Backup and Restore the Datacap Server

- Datacap Server provided services:
  - User Authentication
  - Workflow and queuing
  - File services for Taskmaster Web.
  - Storage in two databases of user details and batch job status.
- Datacap Server backup
  - Back up as described for stateless servers.
  - Use procedure that is described for the backup and restore strategy slide.

Figure 1-43. Backup and Restore the Datacap Server F2581.0

Notes:

IBM Training

Backup the Database Server

- Databases that are most rapidly updated in real time are
  - Administration database
  - Engine database
  - Fingerprint database
- For mission critical environments databases, The use of mirrored image is preferred.
- More detailed database backup information is available in the database vendor documents, websites and other publications.

Figure 1-44. Backup the Database Server F2581.0

Notes:

IBM Training

Backup the File Share

- The file share holds all batch data and the IBM Datacap application project files.
- Continuously mirroring this drive makes sure that a fully up-to-date version of the batches.
- If paired with database mirroring of the Engine database, the status of the batches is also preserved.

Figure 1-45. Backup the File Share F2581.0

Notes:

IBM Training IBM

Review questions

1. For each of the server types listed, indicate which fit the description of a Stateless server.

   a. True or False: Rulerunner Servers are **stateless**?

   b. True or False: Fingerprint Servers are **stateless**?

   c. True or False: Datacap Server are **stateless**?

   d. True or False: Database Servers are **stateless**/

   e. True or False: File Server are **stateless**?

   f. True or False Web Servers are **stateless after scan batches are uploaded?**

Administration of Production System

Figure 1-46. Review questions F2581.0

Notes:

IBM Training

Review answers

1. For each of the server types listed, indicate which fit the description of a Stateless server.

   a. True or False: Rulerunner Servers are **stateless**.

   The answer is True

   b. True or False: Fingerprint Servers are **stateless**.

   The answer is True

   c. True or False: Datacap Server are **stateless**.

   The answer is False

   d. True or False: Database Servers are **stateless**.

   The answer is False

   e. True or False: File Server are **stateless**.

   The answer is False

   f. True or False Web Servers are **stateless** .

   The answer is True (after scan batches are uploaded)

Administration of Production System

Figure 1-47. Review answers F2581.0

Notes:

IBM Training IBM

Review questions

2. How often must Datacap servers with volatile data be backed up.

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

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

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

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

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

Administration of Production System

Figure 1-48. Review questions F2581.0

Notes:

IBM Training

Review answers

2. How often must Datacap servers with volatile data be backed up.

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

      The answer is True

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

      The answer is False

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

      The answer is False

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

      The answer is False

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

      The answer is False

Figure 1-49. Review answers F2581.0

Notes:

IBM Training

Review questions

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. True or False: All servers in the system must be backed up at least weekly and while system activity is at a minimum.
   b. True or False: All Stateless servers must be backed up weekly and Data servers (non-stateless) every day at least system performance.
   c. True or False: Stateless servers must be backed up one time and thereafter only when system configuration changes occur or service packs are applied.
   d. True or False: Servers that hold volatile data (non-stateless) must be backed up in accordance the corporate backup strategy document.
   e. True or False: Before a backup of the Web server, make sure that remote scanned batches are uploaded and purged.

Administration of Production System

Figure 1-50. Review questions F2581.0

Notes:

IBM Training

Review answers

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. True or False: All servers in the system must be backed up at least weekly and while system activity is at a minimum.

      The answer is False

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

      The answer is False

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

      The answer is True

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

      The answer is True

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

      The answer is True

Administration of Production System

Figure 1-51. Review answers F2581.0

Notes:

Lesson 1.4. Configure DB2 Server

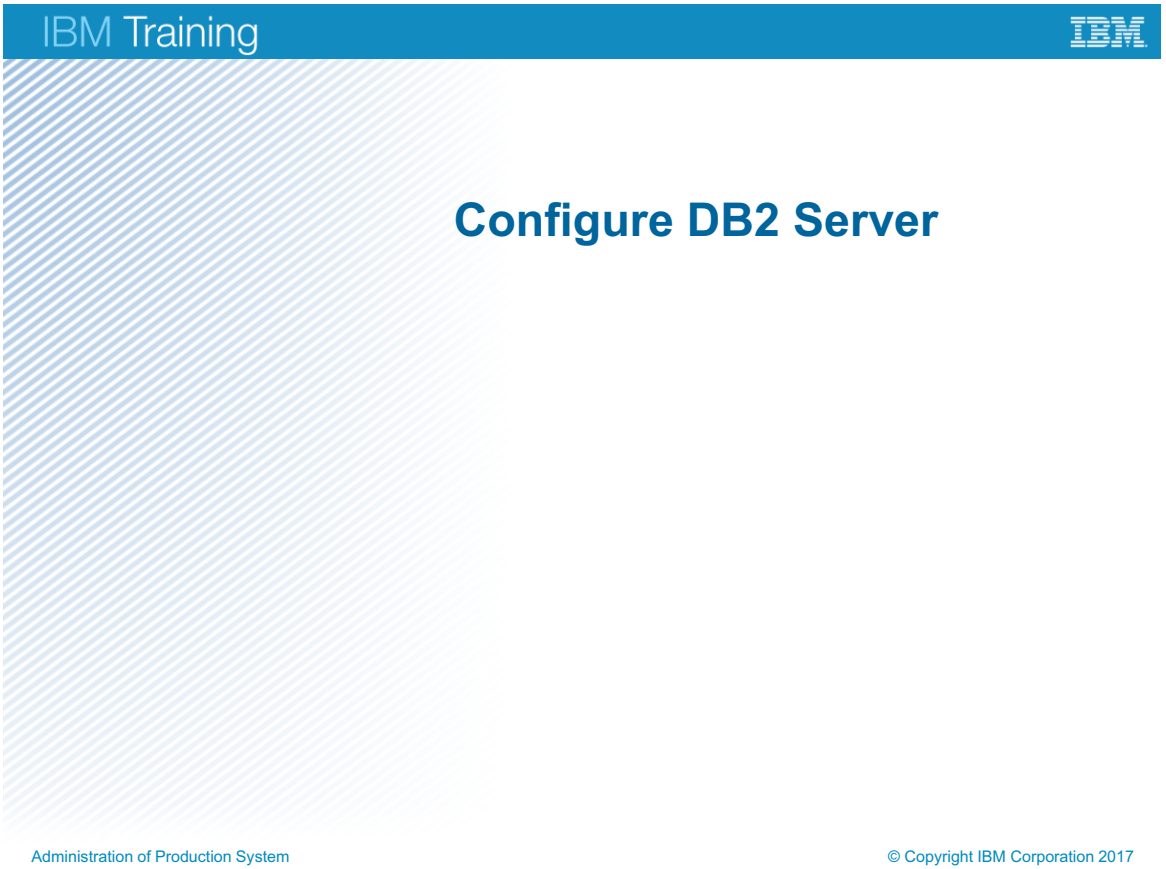

Figure 1-52. Configure DB2 Server F2581.0

Notes:

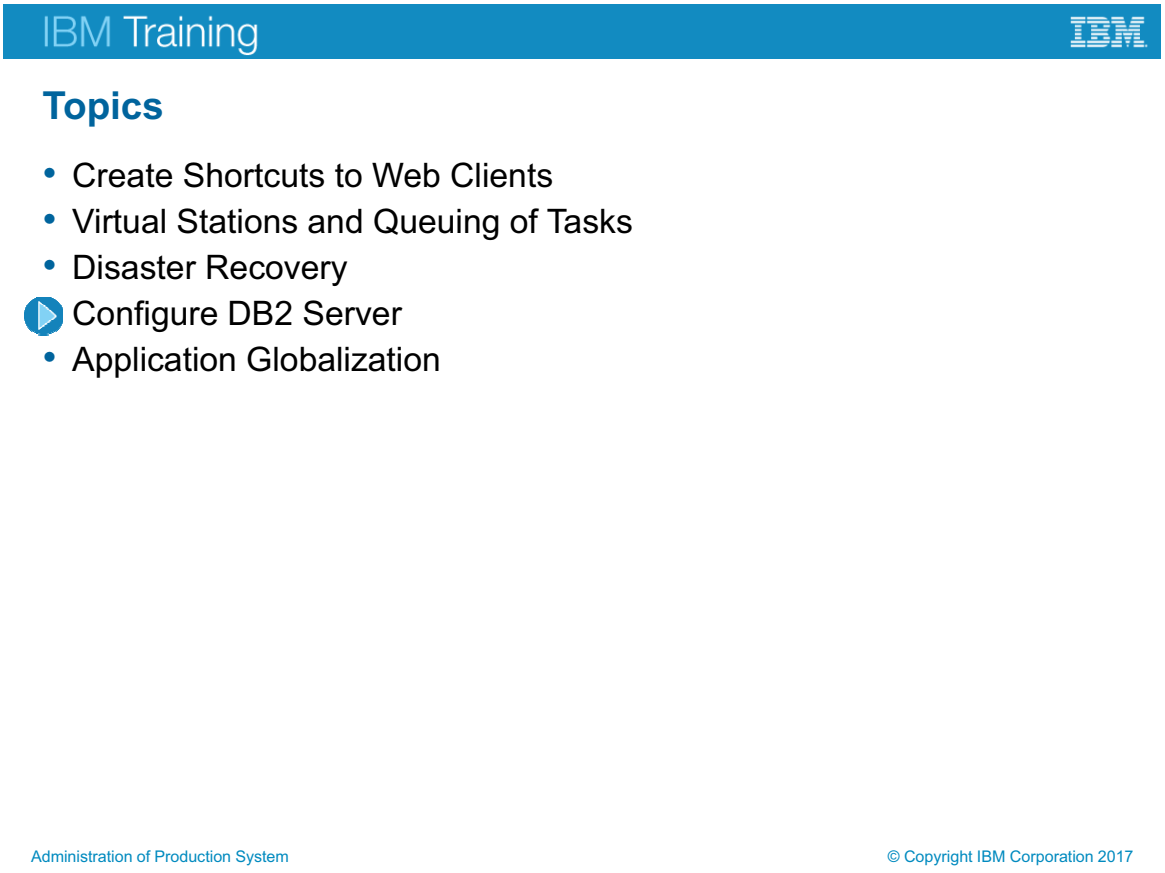

Figure 1-53. Topics F2581.0

Notes:

IBM Training

Why is this lesson important to you?

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

Administration of Production System

Figure 1-54. Why is this lesson important to you? F2581.0

Notes:

IBM Training

Supported Databases

- Sample Application Templates use Access databases.
- Microsoft SQL Server
- Oracle
- Datacap databases that can be converted are:
  - Administration database
    - Definitions for workflows, jobs, and tasks
    - Also, user, group, and station security information.
  - Engine database
    - Historical processing information for each batch
  - Fingerprint database
    - Fingerprints to identification and align them to
  - Lookup database
    - Lookup lists.
  - Application-specific databases

Administration of Production System

Figure 1-55. Supported Databases F2581.0

Notes:

Database Conversion Prerequisites

- A database administrator requires the right to create and modify a database.
- For SQL Server, for isolated test environment you can use Microsoft SQL Server Express.
- For Oracle, Oracle client must be installed on:
  - The database server.
  - Workstations with clients that require fingerprint database access.
  - These clients include:
    - Datacap Desktop
    - FastDoc
    - Rulerunner
    - Taskmaster Web
    - Datacap Navigator

Figure 1-56. Database Conversion Prerequisites F2581.0

Notes:

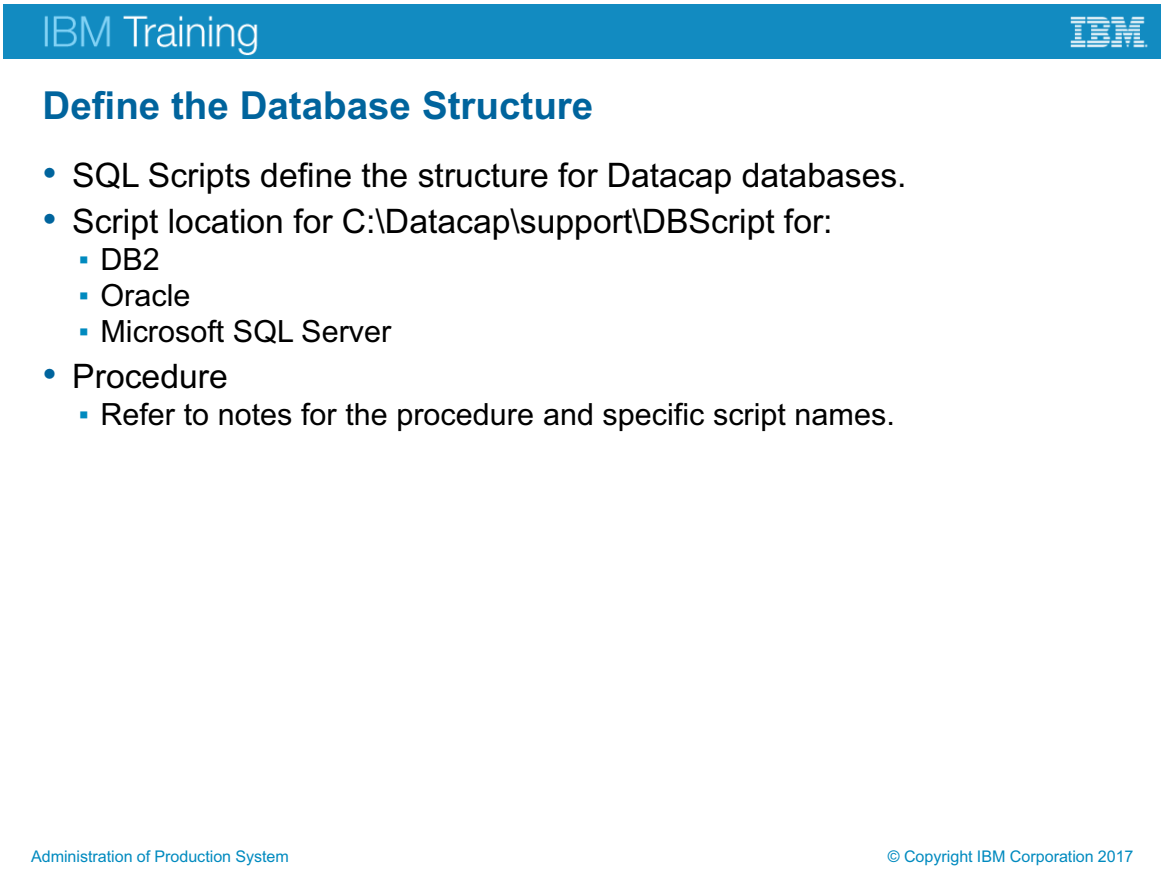

Figure 1-57. Define the Database Structure F2581.0

Notes:

Database Creation Scripts

DB2

DB2_Adm_Base.sql

DB2_Eng_Base.sql

DB2_FP_Base.sql

Oracle

Oracle_Adm_Base.sql

Oracle_Eng_Base.sql

Oracle_FP_Base.sql

Microsoft SQL Server

SQL_Adm_Base.sql

SQL_Eng_Base.sql

SQL_FP_Base.sql

Define the Database in SQL Server.

1. Start SQL Server Management Studio and log on to the server as an administrator.
2. In SQL Server Management Studio, right-click the Databases object and choose New Database.
3. In the Database name field, type <*app name*> Adm and click OK.

Import the Database Structure for SQL Server.

1. Select the <*app name*> Adm database and click File Open.
2. Select the file SQL_Adm_Base.sql and click Open.
3. Click Execute.
4. Repeat procedures for Eng_Base and FP_Base

IBM Training

Migrate the Application & Databases

- Start Application Copy Tool.
  - Start > All Programs > IBM Datacap Developer Tools > Datacap Application Copy Tool.
- Specify Source Copy from options for:
  - Application Name
  - Application Databases.
- Specify the Destination Copy to options
  - Clear the Application files options.
  - Paste the connection string that is created by Datacap Application Manager.
  - For Administration, Fingerprint and Engine database.
  - Click Clear Engine Database check box.
  - See notes for copying the connection string.
- Click OK

Administration of Production System

Figure 1-58. Migrate the Application & Databases F2581.0

Notes:

In the Application Copy Tool, do not use the String that is generated by the tool. Use this sample string that is generated by Datacap Application Manager.

Sample Connection String for BD2 connections

Provider=IBMDADB2;Hostname=ecmedu01;Data Source=Xtreme Sample Database 2008;Database=DCTDDB2;User ID=******;Password=******;

IBM Training

Configuring the Application to use the Database

- Open Datacap Application Manager.
- Select the application that you are migrating.

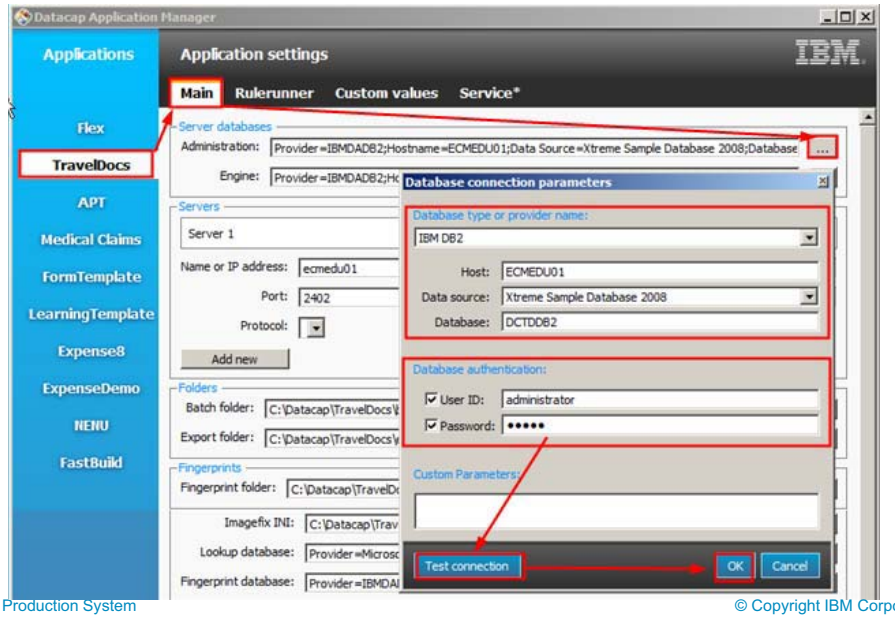

Figure 1-59. Configuring the Application to use the Database F2581.0

Notes:

Procedure to Configuring the Application to use the Database.

1. Open Start > All Programs > IBM Datacap Services > Datacap Application Manager.
2. Select an IBM Datacap Capture application. For example, select TravelDocs.
3. Click the Main tab.
4. In the Administration field, click [...] to go to the database.
5. In the Database Type field, select the database to which you want to configure the application, IBM DB2.
   a. In the Host field type, the DB2 Server name ecmedu01
   b. In the Data Source field select Xtreme Sample Database 2008
   c. In the Database field, enter the name of the application database that you created in DB2, for example DCDTDB2

6. Under Database authentication, select the authentication option:
   a. Click the user check box and type a user name that has authority to connect to the database, Example Administrator.
   b. Click the Password check box and type the password for the selected user.
7. Click Test connection to verify that you can connect to the database.
8. Click Close to close the Test window.
9. Click OK to complete the connection process.
10. Repeat these steps for the Engine database. In the Database field, enter the name of the Datacap Engine database. For example, type TravelDocsEng.
11. Close the Datacap Application Manager.

Verifying the Database Connection.

- Verify the database by processing a document batch for the migrated application.

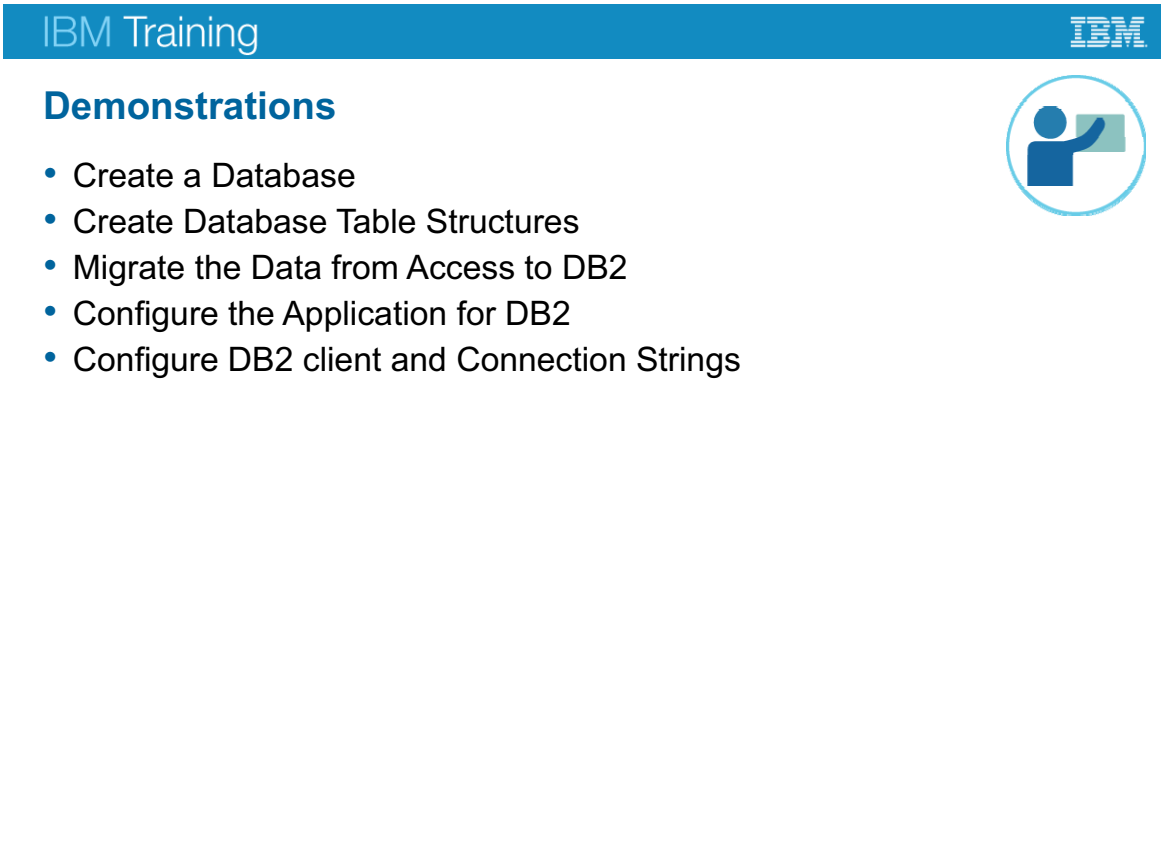

Figure 1-60. Demonstrations F2581.0

Notes:

If you are taking this course as a self-paced virtual course, return to the main course menu to play the pre-recorded demonstrations.

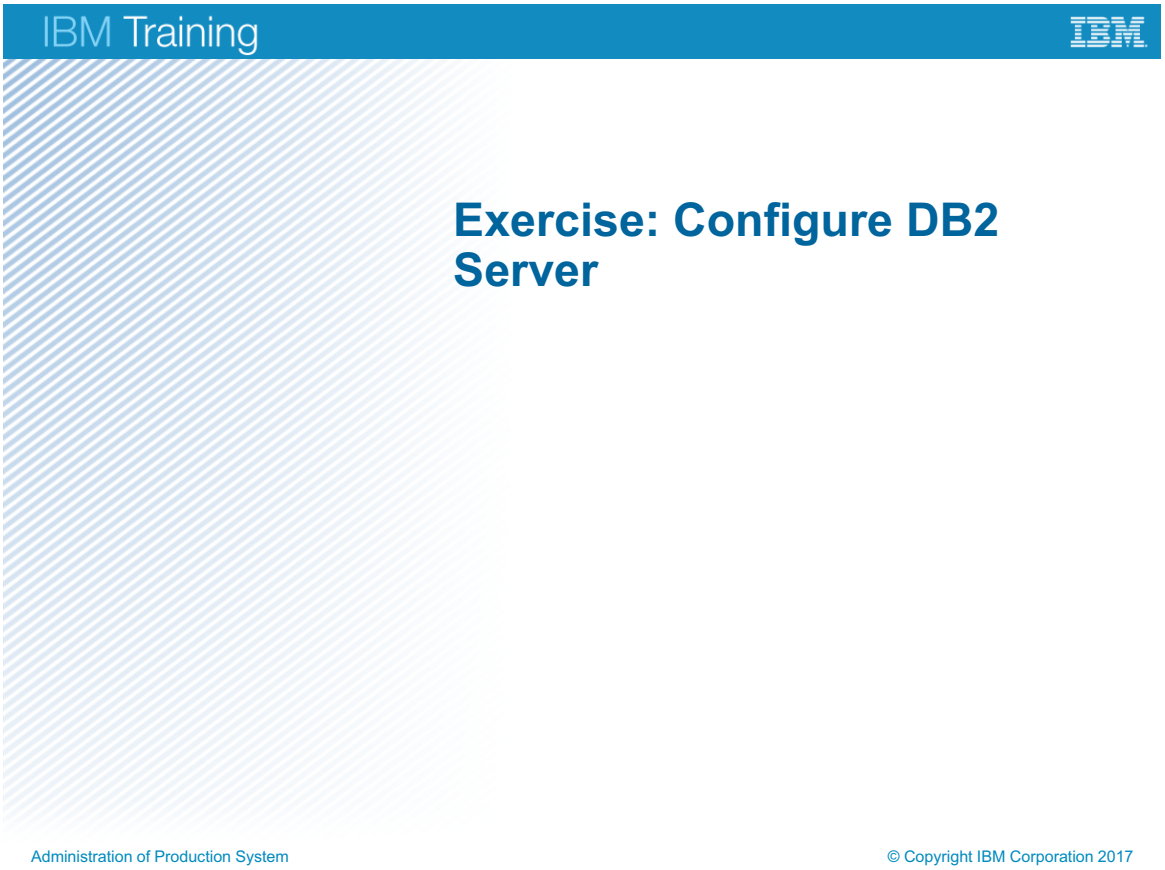

Figure 1-61. Exercise: Configure DB2 Server F2581.0

Notes:

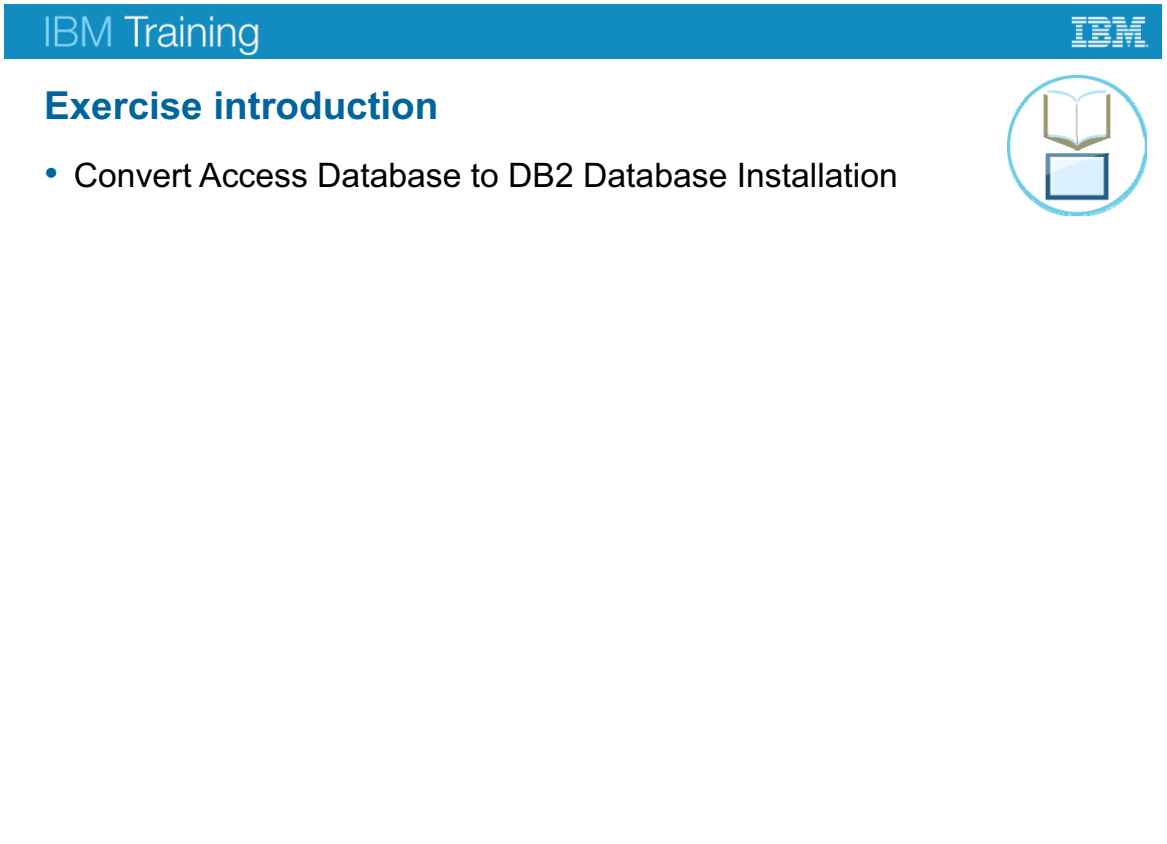

Figure 1-62. Exercise introduction F2581.0

Notes:

Lesson 1.5. Application Globalization

Figure 1-63. Application Globalization F2581.0

Notes:

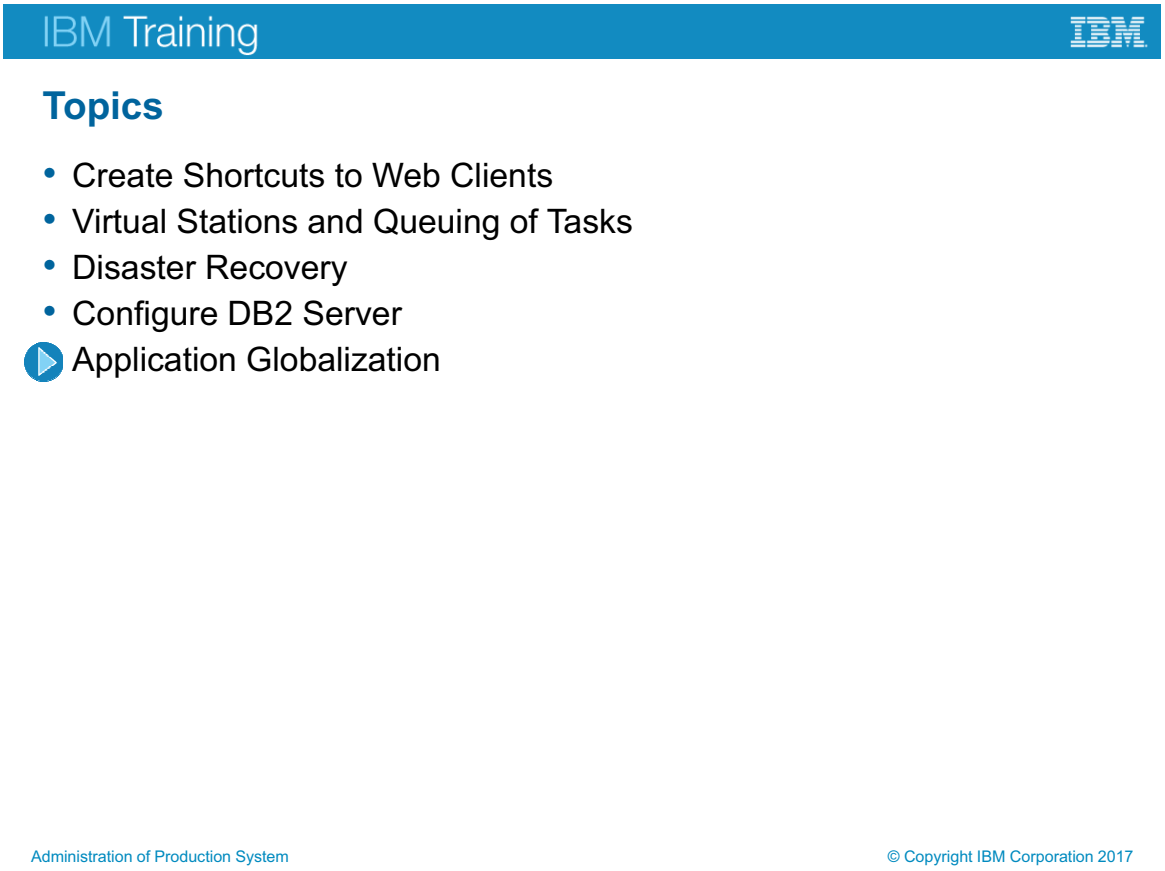

Figure 1-64. Topics F2581.0

Notes:

IBM Training

Why is this lesson important to you?

- This lesson provides an overview of how a developer can configure application globalization for different languages so the critical UI objects are displayed with localized names.

Administration of Production System

Figure 1-65. Why is this lesson important to you? F2581.0

Notes:

IBM Training

Application globalization (What and Where)

- What is it?
  - The ability for developers to translate application strings and object names for UI element into multiple languages.
  - Users access application UIs in multiple locales / languages.
- What is translated?
  - Label variables for various names objects, if translations are provided.
  - Setup DCO Objects:
    - Document, Page, Field names.
  - Workflow objects:
    - Workflow, Job, Task, and Shortcut names
- Where are the translations visible?
  - Datacap Navigator client
  - Datacap Desktop client
    - UIs: scan, verify, classify; start batch

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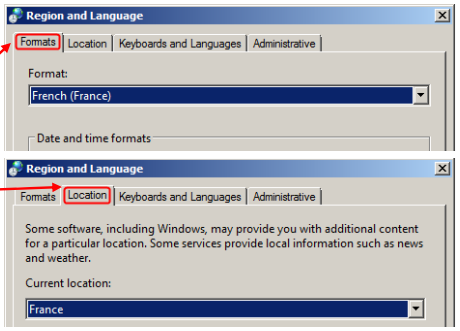
Figure 1-66. Application globalization (What and Where) F2581.0

Notes:

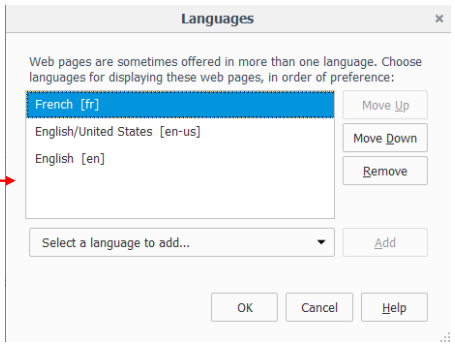
IBM Training

Levels of globalization

- Thick clients like Desktop, FastDoc, Datacap Server Manager, and so on.
  - Follow the language/locale settings set for windows in Control Panel > Clock, Language, and Region widget.



- Thin Clients like Datacap Navigator, tmweb.
  - Follow the setting in the browser settings.
  - For Firefox go to Tools > Options > Content > Languages.
  - For Internet Explorer go to Tools > Internet Options > General > Languages.



Administration of Production System

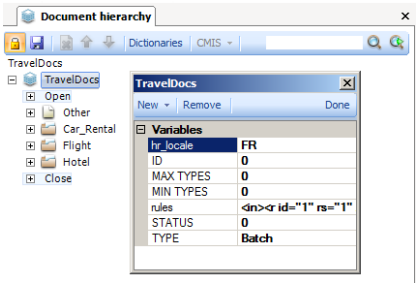
Figure 1-67. Levels of globalization F2581.0

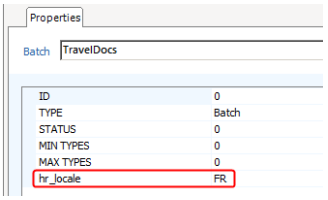
Notes:

IBM Training

Application level globalization

- Within the Application.
  - Globalization can be applied at every level independently.
  - Achieved by setting an hr_locale variable at one or move levels of the DCO.
  - Set DCO object globalization at: batch, document, page, or field level.
  - See the Example in the notes.
- Set top level to effect all DCO levels objects in two possible ways.
  - Set an hr_locale variable:
    - For the whole application in Datacap Application Manager or
    - On the Batch object in Datacap Studio.
    - On lower level objects to override the top level.





Administration of Production System

Figure 1-68. Application level globalization F2581.0

Notes:

- If you want the entire application to work in a single locale,
  - Then set the variable once at the batch level and all objects will run in that locale.
  - This has the same effect as setting the hr_locale variable in the application manager... it will cause the hr_locale to be automatically set at the batch level at run time.
  - You can always override the global setting by setting another hr_locale variable at a lower level.
- If you need different objects in an application to work in different locales,
  - Then you can set the hr_locale at the top node that should run in that locale.
  - All other nodes under it will automatically also use that locale.

Example: Different locale settings at different DCO object levels.

Assume hr_locale is set on these objects:

```
Batch          <- hr_locale = en-US
  Doc1
    Page1      <- hr_locale = fr-FR
      FieldA
      FieldB  <- hr_locale = de_DE
  Doc2         <- hr_locale = ru-RU
    Page2
      FieldC
  Doc3
    Page3
      FieldD
```

Then these are the locales the objects will run in:

en-US: Batch, Doc1, Doc3, Page3, FieldD

fr-FR: Page1, FieldA

de-DE: FieldB

ru-RU: Doc2, Page2, FieldC

Procedure to set object level globalization variables.

Set Object level globalization variables in Datacap Studio.

1. Lock the DCO structure.
2. Right-click the object, batch, document, page, or field.
3. Select Manage variables…
4. Click New and type variable name, hr_locale.
5. Set the value to en, en-US, fr, fr-FR, de, de-DE, or some other valid local value.
6. The variable can be seen in the panel in the lower right corner of the Datacap Studio window.

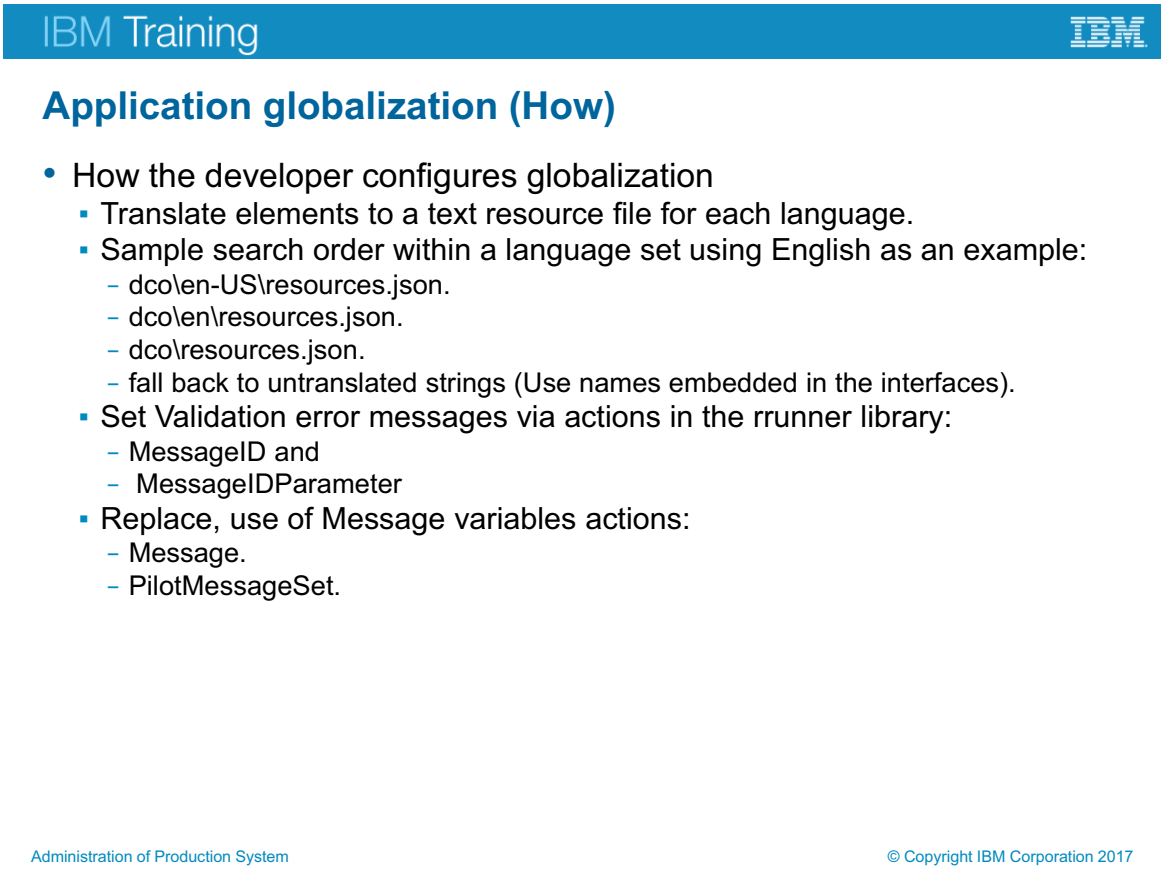


Figure 1-69. Application globalization (How) F2581.0

Notes:

Application globalization is easy for the developer. There is a single file that gets created for each language or locale. These locale resource files are expected in the application DCO sub folders C:\Datacap\dco_<application_Name>\Language or locale. Example en-us, en, de, fr and so on.

Globalization looks in a series of locations based on the locale setting to find the applicable translations for the client UIs. To be clear the search would never attempt to cross languages, the search would always remain within the language specified on the Format tab in the Windows Language settings view.

Sample English Search orderSample French Search orderGeneric Description of search order

en-US	fr-FR	Localized Language
en	fr	Base Language

Default (in root folder)Default (in root folder)Default (in root folder)

Language embedded in the interface.Language embedded in the interface.Language embedded in the interface.

Validation error messages require additional work.

Use application validation actions to set the messages rrunner > MessageID and MessageIDParameter actions.

Discontinue using PilotMessageSet actions.

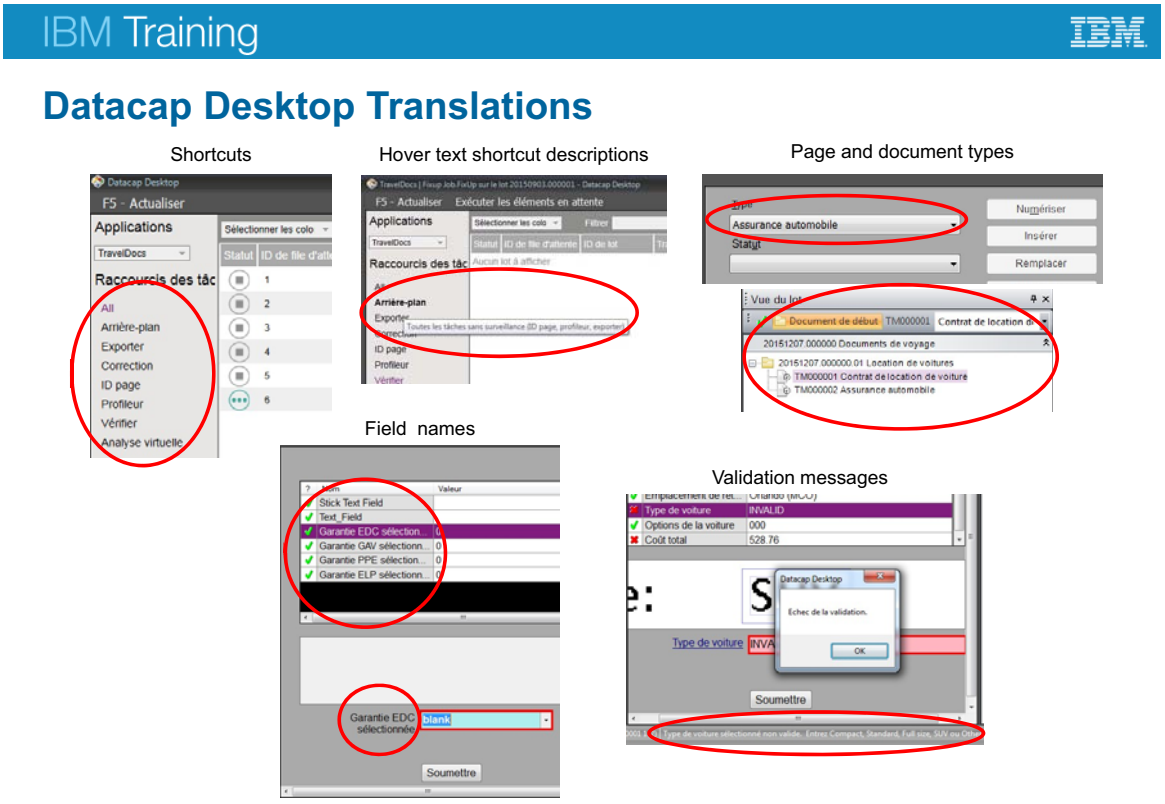


Figure 1-70. Datacap Desktop Translations F2581.0

Notes:

The strings translated on the Datacap Desktop interface are:

- Shortcuts.
- Hover text shortcut descriptions.
- Page and document types.
- Field names.
- Validation messages.

These fields are all marked in the screen capture images by the read circular or elliptical shapes.

Compare the default English resource.json file for the document types against the French resource.json file.

English

```
// document types
"doctype.Car_Rental":"Car rental",
"doctype.Flight":"Airline flight",
"doctype.Hotel":"Hotel bill",
```

French

```
"doctype.Car_Rental":"Location de voitures",
"doctype.Flight":"Vol de compagnie aérienne",
"doctype.Hotel":"Facture d'hôtel",
```

Compare the default English resource.json file for the page types against the French resource.json file.

English

```
// page types
"pagetype.Rental_Agreement":"Car rental agreement",
"pagetype.Optional_Insurance":"Car insurance",
"pagetype.Room_Receipt":"Hotel room charges",
"pagetype.Meals":"Meal charges",
"pagetype.Other_Charges":"Miscellaneous hotel charges",
"pagetype.Air_Ticket":"Airline ticket",
```

French

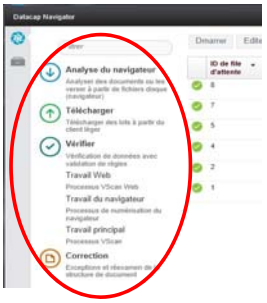
```
"pagetype.Rental_Agreement":"Contrat de location de voiture",
"pagetype.Optional_Insurance":"Assurance automobile",
"pagetype.Room_Receipt":"Frais de chambre d'hôtel",
"pagetype.Meals":"Frais de repas",
"pagetype.Other_Charges":"Frais d'hôtel divers",
"pagetype.Air_Ticket":"Billet d'avion",
```

In the Validation messages screen message window is translated by the product translation. The other translation is done by the Application globalization.

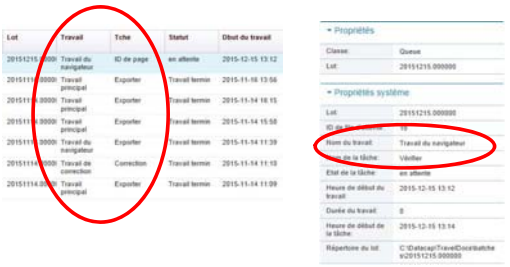
IBM Training

Datacap Navigator Translations

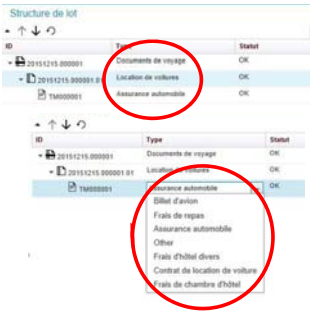
Shortcuts and descriptions



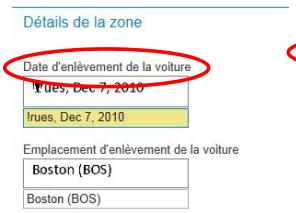
Job and task names



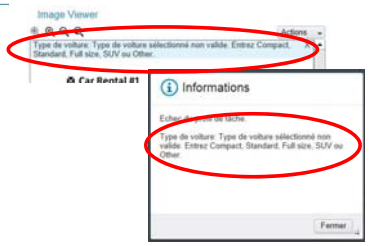
Page and document types



Field names



Validation messages



Administration of Production System

Figure 1-71. Datacap Navigator Translations F2581.0

Notes:

The strings translated on the Datacap Desktop interface are:

- Shortcuts and Descriptions
- Job and Task names
- Page and document types
- Field names
- Validation messages

These fields are all marked in the screen capture images by the read circular or elliptical shapes.

Compare the default English resource.json file for the some field types against the French resource.json file.

English

```
// fields (includes batch-level fields)
"field.Pickup_Date":"Car pick-up date",
"field.Pickup_Location":"Car pick-up location",
"field.Return_Date":"Car return date",
"field.Return_Location":"Car return location",
"field.Car_Type":"Car type",
"field.Options":"Car options",
"field.Total_Cost":"Total cost",
```

French

```
// fields (includes batch-level fields)
"field.Pickup_Date":"Date d'enlèvement de la voiture",
"field.Pickup_Location":"Emplacement d'enlèvement de la voiture",
"field.Return_Date":"Date de retour de la voiture",
"field.Return_Location":"Emplacement de retour de la voiture",
"field.Car_Type":"Type de voiture",
"field.Options":"Options de la voiture",
"field.Total_Cost":"Coût total",
```

IBM Training

Resources.json translation keys

- A resources translation object consists of a key and a value.
  - The key precedes the colon.
  - The value follows the colon.
  - Both are surrounded by quotes.
- The key is a concatenation of the Object type and the object name separated by a period.
  Example: key = “workflow.TravelDocs” value = “ Travel Documents”

Resources.json file – key(type.name):value(translated)

```
{
   // comments
   "workflow.TravelDocs":"Travel Documents",
   "job.Main Job":"Main Job",
   "jobdescription.Main Job":"VScan process",
   "shortcut.Verify":"Verify",
   "shortcutdescription.Verify":“Verify with validations“,
   "task.VScan":"Virtual Scan",
   "doctype.Car_Rental":"Car rental",
   "pagetype.Rental_Agreement":"Car rental agreement",
   "field.Pickup_Date":"Car pick-up date",
   "message.M001":"Invalid car type selected.  Enter {0}, {1}, {2}, {3} or {4}.“
}
```

Administration of Production System

Figure 1-72. Resources.json translation keys F2581.0

Notes:

IBM Training

Validation ruleset and message

- To use selection list to populate a field with a validation error there must be:
  - A validation rule that has:
    - A MessageID action and
    - Multiple MessageParameter Actions.
  - A corresponding message

Validation rule using MessageID

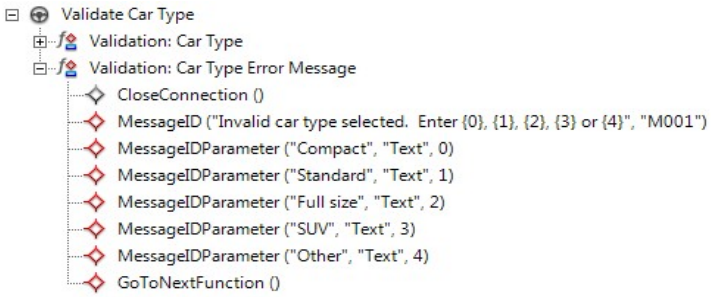


Figure 1-73. Validation ruleset and message F2581.0

Notes:

Resource.json Sample Message

// messages (ID such as 'M001' must match those set in MessageIDParameter action)

// To use this message, replace PilotMessage_Set action with MessageID action

// Translator: the strings "Compact" "Standard" "Full size" "SUV" and "Other" should NOT be translated

English

"message.M001":"Invalid car type selected. Enter {0}, {1}, {2}, {3} or {4}."

French

"message.M001":"Type de voiture sélectionné non valide. Entrez {0}, {1}, {2}, {3} ou {4}.“

MessageIDParameter - 2nd parameter type is one of {"job", "task", "shortcut", "field", "workflow", "appname", "pagetype", "doctype", "text", "variable“}.

If this item is translated, the client will substitute the translated value when displaying the message.

IBM Training

Review questions

1. True or False: Application developers can configure their own application globalization that is driven by the system locale setting.
2. True or False: All Datacap client interfaces respond to the locale settings.
3. What are valid locations for application globalization locale translation file?
   A. C:\Program File\Datacap\local\.
   B. C:\Datacap\dco_<app>.
   C. C:\Datacap\dco__<app>\locale.
   D. C:\Datacap\clients\locale.
4. True or False: All application globalization even for warning or error messages is configured by only creating a custom local/language Resource.json file?

Administration of Production System

Figure 1-74. Review questions F2581.0

Notes:

IBM Training IBM

Review answers

1. True or False: Application developers can configure their own application globalization that is driven by the system locale setting. The Answer is True.

2. True or False: All Datacap client interfaces respond to the locale settings. The Answer is False
3. What are valid locations for application globalization locale translation file?
   A. C:\Program File\Datacap\local\.
   B. C:\Datacap\dco <app>.
   C. C:\Datacap\dco <app>\locale.
   D. C:\Datacap\clients\locale.

   The answer is B and C.
4. True or False: All application globalization even for warning or error messages is configured by only creating a custom local/language Resource.json file? The Answer is False. (Messages also require action edits in the ruleset)

Administration of Production System

Figure 1-75. Review answers F2581.0

Notes:

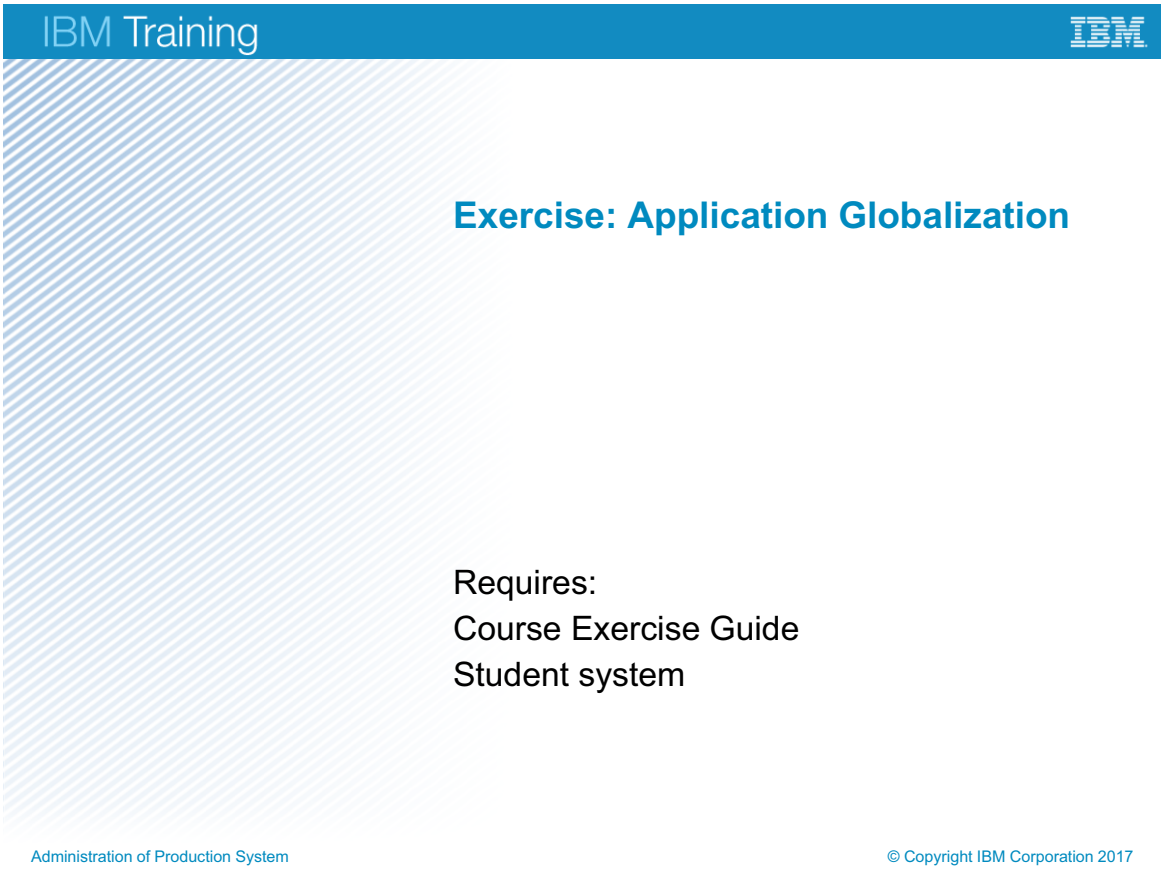


Figure 1-76. Exercise: Application Globalization F2581.0

Notes:

Figure 1-77. Exercise objectives F2581.0

Notes:

IBM Training

Unit summary

- Understand Virtual Stations and Queuing of Tasks
- Add Shortcuts to Web Client
- Plan for Disaster Recovery
- Convert and Migrate Datacap Databases.
- Configure Globalization

Figure 1-78. Unit summary F2581.0

Notes:

Unit 2. Maintenance

What this unit is about

This units shows the maintenance aspects of the system. You learn the difference between Routine, Preventive, and Corrective Maintenance. You also learn about performing maintenance tasks automatically with NENU and you learn about all the available logging capabilities.

What you should be able to do

- Perform Routine, Preventive, and Corrective Maintenance
- Configure NENU to periodically do batch cleanup
- Locate Event Logs

How you will check your progress

- Successfully complete the activities in the Student Workbook.

References

- Knowledge Center

  http://www.ibm.com/support/knowledgecenter/SSZRWV_9.0.1/com.ibm.dc.install.doc/dcpov007.htm
- Redbooks: Implementing Document Imaging and Capture Solutions with IBM Datacap

  http://www.redbooks.ibm.com/abstracts/sg247969.html?Open

Figure 2-1. Unit Objectives F2581.0

Notes:

Lesson 2.1. System Maintenance

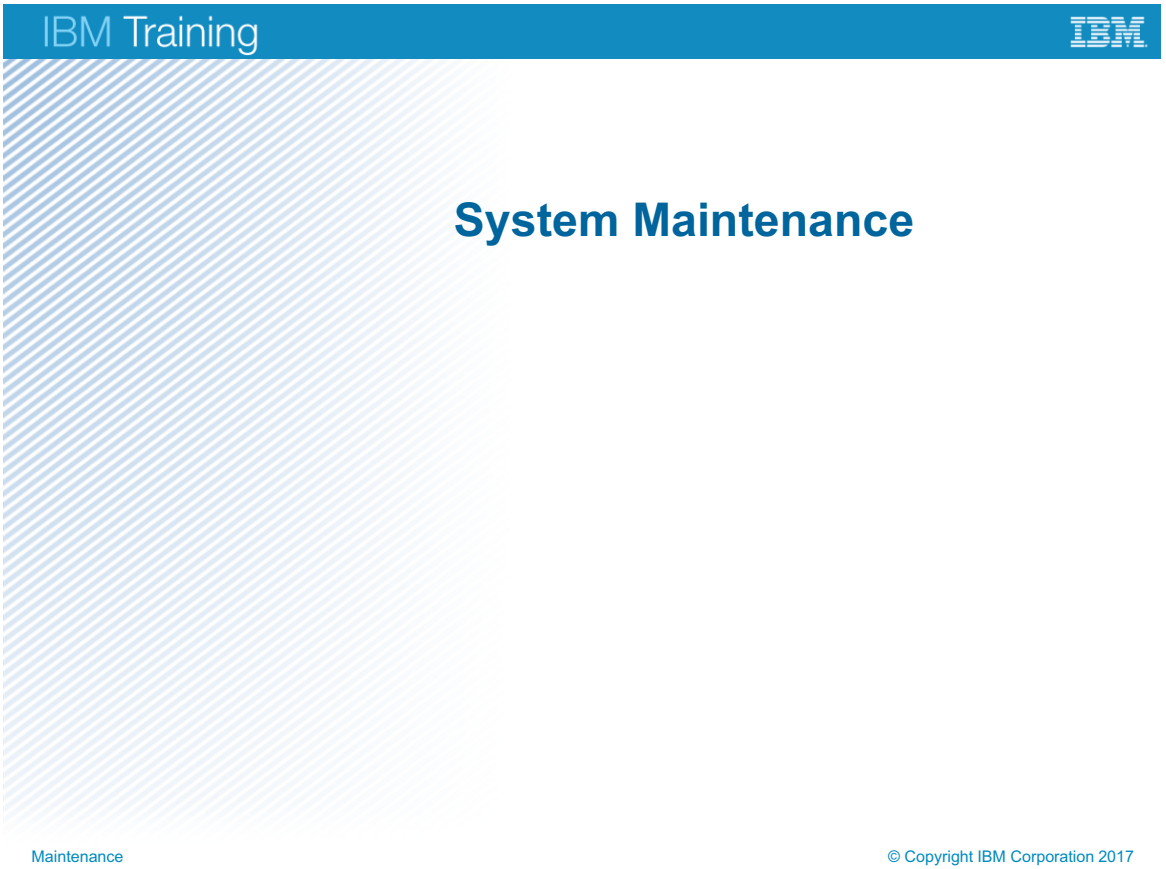


Figure 2-2. System Maintenance F2581.0

Notes:

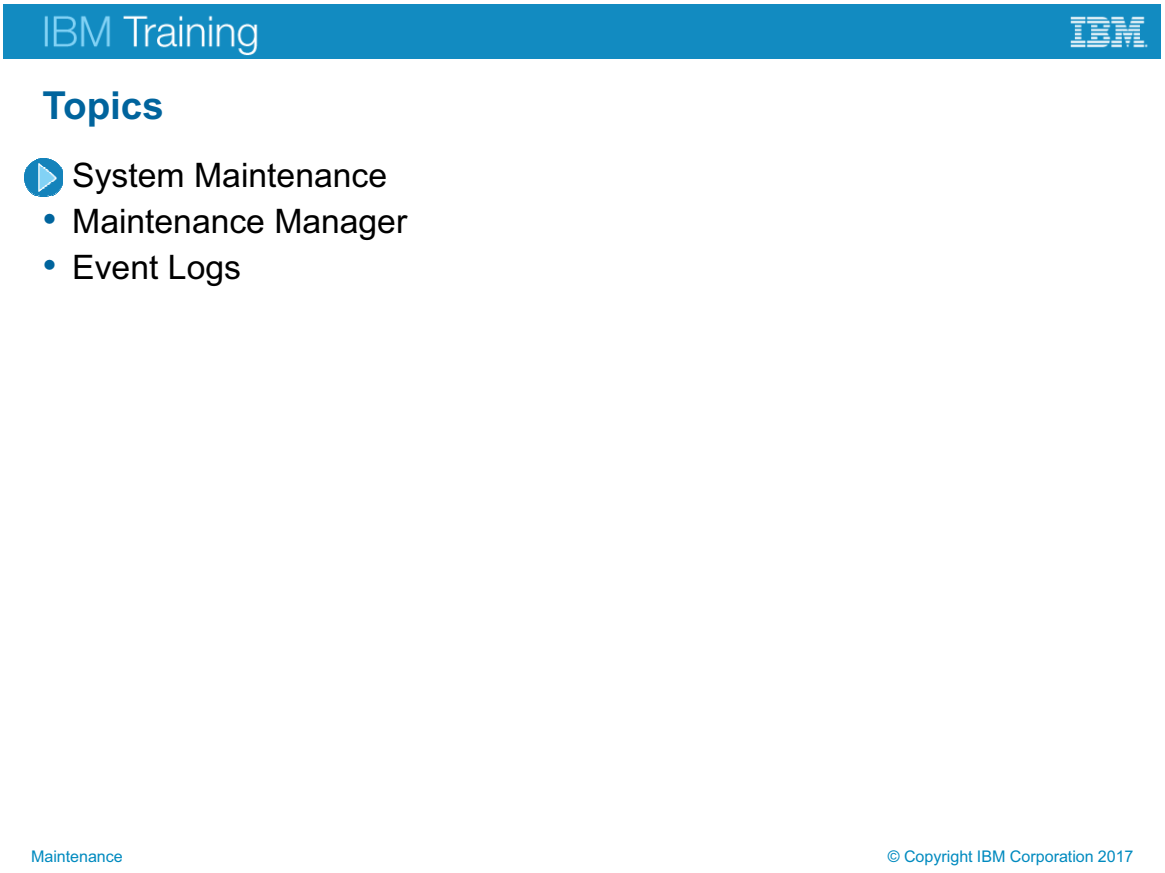


Figure 2-3. Topics F2581.0

Notes:

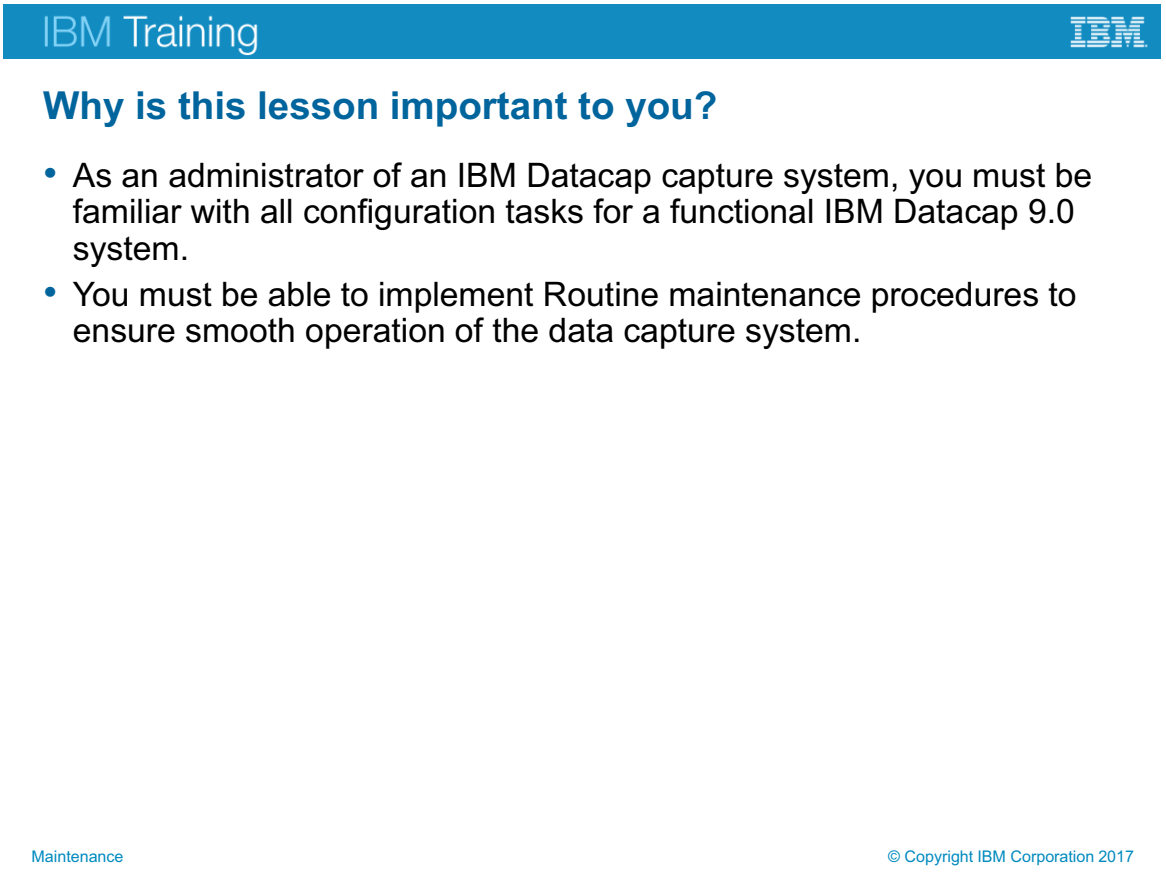


Figure 2-4. Why is this lesson important to you? F2581.0

Notes:

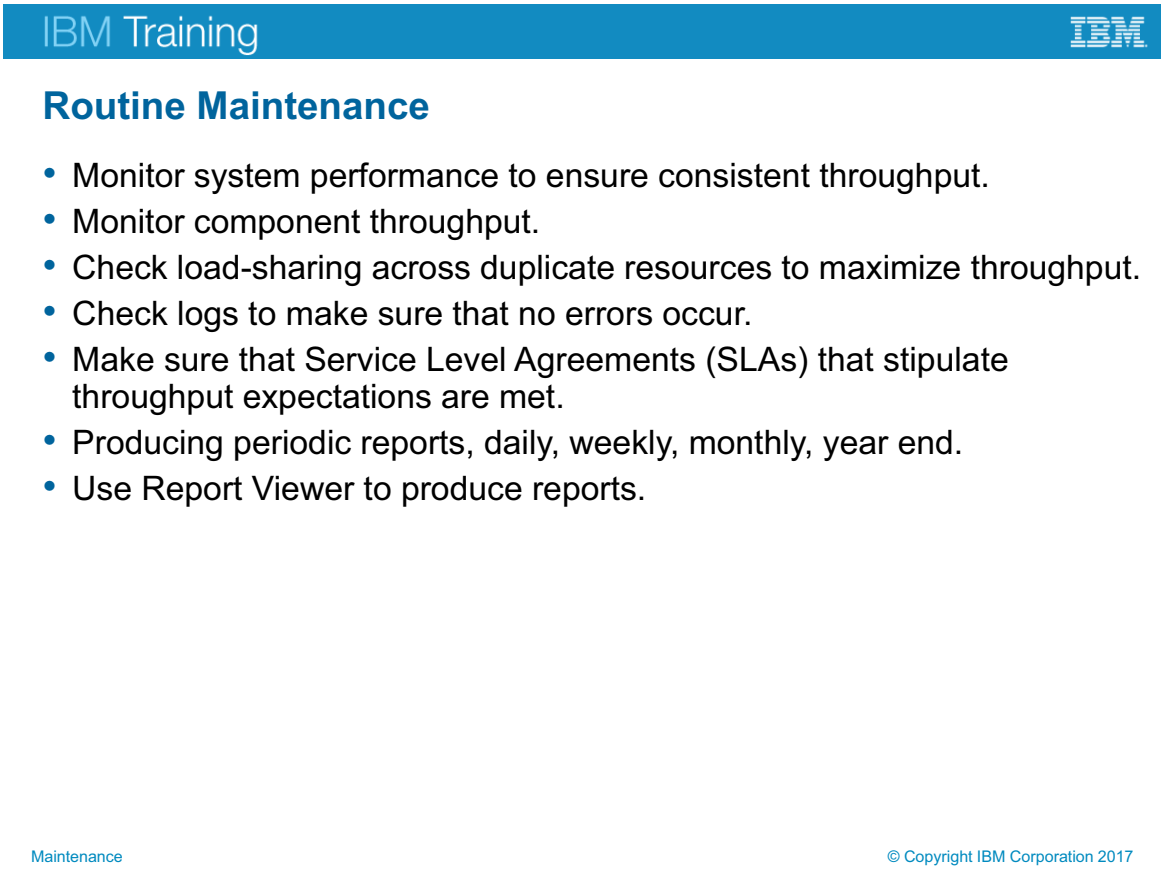


Figure 2-5. Routine Maintenance F2581.0

Notes:

Routine maintenance is any task that is done on some time schedule. It might be daily, weekly, monthly, or some other period. Practically, higher frequency tasks like daily tasks are more often referred to as routine tasks.

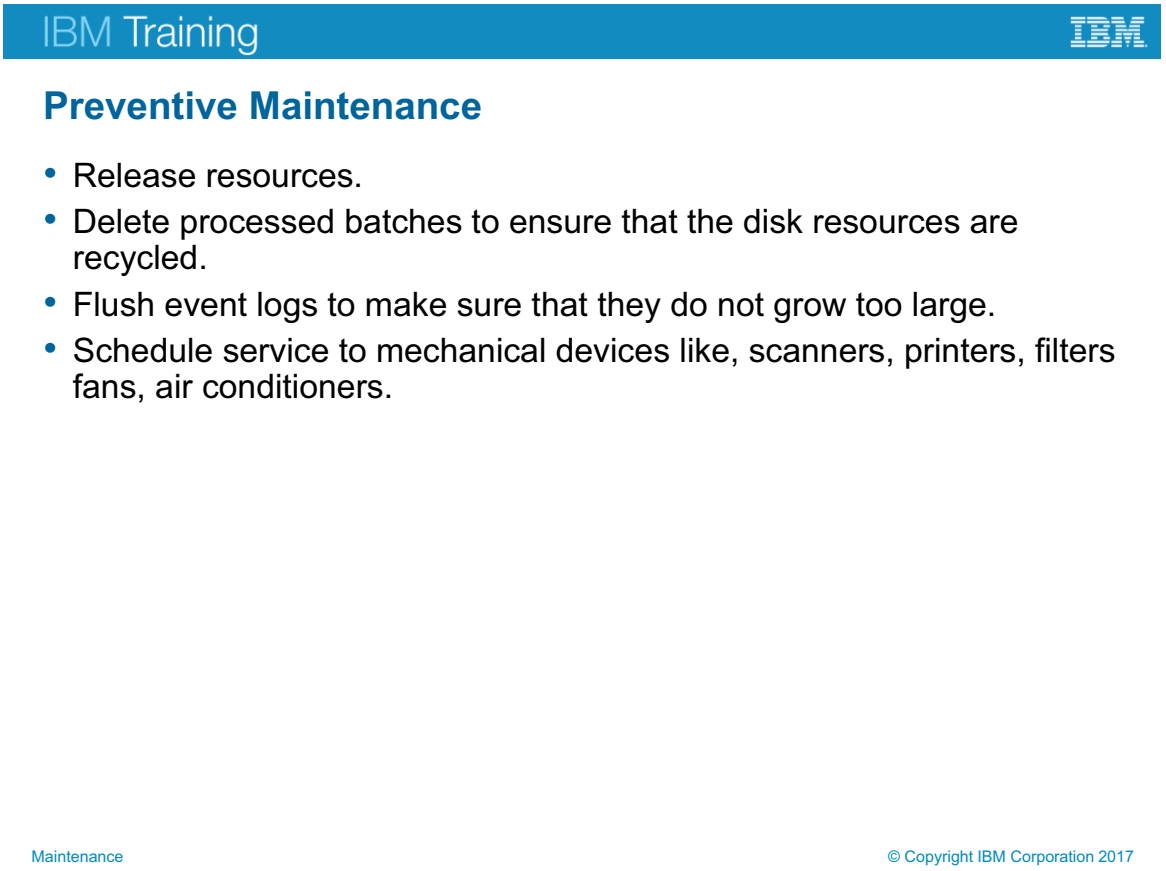


Figure 2-6. Preventive Maintenance F2581.0

Notes:

Preventive maintenance is done less frequently than routine maintenance and is done to prevent performance degradation or catastrophic failure.

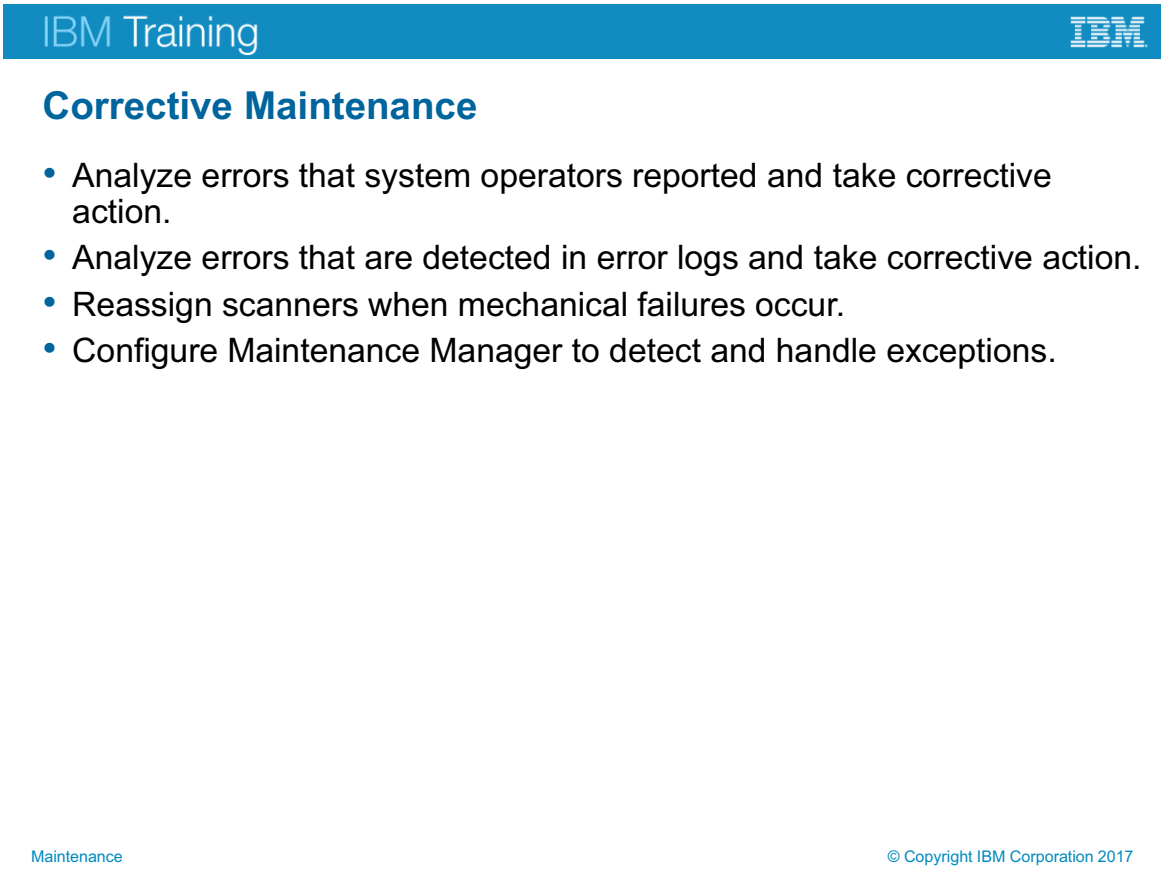


Figure 2-7. Corrective Maintenance F2581.0

Notes:

Corrective maintenance might result from routine and preventive maintenance to correct specific failures that occur.

IBM Training

Review introduction

Each topic that is listed fall into one of three Maintenance categories. Select the Maintenance category that describes the topic best.

Options are:

- **Routine** Maintenance
- **Preventive** Maintenance
- **Corrective** Maintenance.

Figure 2-8. Review introduction F2581.0

Notes:

IBM Training

Review questions

1. Is release resources Routine, Preventive, or Corrective
2. Is monitor system performance to ensure consistent throughput, Routine, Preventive, or Corrective?
3. Is monitor component throughput, Routine, Preventive, or Corrective?
4. Analyze errors that are reported by System Operators and take corrective action. Is this action Routine, Preventive, or Corrective?
5. Is deleting processed batches to ensure that the disk resources are recycled, Routine, Preventive, or Corrective?

Maintenance

Figure 2-9. Review questions F2581.0

Notes:

IBM Training

Review answers

1. Is release resources Routine, Preventive, or Corrective
   The answer is **Preventative**
2. Is monitor system performance to ensure consistent throughput, Routine, Preventive, or Corrective?
   The answer is **Routine**
3. Is monitor component throughput, Routine, Preventive, or Corrective?
   The answer is **Routine**
4. Analyze errors that are reported by System Operators and take corrective action. Is this action Routine, Preventive, or Corrective?
   The answer is **Corrective**
5. Is deleting processed batches to ensure that the disk resources are recycled, Routine, Preventive, or Corrective?
   The answer is **Preventative**

Maintenance

Figure 2-10. Review answers F2581.0

Notes:

IBM Training

Review questions

6. Is checking load-sharing across duplicate resources to maximize throughput, Routine, Preventive, or Corrective?

7. Is flushing event logs to make sure that they do not grow too large, Routine, Preventive, or Corrective?

8. Is check logs to make sure that errors are not occurring, Routine, Preventive, or Corrective?

9. Is analyze errors that are detected in error logs and taking corrective action, Routine, Preventive, or Corrective?

10. Is making sure that Service Level Agreements (SLAs) that stipulate throughput expectations are met, Routine, Preventive, or Corrective?

Maintenance

Figure 2-11. Review questions F2581.0

Notes:

IBM Training IBM

Review answers

6. Is checking load-sharing across duplicate resources to maximize throughput, Routine, Preventive, or Corrective?
   The answer is **Routine**
7. Is flushing event logs to make sure that they do not grow too large, Routine, Preventive, or Corrective?
   The answer is **Preventative**
8. Is check logs to make sure that errors are not occurring, Routine, Preventive, or Corrective?
   The answer is **Routine**
9. Is analyze errors that are detected in error logs and taking corrective action, Routine, Preventive, or Corrective?
   The answer is **Corrective**
10. Is making sure that Service Level Agreements (SLAs) that stipulate throughput expectations are met, Routine, Preventive, or Corrective?
    The answer is **Routine**

Maintenance

Figure 2-12. Review answers F2581.0

Notes:

IBM Training

Review questions

11. Is Producing periodic reports, daily, weekly, monthly, year end, Routine, Preventive, or Corrective?

12. Is Configuring Maintenance Manager to detect and handle exceptions, Routine, Preventive, or Corrective?

13. Is using Report Viewer to produce reports, Routine, Preventive, or Corrective?

14. Is Scheduling service to mechanical devices like, scanners, printers, filters fans, or air conditioners, and releasing resources; Routine, Preventive, or Corrective?

15. Is reassigning scanners when mechanical failures occur, Routine, Preventive, or Corrective?

Maintenance

Figure 2-13. Review questions F2581.0

Notes:

IBM Training

Review answers

11. Is Producing periodic reports, daily, weekly, monthly, year end, Routine, Preventive, or Corrective?
    The answer is **Routine**
12. Is Configuring Maintenance Manager to detect and handle exceptions, Routine, Preventive, or Corrective?
    The answer is **Corrective**
13. Is using Report Viewer to produce reports, Routine, Preventive, or Corrective?
    The answer is **Routine**
14. Is Scheduling service to mechanical devices like, scanners, printers, filters fans, or air conditioners, and releasing resources; Routine, Preventive, or Corrective?
    The answer is **Preventative**
15. Is reassigning scanners when mechanical failures occur, Routine, Preventive, or Corrective?
    The Answer is **Corrective**

Maintenance

Figure 2-14. Review answers F2581.0

Notes:

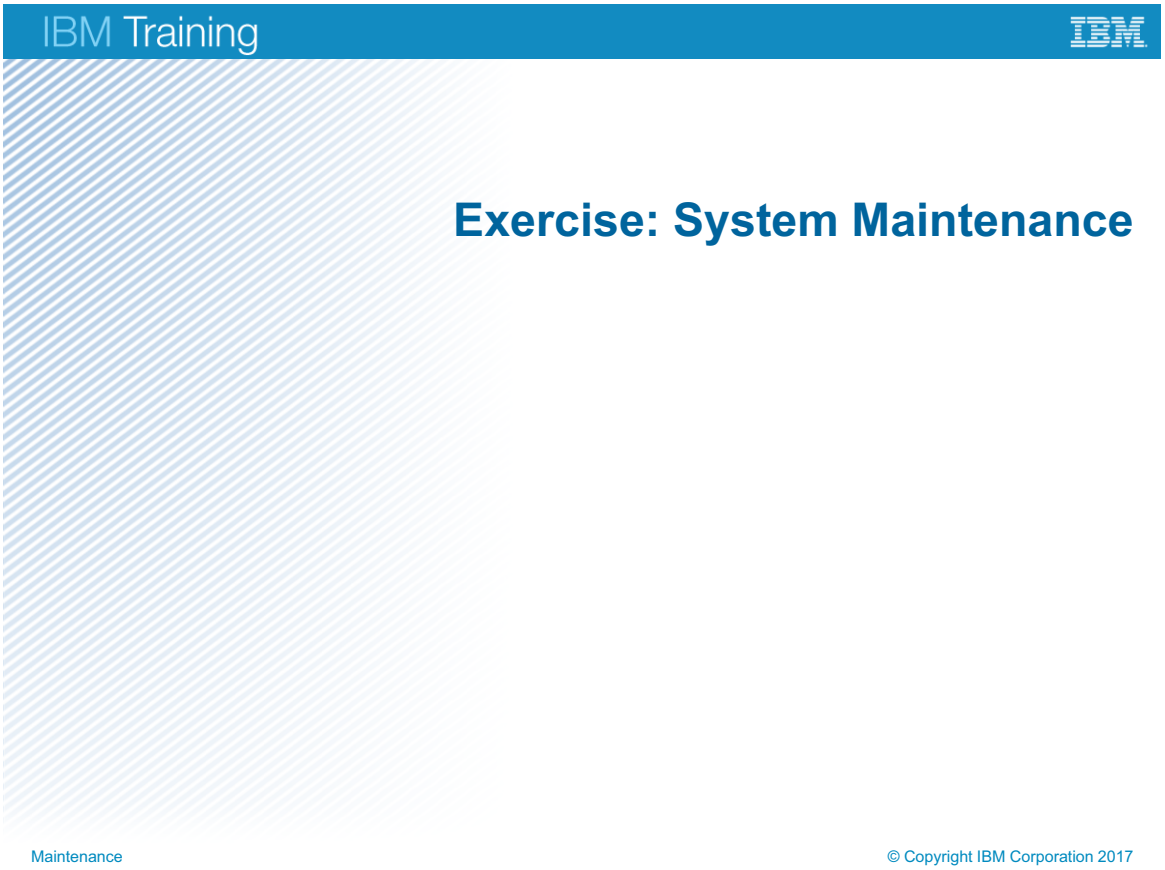


Figure 2-15. Exercise: System Maintenance F2581.0

Notes:

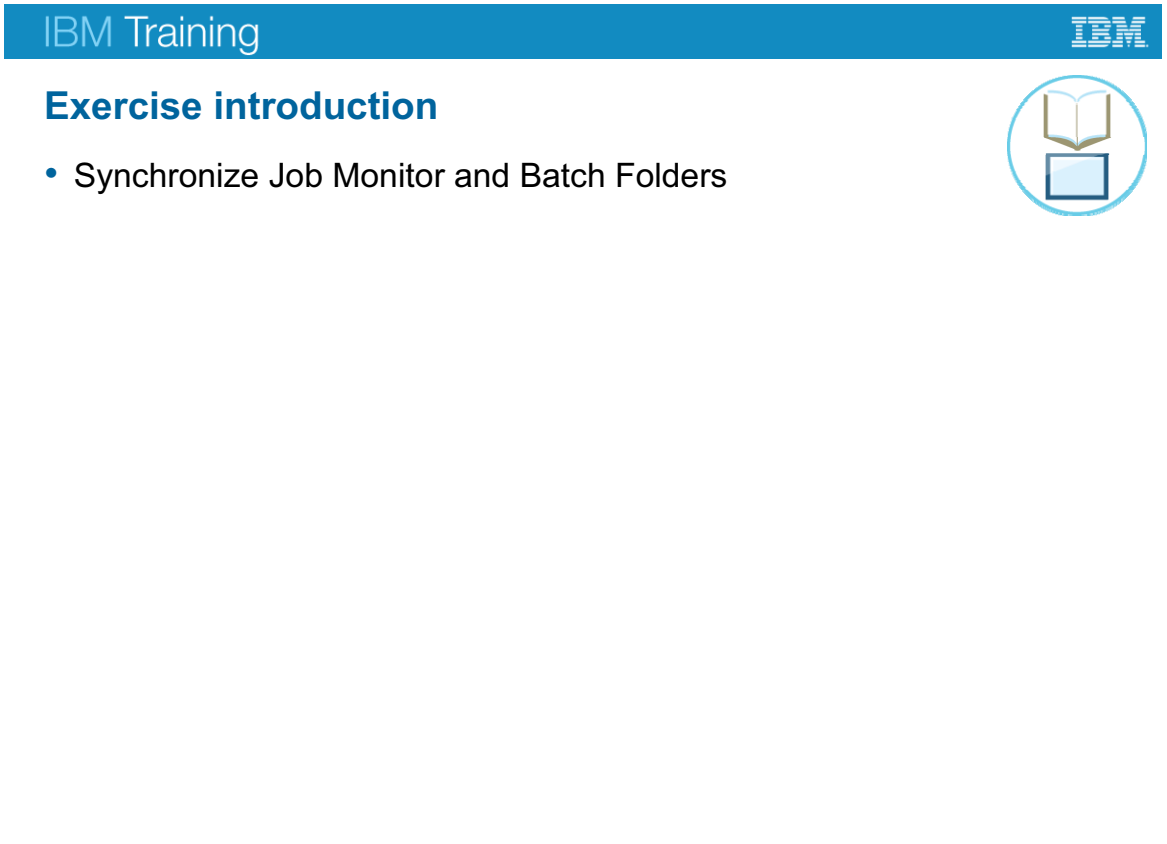


Figure 2-16. Exercise introduction F2581.0

Notes:

Lesson 2.2. Maintenance Manager

Figure 2-17. Maintenance Manager F2581.0

Notes:

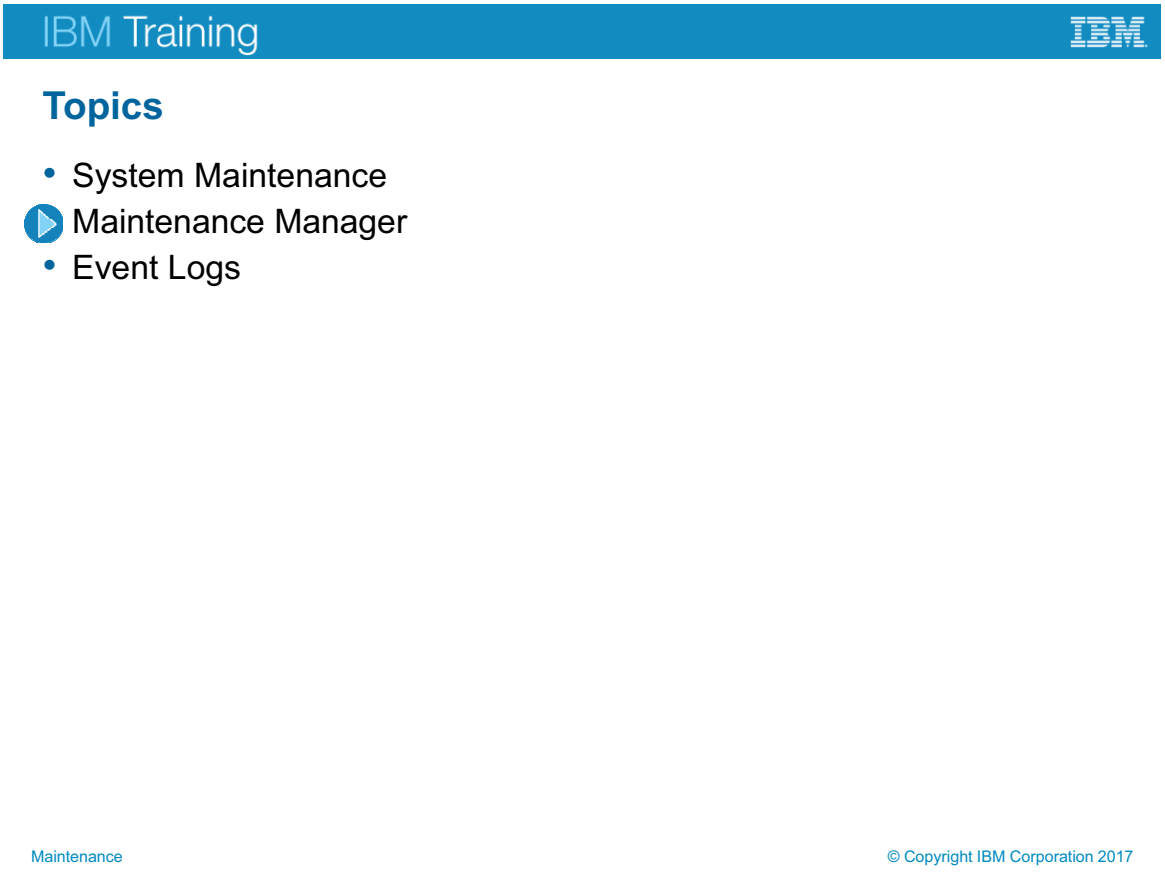


Figure 2-18. Topics F2581.0

Notes:

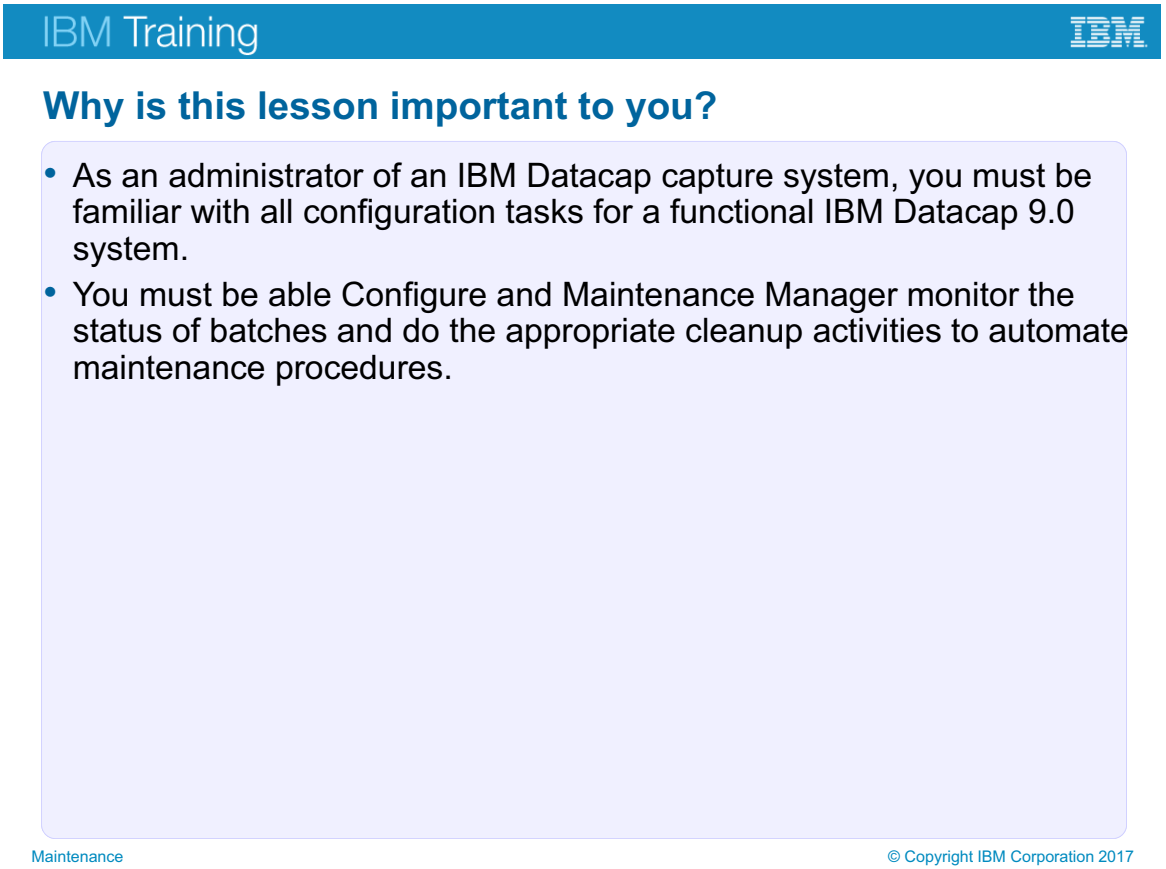


Figure 2-19. Why is this lesson important to you? F2581.0

Notes:

IBM Training

What can Maintenance Manager do?

- The Maintenance Manager component automates recurring, system health, and house cleaning tasks:
  - Batch monitoring.
  - Status notification.
  - Automatic deletion of completed batches.
- Maintenance Manager is a versatile tool.
- Tasks are scheduled with the Microsoft Windows Scheduler.
- Maintenance Manager can execute any Datacap Studio created ruleset.
  - Maintenance Manager rulesets can be part of any application.
  - Maintenance Manager rulesets can be defined in a custom Maintenance Manager application.

Maintenance

Figure 2-20. What can Maintenance Manager do? F2581.0

Notes:

IBM Training

Maintenance Manager Uses

- Use it to do selections in the application Engine database and run actions on the selected batches:
  - Monitor batches, notify statuses, and automatically delete completed batches.
  - Identify batches that meet certain criteria (batches that abort, for example).
  - Change the status of batches and their order in the queue.
  - Delete batches or move them to another location for archive.
  - Capture data snapshots to a database that are reported with Report Viewer.
  - Send email notifications (of error conditions or a batch abort conditions, for example).
  - Populate an external database with data gleaned from batches, such as details of what field data was modified in verification.

Figure 2-21. Maintenance Manager Uses F2581.0

Notes:

IBM Training

Maintenance Manager Run Methods

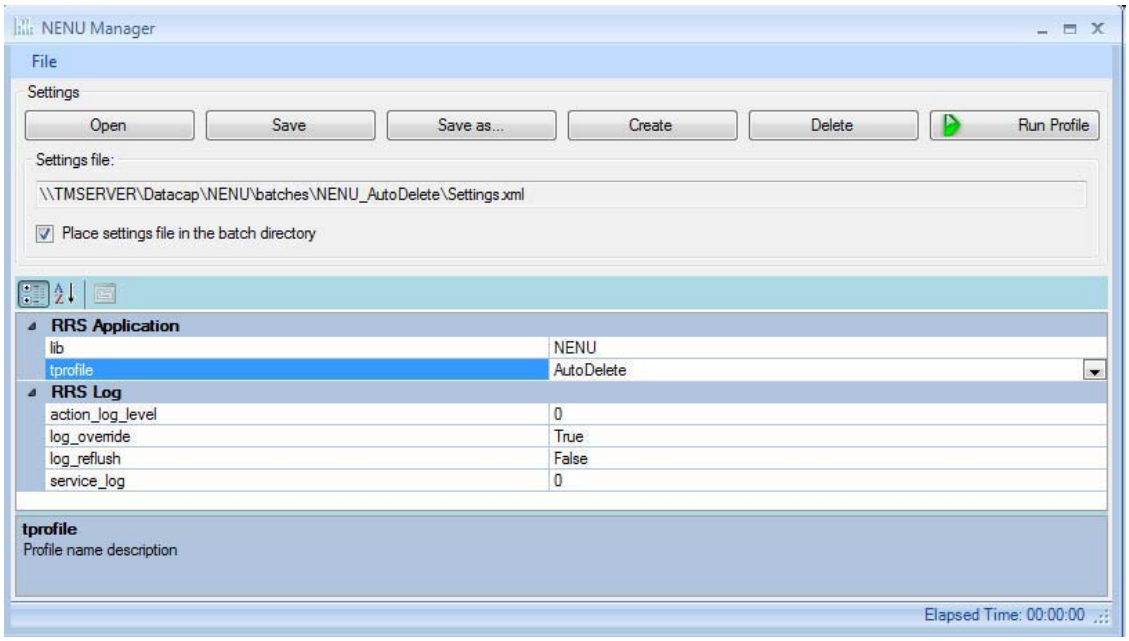
1. Manually using the Maintenance Manager.
2. Automatically using the Windows Task Scheduler, either at scheduled times or when triggered by a system event.
3. Automatically as a task of an application workflow.

Figure 2-22. Maintenance Manager Run Methods F2581.0

Notes:

IBM Training

Maintenance Manager UI



Maintenance

Figure 2-23. Maintenance Manager UI F2581.0

Notes:

Maintenance Manager Interface

Settings

Actions

- Open: Open a Settings file
- Save: Save Settings back to an already defined Settings file.
- Save as …: Save a copy of the Settings file to another location.
- Create: Create a Settings file.
- Delete: Delete the currently selected Settings file.
- Run Profile: Run the Ruleset that the RRS Applications options define.

Settings file:

- The Settings file, by default is named Settings.xml and can be places anywhere in the file system.

- Place settings file in the batch directory: If you select this check box, then the Settings file is placed in the batches folder of the application that the lib parameter selects.

  Example \\TMSERVER\Datacap\<Application>\batches\<Application><Profile>\Settings.xml

RRS Application

- lib: The Application that you select from the selection list of all Applications that are defined in the datacap.xml file.
- tprofile: The Task Profile that you select from the list of all Profiles that are defined in the Application that you selected.

RRS Log

- action_log_level: Select the logging level for action messages; 0 provides maximum information: 2 provides minimum information.
- log_override: Select True to create a log file; False to append to the existing log file.
- log_reflush: 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: Select the logging level for service messages; 0 provides minimum information; 5 provides maximum information.

{Important} Selecting False for the log_reflush option seems counter-intuitive to force messages to be continually flushed to the log file. In the Datacap 9.0 release, this phenomenon is because of a code error. The correct selection should be True to flush the buffer to the log file.

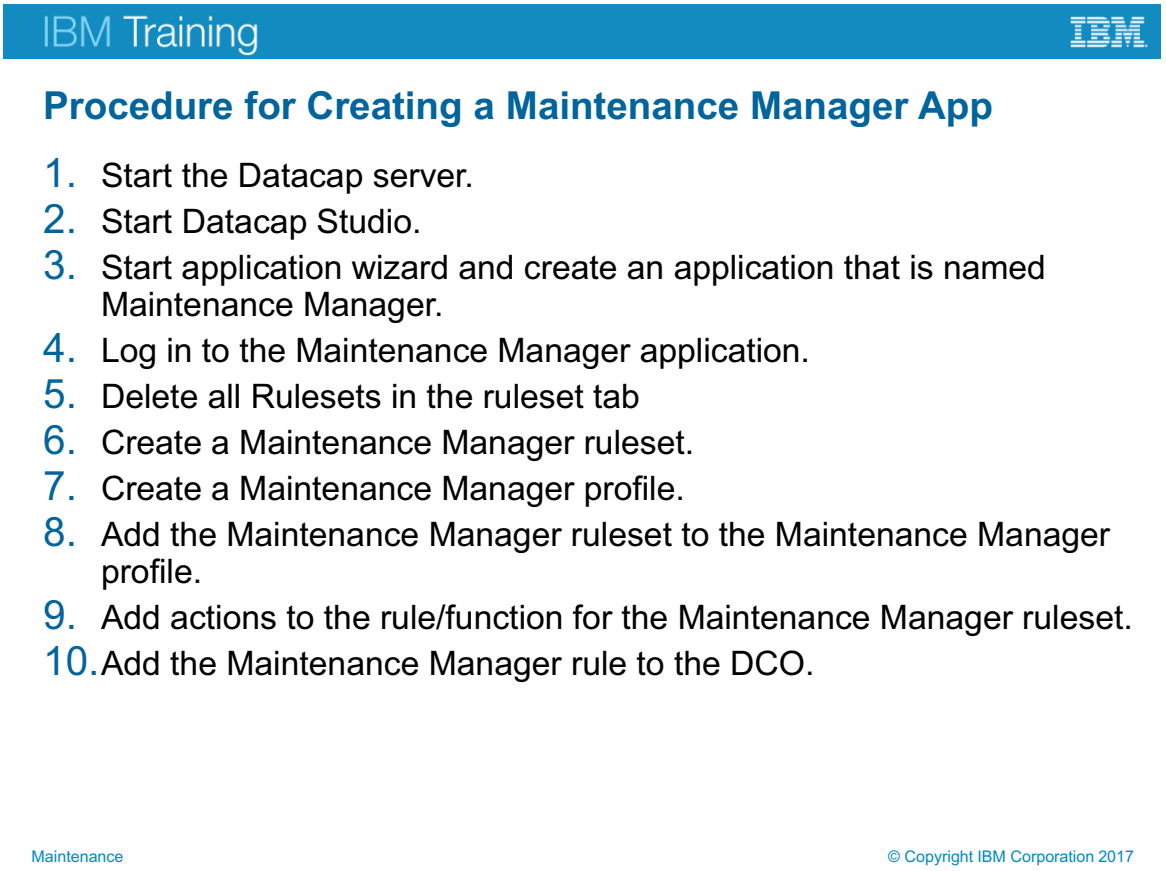


Figure 2-24. Procedure for Creating a Maintenance Manager App F2581.0

Notes:

Create a Maintenance Manager application that is a repository for Maintenance Manager rulesets that can be run either manually or automatically.

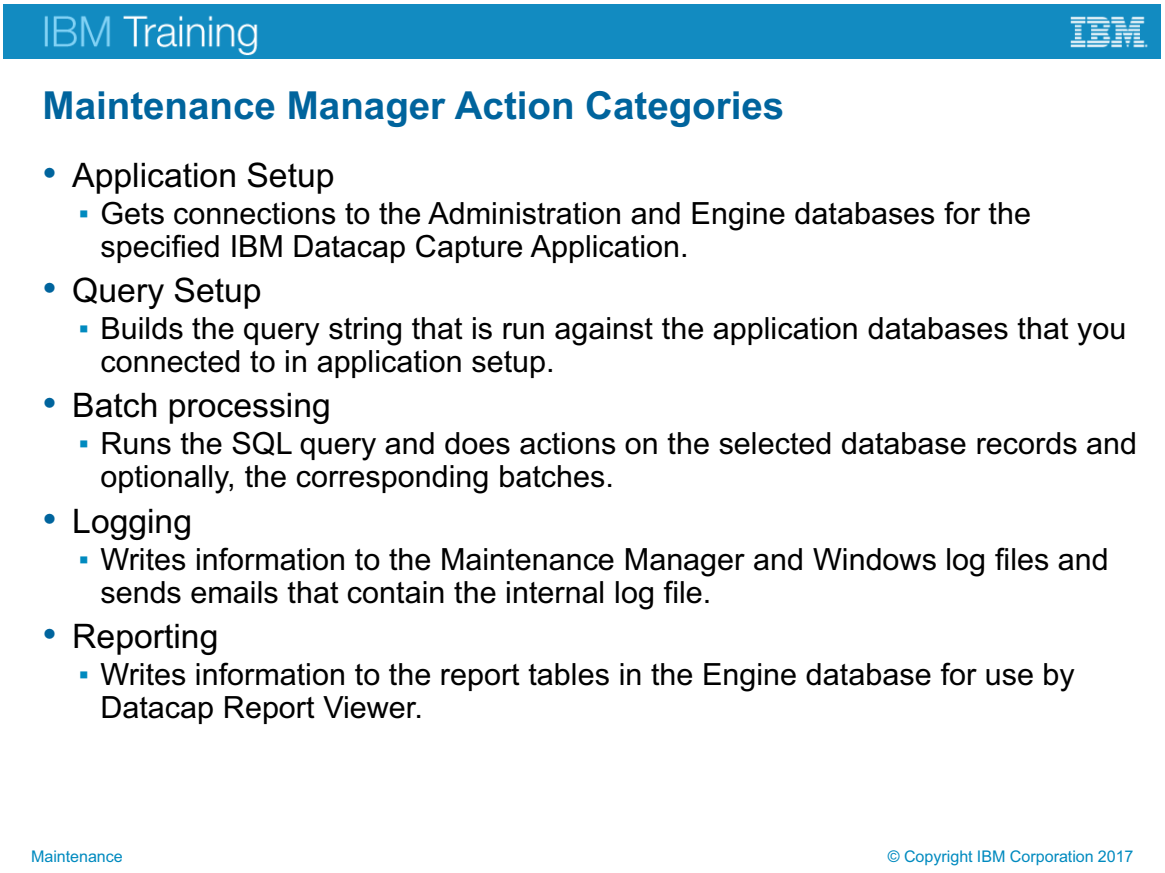


Figure 2-25. Maintenance Manager Action Categories F2581.0

Notes:

Application setup

There are special considerations about the available Authentication Systems.

The SetupOpenApplication Action requires that user credentials are defined before the SetupOpenApplication Action is processed. The credentials that are required are:

- SetUser: The User ID sets this Action.
- SetPassword: The password for the specified user.

  It is best not to store User or Password values in the application without encryption. You should use Smart parameters, which are encrypted.

  Example: SetPassword("@APPVAR(values/adv/mypassword)")
- SetStation: The Station ID to authenticate with.
  - The Station ID defaults to the computer name of the system that processes the Ruleset, if the Station ID is not set with the SetStation Action. The Station ID can be overwritten to use any defined Station ID that has the correct privileges set.

- Add a Datacap station to your Application for Maintenance Manager that has the same name as the machine name and assign appropriate permissions.

TMA Authentication for Maintenance Manager

In the Maintenance Manager application, set the authentication parameters:

- For Authentication Maintenance Manager uses the Datacap User ID that the application set with the SetUser Action.

  SetUser as user name (This user must be defined in the Application Admin database).

- The password is set with the SetPassword Action. Use the Smart parameters to encrypt the password.
- Allow the Station ID to default to the computer name or override it with the SetStation Action.

ADSI or LDAP Authentication for Maintenance Manager

In the Maintenance Manager application, set the authentication parameters:

- For Authentication Maintenance Manager uses the Windows User ID that the application set with the SetUser Action and defaults to the computer name for the Station ID.

  SetUser: Set as domain\username.

- The password must not be defined with the SetPassword Action. Also, DO NOT user SetPassword with a blank password value.
- When you use the Windows Scheduler, set the account in Security Options to the Windows account used by Maintenance Manager to run with highest privileges.

IBM Training

Procedure to AutoDelete Batches

- Locate batches:
  - Based on time criteria.
    For example, more than five days ago.
  - Based on process status
    For example, completed successfully or aborted.
- Possible actions:
  - Delete batches from the batches folder of the application.
  - Delete the records that are related to the deleted batches from the Engine database of the application.

  Or
  - Move them to an archive folder.
  - Move related records to a separate archive database.
- Report actions:
  - Generate a log file that documents the results of the process.
  - Optionally, send an email to document the action that is taken.

Maintenance

Figure 2-26. Procedure to AutoDelete Batches F2581.0

Notes:

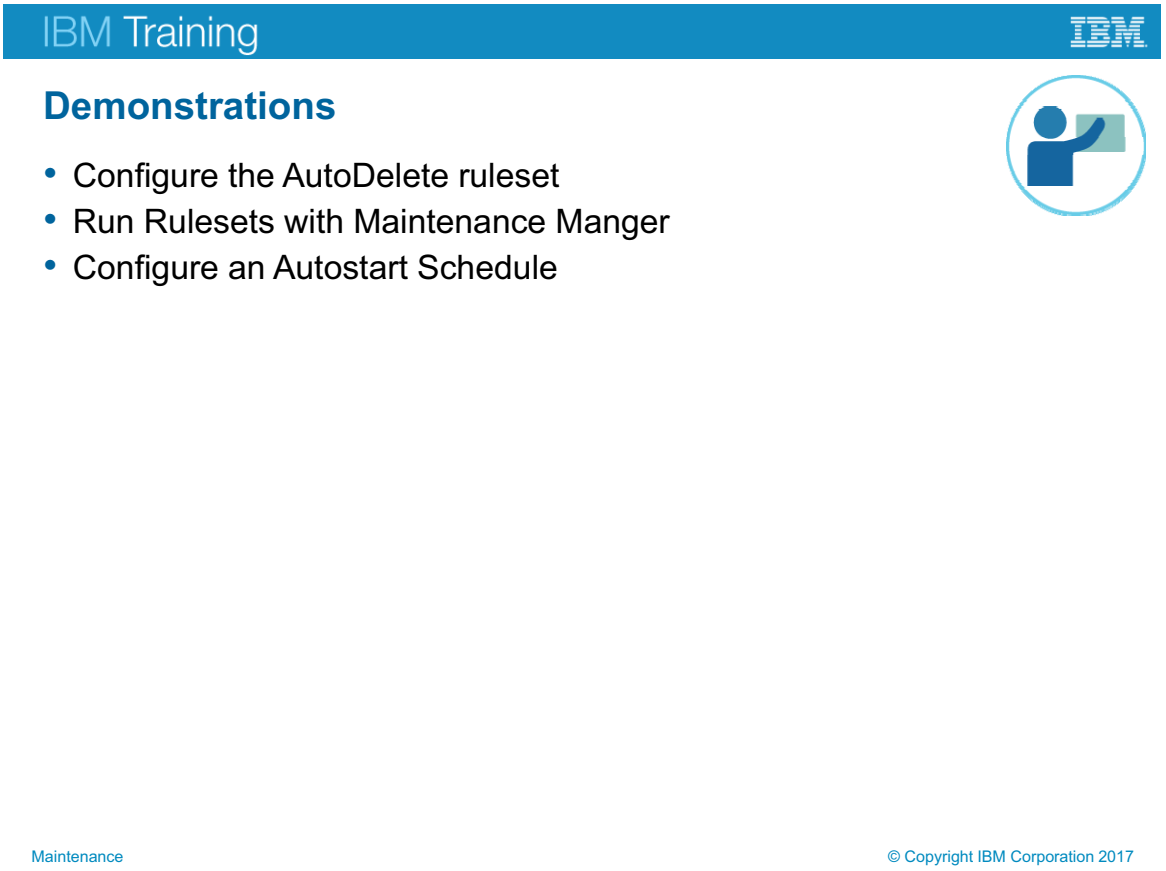


Figure 2-27. Demonstrations F2581.0

Notes:

If you are taking this course as a self-paced virtual course, return to the main course menu to play the pre-recorded demonstrations.

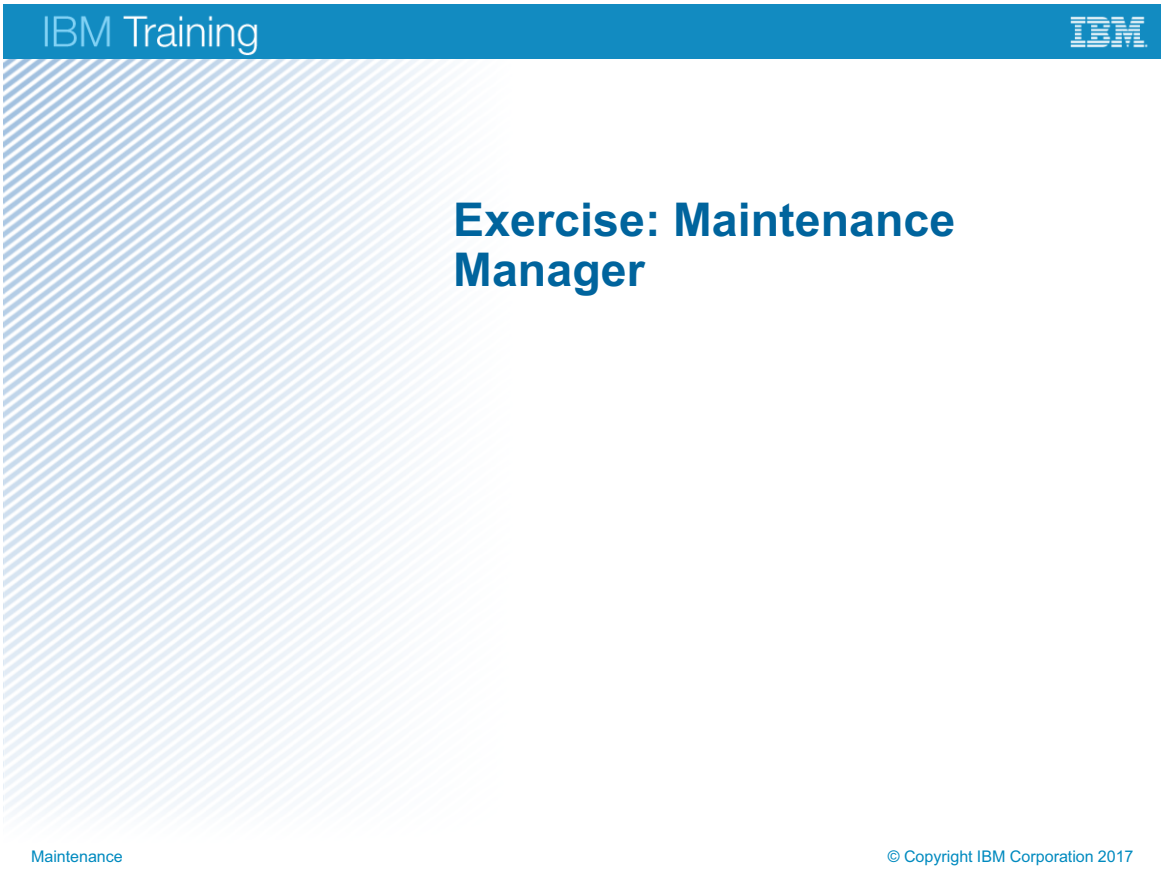


Figure 2-28. Exercise: Maintenance Manager F2581.0

Notes:

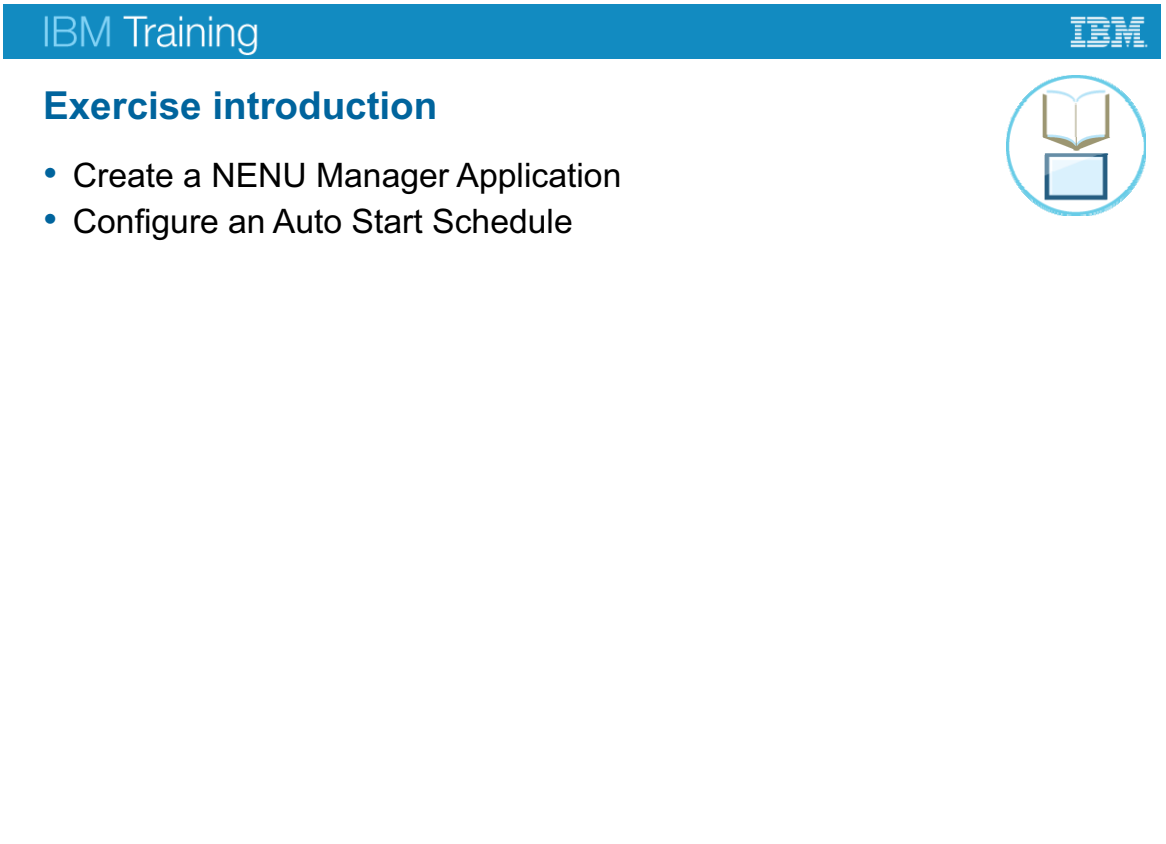


Figure 2-29. Exercise introduction F2581.0

Notes:

Lesson 2.3. Event Logs

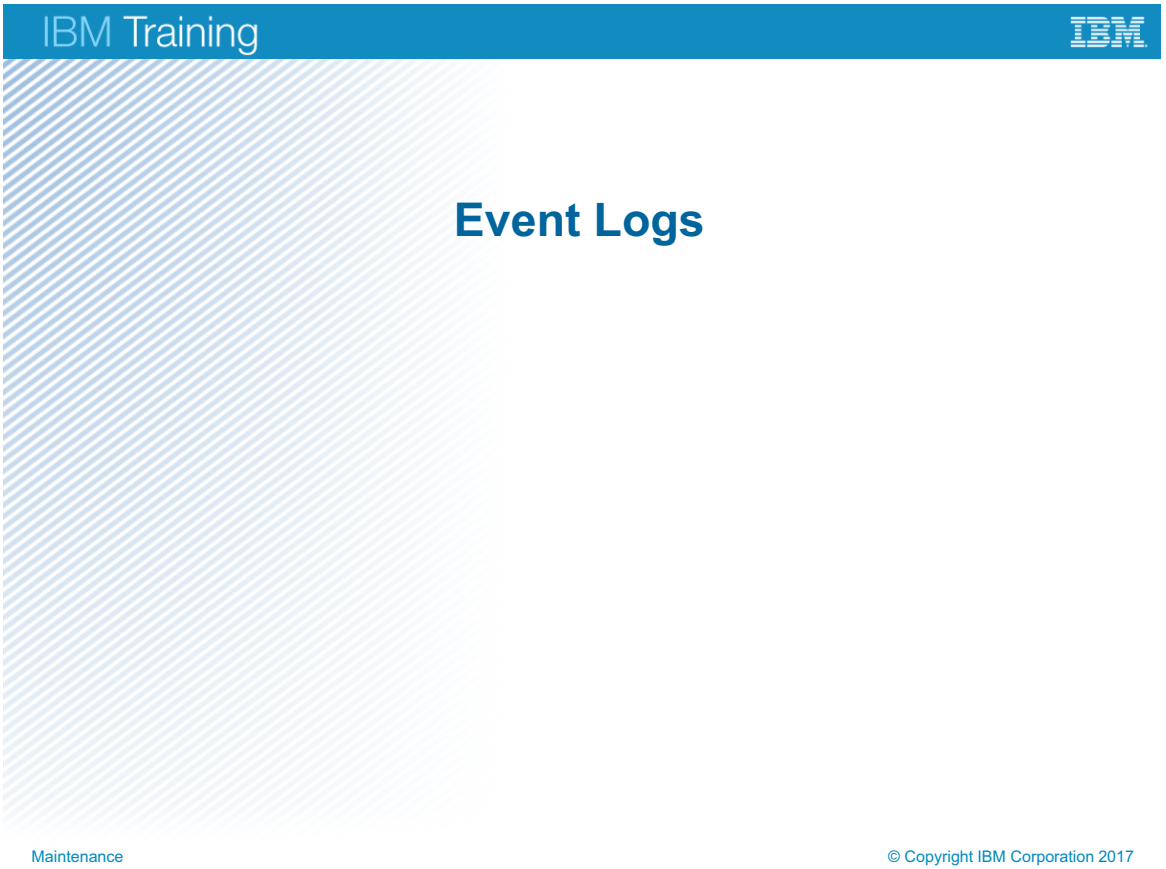


Figure 2-30. Event Logs F2581.0

Notes:

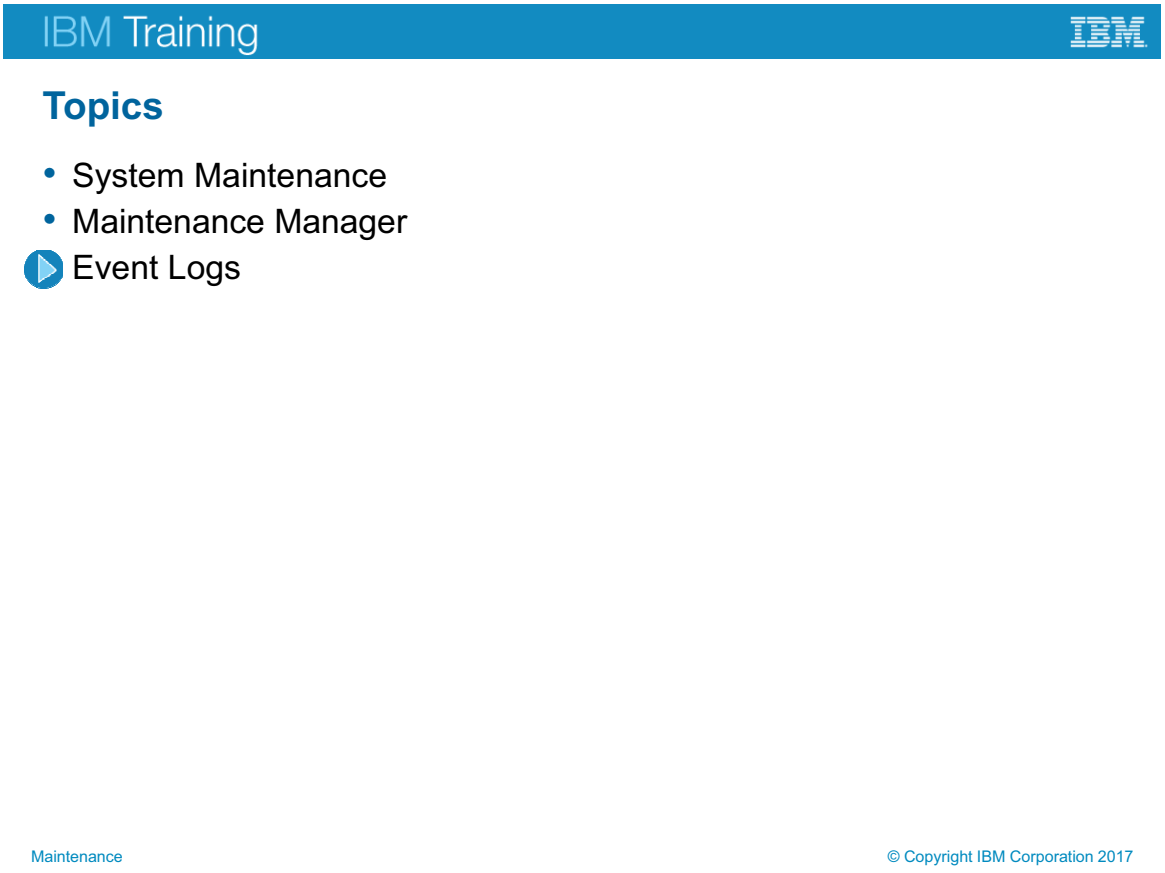


Figure 2-31. Topics F2581.0

Notes:

Why is this lesson important to you?

- 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. You must know where to locate them and how to interpret them for system performance and maintenance purposes.

Maintenance

Figure 2-32. Why is this lesson important to you? F2581.0

Notes:

IBM Training

Introduction to Logging

- Datacap has an abundance of logging capability.
- All log content is controllable.
- Verbose log content can be helpful when testing a new installation or application.
- Excessive log content can be confusing and overwhelming. Maximum settings are not always best.
- Excessive log content uses system resources and degrades performance.
- Know where to locate log files.
- Know what each file is used for.
- Know where to control the log file content.
- When testing is over, set log content to minimum settings.

Maintenance

Figure 2-33. Introduction to Logging F2581.0

Notes:

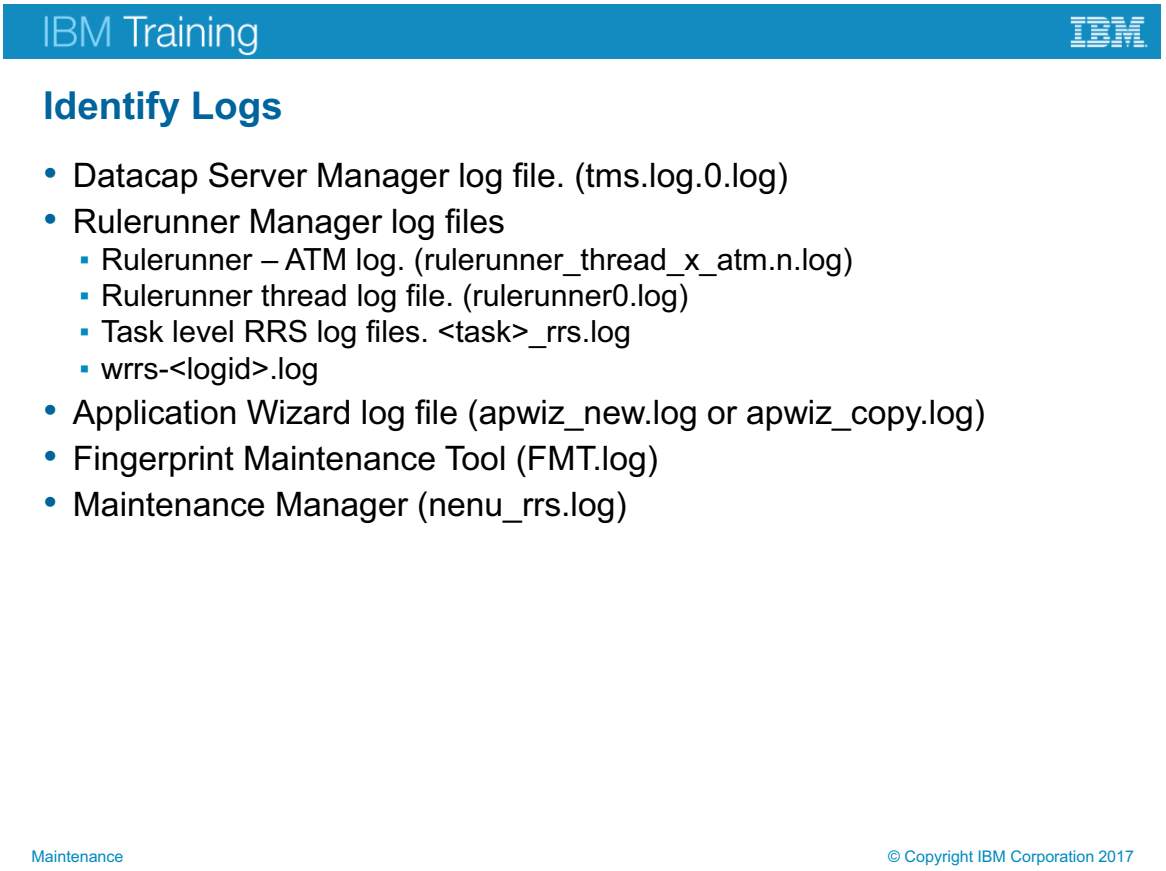


Figure 2-34. Identify Logs F2581.0

Notes:

Log file Locations

Datacap Manager Service log file

This log records the actions that the Datacap Server Manager performs. This log is the most likely place to find messages about authentication progress or errors.

- C:\Datacap\tms.log.0.log

Rulerunner Manager log files

- C:\Datacap\rulerunner0.log
- C:\Datacap\rulerunner_thread_x_atm.n.log
- C:\Datacap\<appname>\batches\<batch>\<task>_rrs.log C:\Datacap\DStudio\dstudio.log
- C:\Datacap\RRS\Logs\wrrs-xxxxxx.log

Application Wizard log file

These two logs record the selections that are made when a new application is created or an application is copied with the Application Wizard.

- C:\Datacap\<appname>\apwiz_new.log or apwiz_copy.log

Fingerprint Maintenance Tool

This log contains processing details that identify the Fingerprint Maintenance Tool changes.

- C:\Datacap\<appname>\dco_<appname>\FMT.log

Maintenance Manager (nenu_rrs.log)

This log contains processing details from Maintenance Manager either from Maintenance Manager or as a process scheduled by the Windows Scheduler.

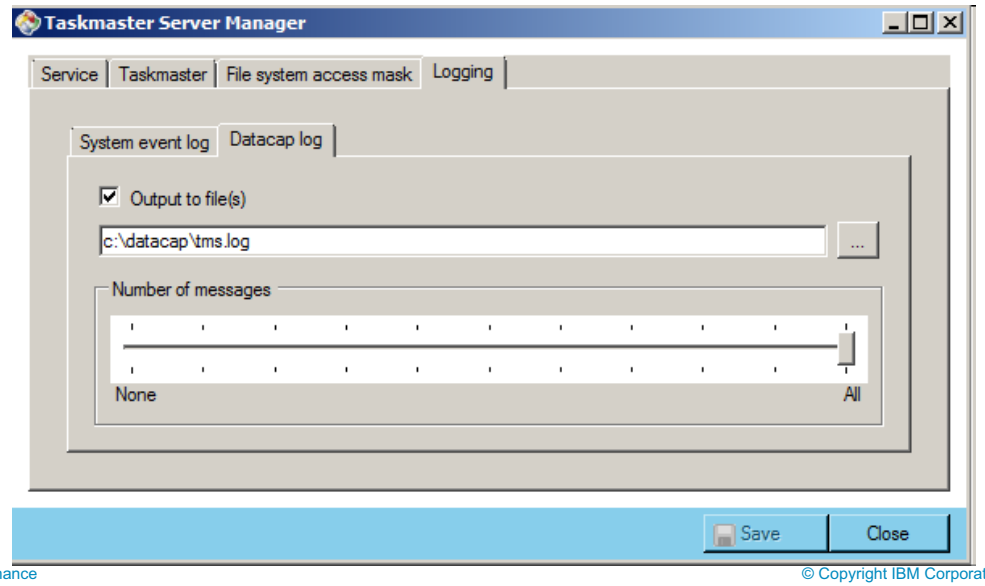
- C:\Datacap\NENU\batches\NENU_NENU\nenu_rrs.log

C:\Datacap\Flex\dco_Flex\FlexManager.log

IBM Training

Control Log Content - Datacap Server Manager

- Start Datacap Server Manager.
  - Start > All Programs > IBM Datacap Services > Datacap Server Manager



Maintenance

Figure 2-35. Control Log Content - Datacap Server Manager F2581.0

Notes:

Datacap Server Manager log

System Event Log

- Controls the level of messages that are written to the Windows System Event log and are viewed with the Windows Event viewer in the System log.
- Message level settings are
  - Critical only.
  - Serious and critical.
  - Info, critical, and serious.

Datacap Log

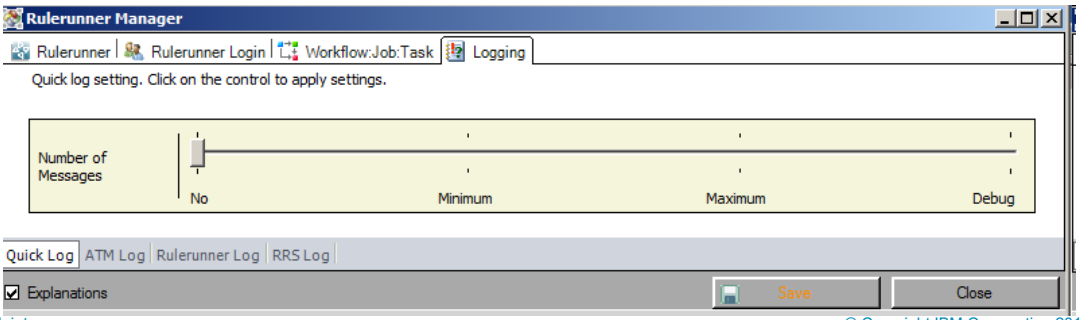
- Control whether any logging is required with the Output to file check box.
- Define the location and name of the tms.log file. The system appends a 0.log to the file name defined here.
- Define the logging that is recorded with the Number of messages slider.

- View the tms.log events with notepad.
- To clear the log, you must stop the server on the Service tab and then delete the file. When the service is restarted, a new log file is created.

IBM Training

Control Log Content - Rulerunner Manager Quick Log

- Start Rulerunner Manager.
  - Start > All Programs > IBM Datacap Services > Datacap Rulerunner Manager
- Wih Quick Log you can adjust all RRS logs simultaneously.
  - ATM Log
  - Rulerunner Log
  - RRS Log
- Individual logs also adjustable independently.



Maintenance

Figure 2-36. Control Log Content - Rulerunner Manager Quick Log F2581.0

Notes:

Number of Messages (slider)

Controls the level of detail that is written to each of the logs.

- No - Only serious errors are written to the Windows Application Event Log.
- Minimum - Writes warnings and errors in log files.
- Maximum - All logs contain almost all of the available information, including information messages, warnings, and errors.
- Debug - Full logging is enabled, including the reflush buffer.

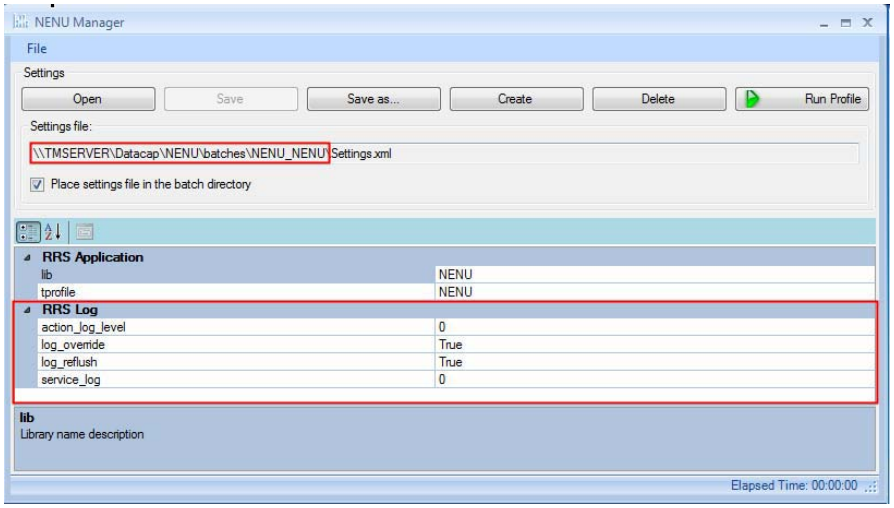
Control individual logs independently from:

- ATM log tab
- Rulerunner log tab
- RRS log tab

IBM Training

Control Log Contents - Maintenance Manager Log

- Start Maintenance Manager
  - Start > All Programs > IBM Datacap Services> Maintenance Manager
- Maintenance Manager RRS Log settings.



Maintenance

Figure 2-37. Control Log Contents - Maintenance Manager Log F2581.0

Notes:

RRS Application Settings for Maintenance Manager

- lib: Select the application that contains the Maintenance Manager task profile.
- tprofile: Select the name of the Maintenance Manager task profile.

RRS Log Settings for Maintenance Manager

- action_log_level: Select the logging level for action messages; 0 provides maximum information: 2 provides minimum information.
- log_override: Select True to create a log file; False to append to the existing log file.
- log_reflush: 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: Select the logging level for service messages; 0 provides minimum information; 5 provides maximum information.

{Important} Selecting False for the log_reflush option seems counter-intuitive to force messages to be continually flushed to the log file. In the Datacap 9.0 release, this phenomenon is because of a code error. The correct selection should be True to flush the buffer to the log file.

Log file location

The log file is in the same folder as the settings file but saved with a file name of nenu_rrs.log

Example: \\TMSERVER\Datacap\NENU\batches\NENU_<*tprofile*>\nenu_rrs.log

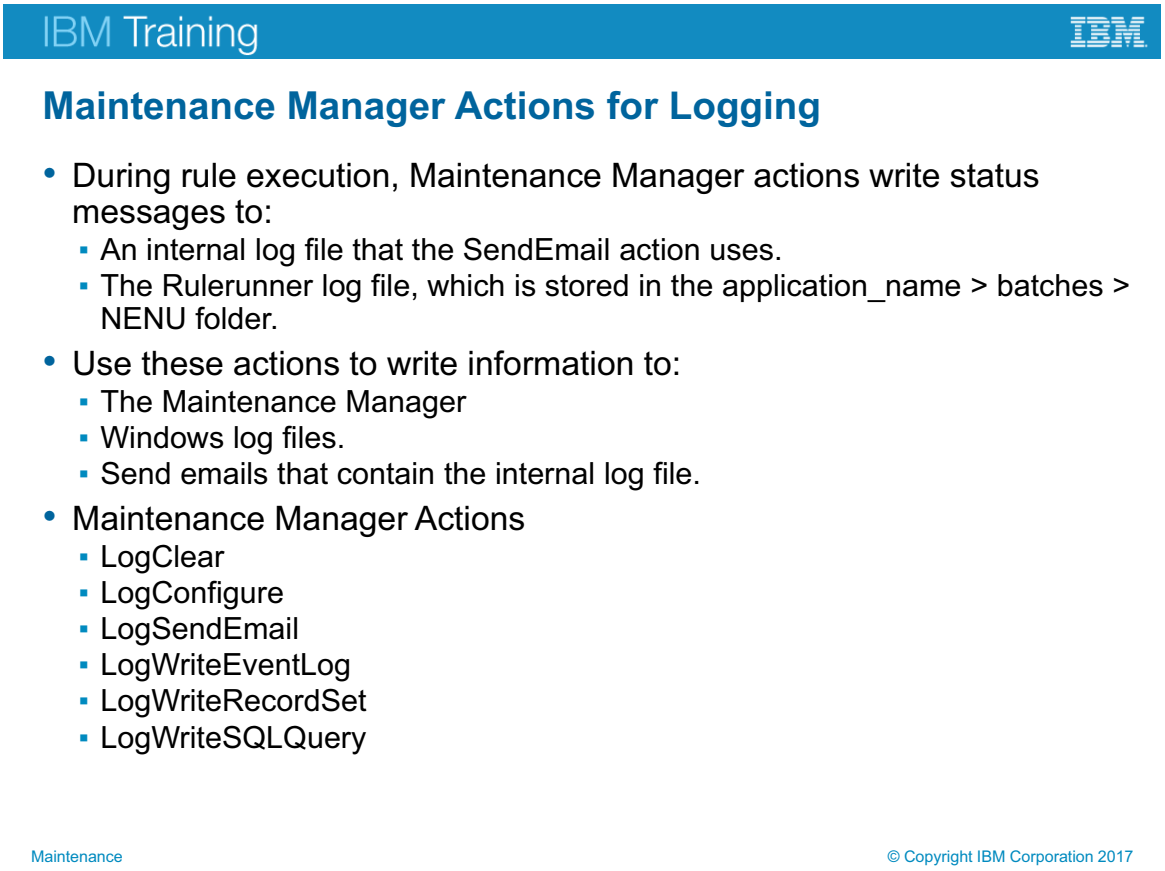


Figure 2-38. Maintenance Manager Actions for Logging F2581.0

Notes:

Logging

Use these actions to write information to the Maintenance Manager and Windows log files and to send emails that contain the internal log file. During rule execution, Maintenance Manager writes status messages to an internal log file and to the Rulerunner log file:

- The internal log file is maintained in memory for the SendEmail action.
- The Rulerunner log file is stored in the application_name > batches > NENU folder.

Action

- LogClear: Clears the internal log file, but does not affect the Rulerunner log file.
- LogConfigure: Sets the severity level at which to activate logging and enables the logging features.
- LogSendEmail: Sends an email with the internal log file to one or more email recipients.
- LogWriteEventLog: Writes an information, warning, or error message to the Datacap section of the Windows Event log file.

- LogWriteRecordSet: Writes the returned recordset to the Maintenance Manager log file.
- LogWriteSQLQuery: Writes the result of previous calls to the Query Set actions to the Maintenance Manager log file.

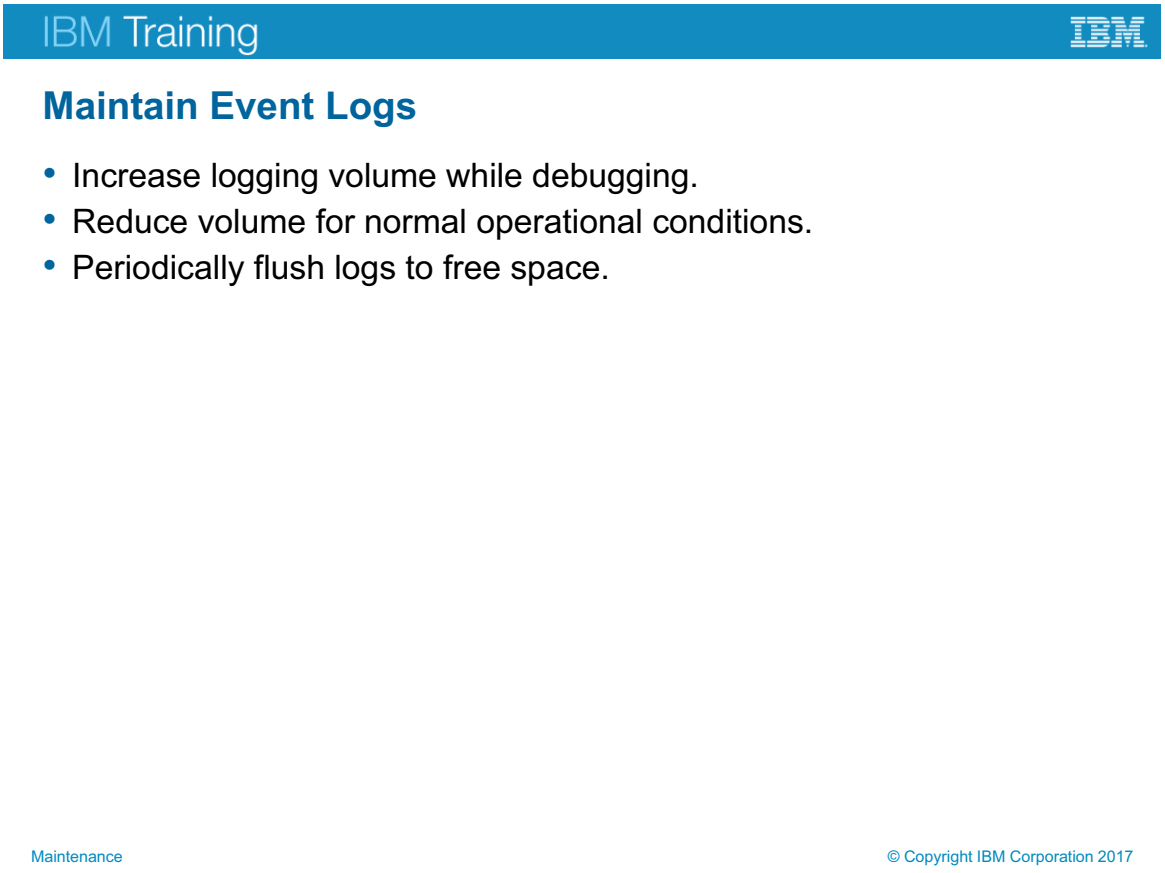


Figure 2-39. Maintain Event Logs F2581.0

Notes:

IBM Training

Datacap Logs

- There are two kinds Datacap log files.
  - Rulerunner Service RRS log files
    - The RRS log provides detailed information about actions as they run.
    - There is a separate log file for each task in the batches folder. (<application>/batches/<date>.<number>/<task>_rrs.log).
  - Task log files
    The task log documents internal calls and is mostly useful to the Datacap support team.

Maintenance

Figure 2-40. Datacap Logs F2581.0

Notes:

View Event Logs

- Datacap Studio Output Pane.
  - In Datacap Studio Debug mode, the task log files are also written to the Output pane.
  - C:\Datacap\<appname>\batches\<batch>\<task>_rrs.log
- Examining the Rulerunner log.
  - C:\Datacaprulerunner0.log
- View Rulerunner Processing logs.
  - C:\Datacap\Application\Batches\<task>_rrs.log
- Connector Action log files (for Export task).
  - C:\Datacap\Application\batches\export_rrs.log
- Microsoft Application Event.
  - Microsoft Event Viewer

Maintenance

Figure 2-41. View Event Logs F2581.0

Notes:

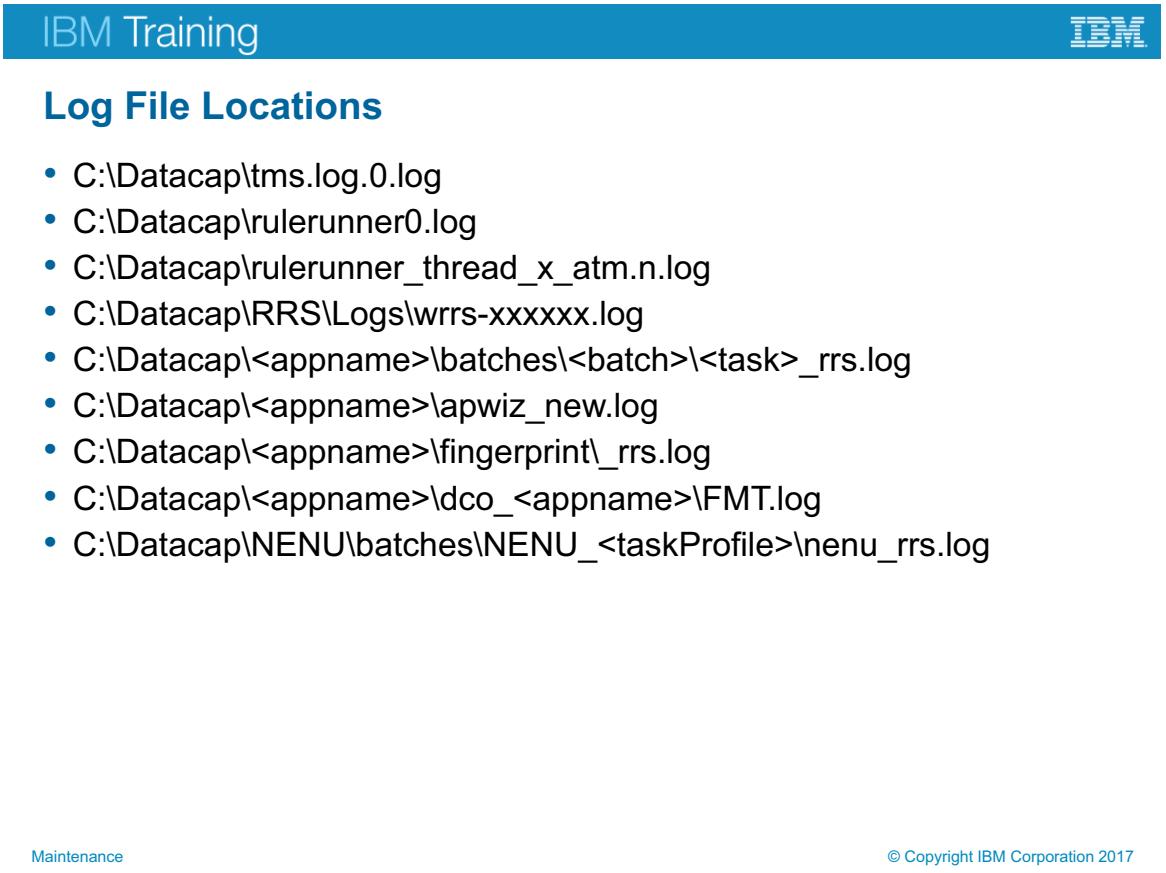


Figure 2-42. Log File Locations F2581.0

Notes:

Figure 2-43. Exercise: Event Logs F2581.0

Notes:

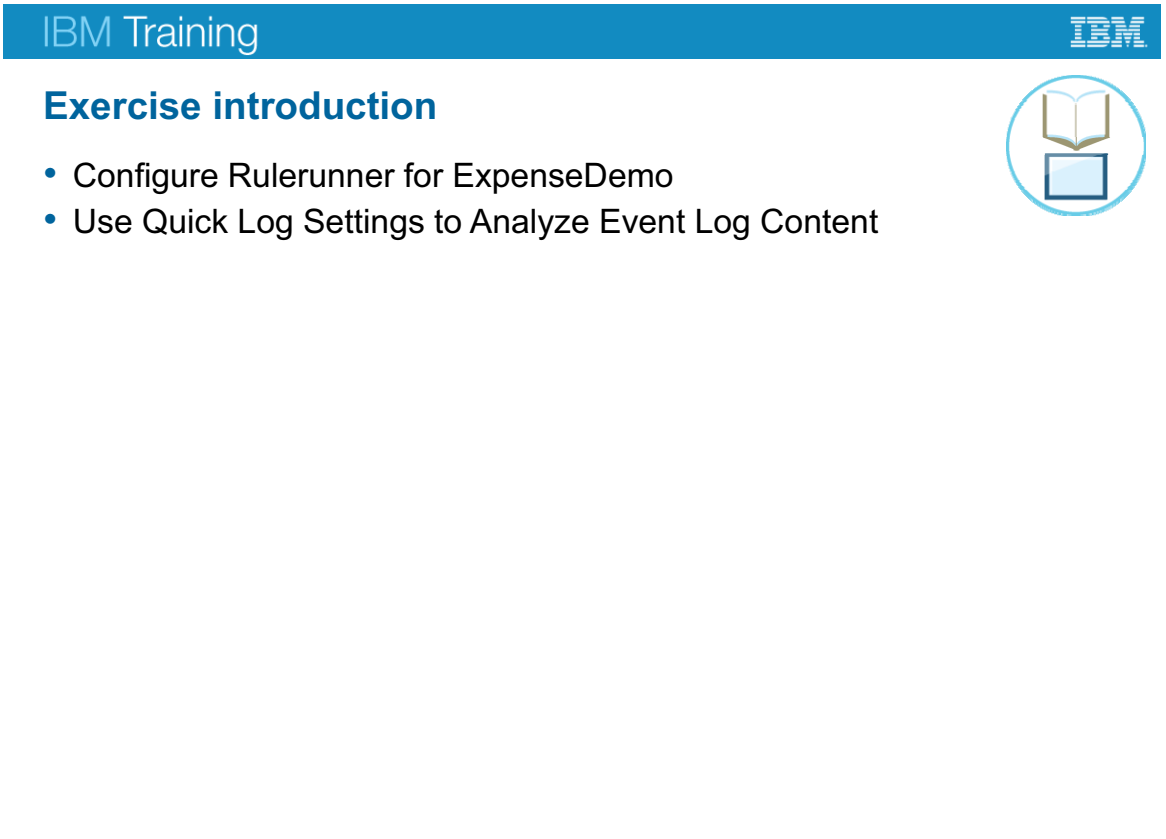


Figure 2-44. Exercise introduction F2581.0

Notes:

Unit summary

- Perform Routine, Preventive, and Corrective Maintenance
- Configure NENU to periodically do batch cleanup
- Locate Event Logs

Maintenance

Figure 2-45. Unit summary F2581.0

Notes:

IBM Training