

## Lesson: Component Integrator architecture

### Overview

#### Why is this lesson important to you?

You are designing an IBM FileNet BPM solution. You want to integrate Java or Java Message Service (JMS) components as steps in your workflow. In order to use component steps in a workflow, you must understand the fundamental concepts and architecture of the Component Integrator.

### Activities

- Identify Component Integrator components: Written exercise
- Identify Component Integrator concepts: Written exercise

### Requirements

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

### Virtual student system

Connect to your student system to complete these lab activities. See the Read Me First file if you need instructions to check or start the system.

### System startup and system check

IBM FileNet P8 software services on your student system must be started. If you have not already started the IBM FileNet P8 software on your system, do the procedures in *Appendix A: System startup and system check* before proceeding with the lessons in this unit.

Perform a system check whenever you start up an IBM FileNet P8 system or start working on a system that is in an unknown state. These activities assume that you have performed a system check when you begin an activity session.

### Read this first

Before attempting these unit activities, you must successfully complete all procedures in Unit 2 *Workflow Infrastructure*, Lesson 2.1 Region structures. All remaining lessons in this course require specific region data structures to already be configured.

**Important**

If you successfully completed Unit 2 Lesson 2.1 Region structures, skip the following steps and proceed with this unit.

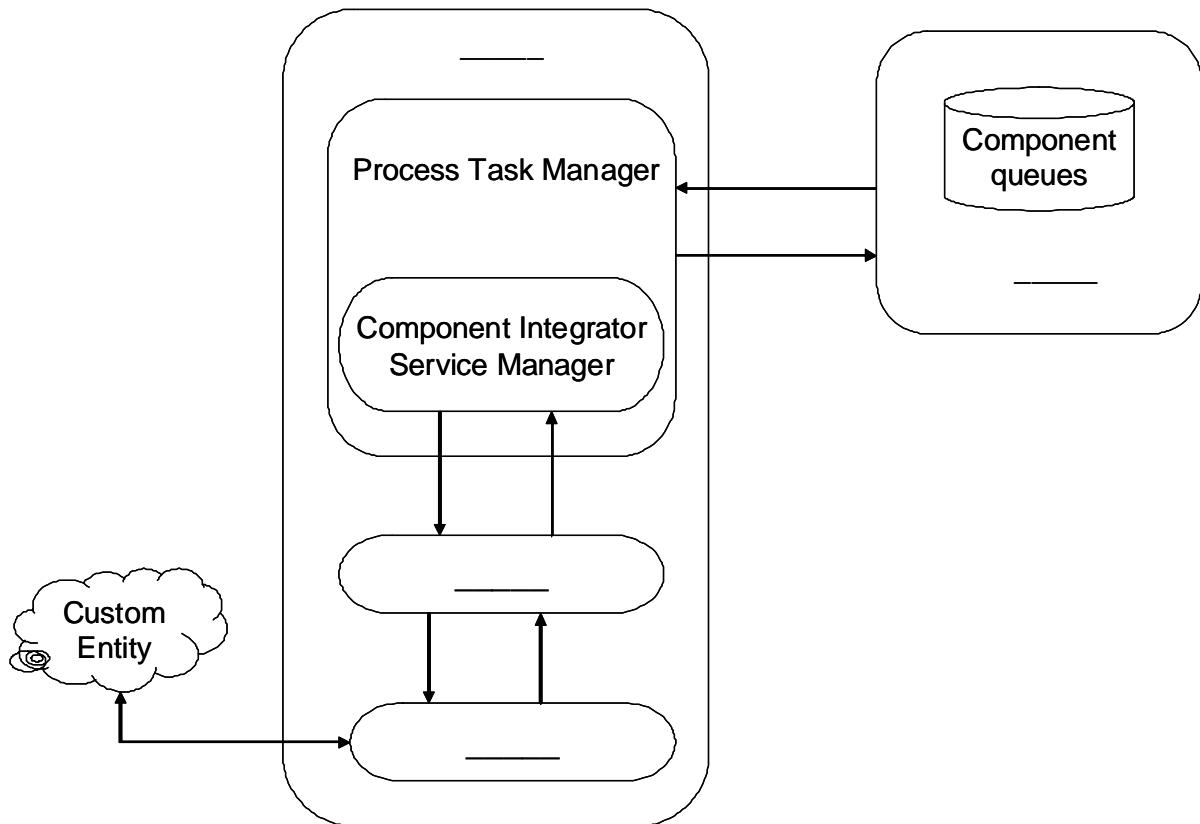
If you did **not** successfully complete Unit 2 Lesson 2.1, do the following steps:

1. On your student Windows XP system, log in to FileNet Workplace XT using the p8admin user account listed in the "Lesson Overview" section.
2. In Workplace XT, click Tools > Administration > Process Configuration Console.
3. Double-click the PELoanRegion[8] node to connect to the region.
4. Click Action > Import from XML file.
5. Click Browse and open the following file: C:\Labs\F145\Solutions\Infrastructure\PELoanRegion8\_ConfigStart.xml
6. Select the Overwrite option.
7. Click Import.
8. Click Yes in the confirmation window.
9. Click Close.
10. Click File > Exit and close the applet window.
11. Log out of Workplace XT and close the browser.

## Identify Component Integrator components: Written exercise

1. Fill in the blanks with the correct letter of the element shown in the following Component Integrator architecture diagram.

- A. Adapter
- B. Application Engine
- C. Component
- D. Process Engine



2. Write the letter of the description statement beside the component it describes.

Component	Description
___ Java adapter	<b>A.</b> Interacts with message queues.
___ JMS adapter	<b>B.</b> Routes work to an operation in a custom Java or JMS component.
___ Component Manager	<b>C.</b> Communicates with Java components.
___ Component queue	<b>D.</b> Polls component queues for work items waiting to be processed.
___ Component step	<b>E.</b> Holds work items waiting to be processed by a Java component or JMS queue.

## Identify Component Integrator concepts: Written exercise

For each question, indicate the correct answer.

1. Which of the following best describes the Component Integrator?
  - a. An IBM FileNet BPM service that makes it possible to interact with an external entity from a workflow step
  - b. An IBM specification for how developers create components and build applications from these components
  - c. An IBM FileNet P8 application that provides Web browser-based access to Process Services and Content Services libraries
  - d. A native IBM FileNet P8 application that allows users to add items to an object store, to browse and search for items, and to run workflows
2. What is the purpose of a service adapter in the Component Integrator architecture?
  - a. To provide status of the activities that are performed by Java and JMS components
  - b. To execute the interface to a Java or JMS component
  - c. To log a Java or JMS event entry into the region event log
  - d. To perform parallel activities
3. Who is generally responsible for starting and administering the Component Managers on the Application Engine for a production IBM FileNet BPM system?
  - a. Workflow or system administrator
  - b. Workflow designer
  - c. Application developer
  - d. IBM FileNet P8 system installer
4. Who is generally responsible for developing and deploying Java components for a production IBM FileNet BPM system?
  - a. Workflow or system administrator
  - b. Workflow designer
  - c. Application developer
  - d. IBM FileNet P8 system installer

5. You are testing the integration of a Java component in a workflow definition. Your component is not receiving or returning data from the workflow. Which of the following is a possible cause of this problem?
  - a. The component adapter is not configured correctly for the component queue.
  - b. Component Manager is not running on the Application Engine.
  - c. The Process Engine is not configured to connect to the Component Manager.
  - d. All of the above.
6. How does a workflow make use of a component?
  - a. Through a system step that is configured to execute a Java or JMS adapter
  - b. By using an XML data field to hold the name of the component and operation
  - c. Through a call to a Java or JMS adapter in a multiparticipant step
  - d. By executing a component step in a process map