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Oracle Application Development Framework 12c Essentials Exam Study Guide

Getting Started

The Oracle Application Development Framework 12c Essentials Exam Study Guide is designed to help you prepare for the [Oracle Application Development Framework 12c Essentials Exam \(1Z0-419\)](#).

Earning this certification helps OPN members differentiate in the marketplace through proven in-depth expertise, and helps their partner company qualify for the [Oracle Application Development Framework 12c Specialization](#).

Target Audience

Oracle Application Development Framework 12c Essentials exam audience defines the type of participants who are likely to pass the exam and targets individuals with a specific level of education and expertise:

Job Role:

- Technical Implementers

Level of Competency:

- Strongly recommended for the individuals to have at least 2-3 years implementation experience
- Participants should possess a strong foundation and expertise in implementing solutions using Oracle Application Development Framework (ADF)

Exam Topics

Oracle Application Development Framework 12c Essentials Exam covers **16 topics**:

- Introduction to JDeveloper and ADF
- Building a Data Model with ADF Business Components
- Exposing Data to Clients
- Creating Views with ADF Faces
- Defining Task Flows and Adding Navigation
- Declaratively Customizing Business Components
- Validating User Input
- Modifying Data Bindings between the UI and the Data Model
- Adding Functionality to Pages
- Adding Advanced Features to Task Flows and Page Navigation
- Passing Values Between UI Elements
- Responding to Application Events
- Building Reusability Into Pages
- Programmatically Customizing the Data Model
- Debugging and Deploying ADF Applications
- Implementing Security in ADF Applications

Levels of Knowledge

Each exam topic contains objectives and each objective is categorized as either a learner or practitioner level of knowledge.

Learner items test foundational grasp and require product comprehension (not recognition or memorization).

Example:

“When setting up price list modifiers in Advanced Pricing, which three steps must be completed in order to successfully activate surcharge and price break features?”

Practitioner items present on-the-job scenarios and require the ability to: integrate and apply knowledge in new contexts, analyze and troubleshoot complex issues, and solve problems.

Example:

1) “You are creating price list modifiers in Advanced Pricing. Your customer has three requirements: X, Y, Z. Identify the two steps that must be completed in order to meet those requirements.

2) “You are running a two-instance database with six redo logs defined. You decide to add a third thread to support a third database instance, on the third node of the cluster.

Using command line administration, which two commands will you execute to achieve this?

Training Options

Throughout the study guide each exam topic recommends one or several training/documentation titles:

Recommended Training

- Online Training - recorded or live virtual training sessions
- OPN Boot Camps - a combination of classroom lectures, hands-on lab exercises, and case studies
- Oracle University Training - instructor-led in-class training, live virtual class, on-demand training

Recommended Documentation

- Oracle Documentation – product manual in on-line format
- Product tutorials - on-line information on how to use the product
- Datasheets and white papers - documents that summarize the performance and other technical characteristics of a product, machine, component
- Books – product information written text that published in printed or electronic form

While the Oracle PartnerNetwork facilitates free access to online training, in class trainings often require a fee.

Exam Details per Topic

This section covers details associated to all exam topics such as: exam topics overview, objectives, levels of knowledge, recommended trainings and sample questions. Specialization exams include all application functionalities not only the most frequently used ones.

Topic 1: Introduction to JDeveloper and ADF

Objectives

- Explain how ADF fits into the Fusion architecture
- Describe the ADF technology stack (MVC)
- Create applications, projects, and connections in JDeveloper
- Describe how ADF is used in building Mobile applications

Level

Learner
Learner
Practitioner
Learner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [ADF Quick Overview](#)
- [ADF Overview](#)
- [Getting Started with the JDeveloper IDE](#)
- [Guide to the JDeveloper IDE](#)
- [A Fighter Pilot's Guide to the JDeveloper IDE Editor](#)
- [Introduction to Oracle ADF Development](#)
- [Developing Rich Web Applications With Oracle ADF: Tutorial](#)

Recommended Documentation

- [Oracle Application Development Framework: Data Sheet](#)
- [Oracle Application Development Framework Overview: White Paper](#)
- [Understanding Oracle Development Framework](#)

Sample Questions

Identify two characteristics of model-view-controller architecture.

- A. The separation of user interface components from the underlying application and business logic makes the code more flexible and easier to**

maintain.

- B. The view layer represents the data values bound to the current page.
- C. When a user interacts with the view, the controller handles page navigation.**
- D. The view reads data from the controller to render the appropriate user interface.



Which two methods can be used to create an ADF web application in JDeveloper?

- A. Create a new application by using the ADF Java Desktop Application template.
- B. Create a new application by using the ADF Fusion Web Application template.**
- C. Create a blank application and add ADF Model and ADF View Controller projects to the application.**
- D. Create a blank application and add Database and ADF View Controller projects to the application.
- E. Create a blank application and add ADF Business Components and ADF Faces components to the application.

Topic 2: Building a Data Model with ADF Business Components

Objectives

- | | Level |
|---|--------------|
| • Describe the characteristics of an entity object | Learner |
| • Describe the characteristics of a view object | Learner |
| • Describe the characteristics of an application module | Learner |
| • Define a SQL statement on which to base a query for a view object | Practitioner |
| • Describe the persistence mechanism of entity objects | Learner |
| • Use the wizard to generate entity objects from database tables | Practitioner |
| • Create updatable view objects based on entity objects | Practitioner |
| • Link view objects to one another in a master-detail hierarchy | Practitioner |

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training:

- [Developing Rich Web Applications with Oracle ADF](#)
- [Introduction to Oracle ADF Business Components](#)
- [Deploying Reusable Components](#)
- [Building a Web Application using EJB, JPA and JavaServer Pages](#)

Recommended Documentation

- [Understanding Oracle Development Framework](#), ADF Business Components
- [Oracle ADF Model and Business Components API Reference](#), [Interface Entity](#)
- [About Oracle ADF Entity Objects](#)
- [Appreciating the Entity Object](#)
- [About Oracle ADF View Objects](#)
- [Creating a Master-Detail Application Using Oracle ADF](#)
- [Create Master Detail Form in Oracle ADF](#)

Sample Questions

Which statement describes an entity object?

- A. It duplicates a database and its rows within the ADF application.
- B. It represents a row of a database table within the ADF application.**
- C. It defines a single application use case.
- D. It defines a Select statement used to query database rows in an application.
- E. It is any Java class that defines any business object in an ADF application.

Which option characterizes the function of an application module?

- A. Defines application flow between application web pages
- B. Assembles view object and view link instances to implement a data model for a logical unit of work related to an end user task**
- C. Defines a query for selecting rows from a database table
- D. Represents a single row of data from a database table
- E. Defines an application web page



Topic 3: Exposing Data to Clients

Objectives

- Declaratively define the data model for an application module
- Explain how application modules can manage application state
- Create nested application modules and understand transaction considerations
- Create web service interfaces for application modules
- Explain ADF BC transaction handling

Level

Practitioner
Learner
Practitioner
Practitioner
Learner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [Introduction to Oracle ADF Business Components](#)
- [ADF Data Binding: Using a Bean Data Control](#)

Recommended Documentation

- [Understanding the ADF Business Components State Management Feature](#)

Sample Questions

You are prototyping an ADF application that uses ADF Business Components. The database schema that you connect to does not contain any tables or data to show in the prototype. Which two declarative options are available to you to provide hard-coded data for purposes of your prototype?

- A. Entity objects with default values
- B. Placeholder data control**
- C. Static list view objects
- F. Declarative managed beans



You need to create a web service interface for your ADF Business Components such that external consumers of the web service can create one or more records in an exposed EmployeesView object. Which three ADF BC web service operations support creating rows?

- A. **Create**
- B. Update
- C. Delete
- D. **Merge**
- E. Find
- F. **Process**

Topic 4: Creating Views with ADF Faces

Objectives

- Define JavaServer Faces (JSF) and the component architecture
- Describe the purpose of backing beans
- Identify ADF component types included in the ADF Faces component library
- Explain the purpose of a data control
- Explain what stretch and flow components are and describe how to use them effectively
- Define and use complex layout components

Level

Learner
Learner
Learner
Learner
Learner
Practitioner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [Introduction to Oracle ADF Faces Components](#)
- [Using JavaScript in Oracle ADF Faces](#)
- [Working with Backing Beans in JDeveloper – The Right Way](#)
- [Building User Interfaces](#)

Sample Questions

Which component can be used to stretch an `af:panelBox` horizontally and vertically?

- A. `af:panelStretchLayout`
- B. `af:panelBorderLayout`
- C. `af:stretchComponentBehavior`
- D. `af:panelGroupLayout`
- E. There is no way to stretch an `af:panelBox`.



Which three components allow a user to collapse an area of the screen to hide its content?

A. af:panelSplitter

B. af:panelBox

C. af:panelTabbed

D. af:showDetail

E. af:decorativeBox

G. af:panelForm

Topic 5: Defining Task Flows and Adding Navigation

Objectives

- Explain how ADF extends capabilities of JSF controller
- Create task flows to define control flow in an application
- Explain how managed beans are used in an application

Level

Learner
Practitioner
Learner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- ADF Task Flow – Overview [Part 1](#) and [Part 2](#)
- [Now to Create Trains and Bounded Task Flows in Oracle ADF](#)
- [Passing Data within a Task Flow](#)

Recommended Documentation

- [Working with Bounded Task Flows, Regions and Routers](#)
- [Getting Started with ADF Task Flows](#)
- [Creating ADF Menus for Page Navigation](#)
- [Working with Navigation Components](#)

Sample Questions

Which expression must you use to access the input parameter (p1) that was passed into a task flow from pages inside a bounded task flow?

- A. `#{param.p1}`
- B. `#{sessionScope.p1}`
- C. `#{pageFlowScope.p1}`**
- D. `#{backingBeanScope.p1}`
- E. `#{p1}`

Which two statements are true?

- A. A JSF page requires a backing bean.



- B. In Oracle ADF, a managed bean can have the scope of pageFlow, view, application, request or null.**
- C. A managed bean can mix both data and methods used in a JSF page.**
- D. Each method on a managed bean can be invoked by only one component in a JSF page.

Topic 6: Declaratively Customizing Business Components

Objectives

- Modify the default behavior of view objects declaratively
- Modify the default behavior of entity objects declaratively
- Define a list of values (LOV) for an attribute
- Create a transient attribute
- Define control hints for entity object attributes

Level

Practitioner
Practitioner
Practitioner
Practitioner
Practitioner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [Adding a Transient VO Attribute via Customization](#)
- [Oracle ADF Transient Attributes Using Groovy](#)
- [How to Add a Transient VO Attribute](#)

Recommended Documentation

- [Using List-of-Values Components](#)
- [Adding Transient and Calculated Attributes to an Entity Object](#)

Sample Questions

Which statement is true about a transient attribute?

- A. It defines a calculated or derived attribute value that is not persisted in the database.**
- B. Its value can be defined only by a SELECT statement.
- C. Its value can be defined only by a Groovy statement.
- D. It always participates in a view object's initial SELECT statement, but data changes to the attribute are not persisted back to the database.
- E. It represents an attribute value that is marked as stale after a defined length of time after the initial query.



Which feature of an entity object would you use to enforce that an attribute value is required?

- A. Select the attribute's `Primary Key` attribute setting.
- B. Select the attribute's `Mandatory` attribute setting.**
- C. Set the attribute's `Updatable` attribute setting to `Always`.
- D. Set the attribute's `Updatable` attribute setting to `Never`.
- E. Enforcing that an attribute value is required is implemented only in a view object.

Topic 7: Validating User Input

Objectives

- Describe the types of validation available for ADF applications
- Add declarative validation for an entity object
- Write Groovy expressions in validation

Level

Learner
Practitioner
Practitioner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [Using Groovy in Oracle ADF Applications](#)

Recommended Documentation

- [Using Validation in the ADF Model Layer](#)
- [Defining Validation and Business Rules Declaratively](#)

Sample Questions

Which statement accurately describes why you would use a method validator in an entity object?

- A. To write a validate rule that is not easily implemented using the declarative validation features of ADF Business Components**
- B. To validate against attribute values not available in the entity to which the validation rule is attached
- C. To perform validation at the entity level rather than in the attribute
- D. To validate against data held in the database
- A. Method validator is the only validation option if you want to conditionally control if and when a validation URL is executed.

The Orders entity object has an associated Java class `OrdersImpl` which includes a method `getMaxOrderValue` that returns a `Number`. Which Groovy expression



would you use to validate the `OrderTotal` attribute to ensure that the value of `OrderTotal` input by the user is less than the maximum order value as defined by `getMaxOrderValue`? The validation must apply to new and existing orders.

- A. `return OrderTotal < OrdersImpl.getMaxOrderValue()`
- B. `return OrderTotal < get MaxOrderValue()`
- C. `return newValue < getMaxOrderValue()`**
- D. `return OrderTotal < groovy.MaxOrderValue()`
- A. It is not possible to call an entity `Impl` method from Groovy and so you should use a method validator.

Topic 8: Modifying Data Bindings Between the UI and the Data Model

Objectives

- | | |
|---|--------------|
| • Describe the relationship between UI components, data bindings, data controls, and business services | Learner |
| • List and define the three types of data bindings | Learner |
| • Create and edit data bindings | Practitioner |
| • Examine how metadata files are used to specify parameters, methods, and return values to a data control | Learner |

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- ADF Binding Internals [Part 1](#) and [Part 2](#)
- [Classic Mistakes with Oracle ADF Internal APIs – Part 1](#)

Recommended Documentation

- [An Overview of Databinding Features in Oracle ADF: White Paper](#)
- [Using ADF Data Controls](#)

Sample Questions

Which statement is true about the role of bindings within the ADF Model layer of ADF?

- A. The binding is a Java API for reading and writing data directly between ADF Business Components and ADF Faces.
- B. There is a one-to-one mapping such that each data control has only one binding.
- C. There are three types of bindings: method, attribute and table.
- D. Expression Language is used to connect a UI component to a binding.**
- E. Bindings can be created only by dragging and dropping from the Data Controls window.



Which statement accurately describes the purpose of the DataBindings.cpx file?

- A. It defines the ADF binding context for the entire application and contains references to the <pagename>PageDef.xml files that define the bindings for each application page.**
- B. It defines the UI components and bindings for a particular page.
- C. It is the default unbounded task flow source file.
- D. It contains the XML implementation of data controls as represented in the Data Controls panel.
- B. It defines all the data controls for the current application.

Topic 9: Adding Functionality to Pages

Objectives

- Implement a list of values (LOV) to enable users to select a value from a list
- Use the table component to display structured data as a formatted table
- Display hierarchical data in trees
- Use ADF Data Visualization (DVT) components to add charts and maps to JSF pages

Level

Practitioner
Practitioner
Practitioner
Practitioner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [Introduction to ADF Data Visualization Components – Graphs, Gauge, Maps, Pivot Table and Gantt](#)
- [Charting with ADF Data Visualization Components](#)

Recommended Documentation

- [Using List-of-Values Components](#)
- [Using ADF Hierarchy Viewer Components](#)
- [Using Tables, Trees, and Other Collection-Based Components](#)
- [Introduction to ADF Data Visualization Components](#)

Sample Questions

Which statement is false about Oracle ADF Business Components?

- A. **An ADF Business Components list of values cannot depend on the selection in another list of values.**
- B. There is a field allowing you to specify query limits for a list of values that is displayed when you use the functionality to search for a value.
- C. You can use a view object based on a static list to provide the values for a list of values in another table.
- D. You can define more than one attribute in a view object that has a list of values associated with it.



You enclose an `af:table` inside an `af:panelCollection`. However, you do not see the menus that allow you to hide/show columns or freeze columns at runtime. Which statement accurately describes the reason for this?

- A. You need to include a new menu component in the menus facet of `af:panelCollection`.
- B. This is probably a limitation of the browser you are using.
- C. Your table is not based on ADF Business Components, but rather on another type of data control.
- D. The `columnSelection` attribute of your table is set to `none` or not set at all.**

Topic 10: Adding Advanced Features to Task Flows and Page Navigation

Objectives

- Describe the difference between bounded and unbounded task flows
- Create routers for conditional navigation
- Call methods and other task flows
- Create menu items, menu bars, pop-ups, and context menus
- Use a bounded task flow as a region

Level

Learner
Practitioner
Practitioner
Practitioner
Practitioner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [Working with Bounded Task Flows, Regions and Routers](#)
- [Creating ADF Menus for Page Navigation](#)
- ADF Task Flow – Overview [Part 1](#) and [Part 2](#)

Recommended Documentation

- [Getting Started with ADF Task Flows](#)
- [Task Flow Design Fundamentals: White Paper](#)

Sample Questions

Which two statements are true about bounded task flows?

- A. They must have a defined entry point.**
- B. They must have a defined exit point.
- C. They can use managed beans, but cannot contain direct binding references.
- D. It is better to reuse a transactional flow in the application module layer than in a bounded task flow.
- E. Parameters can be passed to a bounded task flow.**



Consider a use case where a user enters a value for `customer ID` in a JSF view in one task flow and then submits the page that calls a second task flow. The second task flow allows for viewing and editing `Orders` for the specified customer. Which two actions do you perform to pass the `customer ID` to the called task flow?

- A. **Use a method call activity on the called task flow to process the initialization parameter.**
- B. Create a finalization parameter on the called task flow.
- C. Use a region to embed the called task flow within the calling page.
- D. Create an execute action binding on the first page of the called task flow.
- E. Create a view criteria to filter the `Orders` view object by the specified parameter.

Topic 11: Passing Values between UI Elements

Objectives

- Use a managed bean to hold values
- Access business logic from a managed bean through bindings
- Use parameters to pass values

Level

Practitioner

Practitioner

Practitioner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [ADF Region Interaction – An Overview](#)
- [ADF Region Interaction – Contextual Events](#)
- [Binding a JSF Page to a Managed Bean](#)

Recommended Documentation

- [Passing Parameters to Managed Bean Methods using EL](#)

Sample Questions

You are writing a fragment-based task flow to be published as an ADF Library JAR to be reusable across applications. To be reusable, the task flow cannot have any dependencies on external code. It must depend on task flow parameters and its own managed bean state to pass values. Which three managed bean scopes should the task flow use to meet this requirement?

- A. `backingBeanScope`
- B. `viewScope`
- C. `pageFlowScope`
- D. `sessionScope`
- E. `applicationScope`

A backing bean for a page must hold its value over multiple requests for the current



user. Which three bean scopes are applicable?

- A. requestScope
- B. backingBeanScope
- C. viewScope**
- D. pageFlowScope**
- E. sessionScope**
- F. applicationScope

Topic 12: Responding to Application Events

Objectives

- Describe the phases of the JSF life cycle
- List other types of server events used by ADF Faces components
- Use Partial Page Rendering (PPR)

Level

Learner

Learner

Practitioner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [Programmatic Partial Page Refresh](#)

Recommended Documentation

- [Using the JSF Lifecycle with ADF Faces](#)
- [Avoiding JSD and ADF Lifecycle Frustrations](#)
- [Handling Events](#)
- [Rerendering Partial Page Content](#)

Sample Questions

What single type of event does a command component such as `af:commandButton` support?

- A. Query
- B. Action**
- C. Disclosure
- D. Selection

A JSF page contains the code:

```
<af:inputText id="it1" autoSubmit="true"/>
<af:inputText id="it2" required="true"/>
<af:inputText id="it3" required="true"/>
```



```
partialTriggers="it1"/>
```

At runtime, a user enters a value into `it1` and presses the Tab key. Which statement is true?

- A. Field `it1` displays an error.
- B. Field `it2` displays an error.**
- C. Field `it3` displays an error.
- D. Fields `it2` and `it3` display an error.
- E. All the fields display an error.
- F. No errors are displayed and the cursor moves to field `it2`.

Topic 13: Building Reusability Into Pages

Objectives

- | | Level |
|--|--------------|
| • Identify the benefits of reusing components | Learner |
| • Create ADF libraries to share components within and across teams and applications | Practitioner |
| • Create a page template for reuse across the JSF pages in an application to enable a consistent look and feel | Practitioner |
| • Describe how skinning can be used to change the appearance of an ADF application | Learner |

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [ADF Page Templates and Declarative Components](#)
- [ADF Faces Skinning](#)
- [Classic Mistakes with Oracle ADF Internal APIs – Part 2](#)

Recommended Documentation

- [Creating and Reusing Fragments, Page Templates, and Components](#)
- [Creating ADF Skins with Oracle ADF Skin Editor](#)

Sample Questions

Identify two benefits of reusing components.

- A. Code lines have cross-dependencies for deployment.
- B. Code resides closest to the object to which it is related.
- C. Code is less likely to be duplicated.**
- D. There is less code to test.**
- E. Code is copied from one component to another.



Which three statements are true about skinning?

- A. **A skin is defined in a style sheet.**
- B. **Skins can be used to change the styles, icons and properties of ADF Faces components.**
- C. Skins operate on HTML elements to change the style of HTML generated by ADF Faces component.
- D. Text should not be defined in a skin because it is not internationalizable.
- E. **Inline styles should not be used to style a component because the style will be applied to the root component.**

Topic 14: Programmatically Customizing the Data Model

Objectives

- Generate Java classes for business components to modify default behavior programmatically
- Set the value of bind variables of a view object at run time
- Explain the benefits of adding service methods at the application module level
- Create a method validator for an entity object or attribute

Level

Practitioner
Practitioner
Learner
Practitioner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Recommended Documentation

- [Working Programmatically with View Objects](#)
- [Working with Bind Variables](#)
- [Customizing an Application Module with Service Methods](#)
- [What Happens When You Create an Entity-Level Method Validator](#)
- [To create an entity-level method validator](#)
- [What Happens When You Create an Attribute-Level Method Validator](#)
- [To create an attribute-level method validator](#)

Sample Questions

Which two statements are true regarding the benefit of adding service methods at the application module level?

- A. It allows you to build business-level methods that a consuming web page or client may use.**
- B. Any public method you add to an application module is automatically exposed to the consuming client.
- C. An application module service method exposed in a service interface appears as an operation in the Data Controls window.**

- D. Defining a service interface in an application module is the only way to expose non-CRUD methods in Business Components to a web service client.
- E. Business Components CRUD operations are automatically exposed in the application module service interface.

Which three statements are true about creating a method validator for an entity object or attribute?

- A. It allows the implementation of business rules that are not catered for by the existing set of declarative validation rules.**
- B. It provides the ability to call pre-existing Java code and its embedded logic.**
- C. The implementation is more efficient than declarative validation rules.
- D. It is the only way to implement a comparison between two entity object attributes.
- E. In all cases, ADF developers must code solutions over declarative solutions.
- F. It provides developer flexibility in creating validation rules if the validation rule can be more easily express as a Java function rather than a declarative validation.**



Topic 15: Debugging and Deploying ADF Applications

Objectives

- Identify the JDeveloper tools for logging and diagnostics
- Configure ADF logging
- Use the JDeveloper debugger
- Use JDeveloper to create deployment profiles and configure deployment options
- Describe the deployment process

Level

Learner
Practitioner
Practitioner
Practitioner
Learner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training

- [Debugging and Logging for Oracle ADF Applications](#)
- [How to Implement Logging in an ADF Application](#)
- [Debugging Task Flows and Memory Scope](#)

Recommended Documentation

- [Testing and Debugging ADF Components](#)
- [Troubleshooting ADF Faces](#)

Sample Questions

Which tool would you use to view messages about query execution in ADF Business Components in your application?

- A. **Oracle ADF logger**
- B. Oracle ADF source
- C. Oracle ADF declarative debugger
- D. Expression Language Evaluator
- E. `-Djbo.debugoutput=console`

Which two steps must a developer perform to enable ADF logging for an application?

- A. **Right-click the Actions tab in a running WLS server log and select**



“Configure Oracle Diagnostic Logging”.

- B. From the Oracle Diagnostic Logging Configuration editor, set `oracle.adfdiagnostics` log level to **FINEST**.**
- C. Right-click the logging code added to an ADF class and select “Configure Oracle Diagnostic Logging”.
- D. Manually add a Java logging library to your ADF project.

Topic 16: Implementing Security in ADF Applications

Objectives

- Describe security aspects of an ADF application
- Add ADF security authentication and authorization to an application
- Access security information programmatically and with Expression Language (EL)

Level

Learner
Practitioner
Practitioner

Recommended Training

Classroom Training

- [Oracle Fusion Middleware 12c: Build Rich Client Applications with ADF Ed 1](#)

Online Training:

- [ADF Application Security](#)
- [Enabling SSO for the ADF Application using Oracle Access Manager 11g](#)

Recommended Documentation

- [Security for Everyone](#)
- [Enabling ADF Security in a Fusion Web Application](#)

Sample Questions

Consider a case where you have two views contained in a bounded task flow. How would you use ADF Security to configure authorization for only one view and not the other?

- A. **You cannot configure security for only one view. Page-level security is not checked within bounded task flows.**
- B. Put the bounded task flow in an ADF library and add the task flow as a region on a secured page.
- C. Use the ADF Security wizard to define authorization for the secured view.
- D. Define authorization for the secured view to the test-all role.

You want to configure an application so that users can shop for products anonymously without authentication and must then authenticate after they enter the checkout process.



How would you enable this requirement?

- A. **Grant roles access rights to the task flow containing the checkout process.**
- B. Ensure that task flow containing the shopping process is unbounded.
- C. Remove AD Security for the application and replace it with Java EE Security for the task flow containing the checkout process.
- D. Add a view containing a login form to the task flow containing the checkout process.

Exam Registration Details

Full exam preparation details are available on the exam page [Oracle Application Development Framework 12c Essentials \(1Z0-419\)](#), including learning objectives, number of questions, time allowance, pricing and languages available.

The OPN Certified Specialist Exams appointments are available worldwide at [Pearson VUE Testing Centers](#). Reservations can be made via [phone or online](#).

Candidates must have an Oracle Web Account to access [CertView](#) and check their exam results. In order to have their certifications reflected on [OPN Competency Center](#), both CertView and Pearson Vue accounts must be updated with the current OPN Company ID. Your Company ID can be obtained by contacting your local [Oracle Partner Business Center](#) or by signing in to your [OPN account](#).

Additional Resources

- [Oracle Application Development Framework 12c](#)
- [OPN Guided Learning Paths & Assessments](#)
- [OPN Certified Specialist Exam Study Guides](#)