Oracle ATG Web Commerce 10 Implementation Developer Essentials Exam Study Guide

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Objective
Help you prepare to take the Oracle ATG Web Commerce 10 Implementation Developer Essentials (1Z0-510) Exam by providing pointers to resources that you can use in your preparation.

Targeted Audience

- Technical Consultants, Architects, Application Developers
- Strong knowledge and expertise in Oracle ATG Web Commerce 10
- Participated in the deployment of an Oracle ATG Web Commerce 10 Application to production
- Candidate must also have knowledge of the Java Programming Language, XML, SQL, as well as general e-commerce and merchandising concepts
- Up-to-date training and field experience are recommended
Exam Topics & Objectives

Exam Topics
The Oracle ATG Web Commerce 10 Implementation Developer Essentials (1Z0-510) Exam consists of 15 topics:

1. Introduction to ATG Web Commerce 10
2. ATG Web Commerce 10 Technical Overview
3. ATG Nucleus
4. ATG Page Development
5. ATG Repositories
6. Personalization
7. Commerce
8. Product Catalog
9. Basic Pricing and Inventory
10. Promotions
11. Advanced Repository Concepts
12. Purchase Flow and Commerce Pipeline
13. Fulfillment and Integrations
14. Multi-Site
15. Advanced Commerce Concepts

Exam Objectives
The exam objectives are defined by learner or practitioner level of knowledge:

• **Learner-level:** questions require the candidate to recall information to determine the correct answer.

  Example: When is an ATG User Profile created for a person visiting the web site?

• **Practitioner-level:** questions require the candidate to derive the correct answer from the application of their knowledge, which can only be attained by extensive experience with the product.
Training Options

For each exam topic there have been identified alternative training options that are available at Oracle. The training options are divided into three categories:

• **Boot Camps**
  The Boot Camps are designed as a "jump start" training to enhance your skills by providing role-based training on industry-leading Oracle solutions and services. The boot camps are built as concise, intensive, and real-time training to give partners a competitive advantage as they prepare to build powerful solutions for their own customer base. Partners can choose to attend these boot camps in class or in a live virtual class format to maximize the effectiveness and the time allocated to training.

• **Instructor-Led Training**
  Partners can take any publicly-scheduled OPN and Oracle University courses. Benefit from hands on experience to gain real working skill and work toward Oracle certifications.

• **Online Training**
  Oracle Partners are entitled free access to the Oracle Knowledge Center (OUKC), a vast library of recorded product courses. New courses are regularly added to the library, providing partners with the latest information and training to master new products or to increase proficiency on the new releases.

A Guided Learning Path for the ATG Implementation Developer Specialization has also been provided through the OPN Competency Center, and features independent learning modules on various ATG Commerce developer topics.
We recommend that partners preparing for the exam should also review the ATG Web Commerce Online Documentation Library, which can be found at: http://docs.oracle.com/cd/E22630_01/index.html. The following would be particularly useful as reference (in alphabetical order):

- **Business Control Center Administration and Development Guide**
  Describes how to configure the ATG Business Control Center. Includes information on creating and managing user profiles, organizations, and roles. Explains how to customize the ATG Business Control Center user interface. Intended for system administrators and developers.

- **Commerce Programming Guide**
  Describes how to install and customize Consumer Commerce and Business Commerce. Intended for programmers and site administrators.

- **Multisite Administration Guide**
  Presents an overview of multisite support features and shows how to use the Site Administration utility to register and configure multiple sites to run together. Includes a roadmap for converting a single-site environment to a multisite-enabled one.

- **Page Developer's Guide**
  Provides an introduction to developing JavaServer Pages on the Oracle ATG Web Commerce platform. Intended primarily for JSP developers, but should also be read by programmers who are new to the product suite.

- **Personalization Programming Guide**
  Describes programming tasks for the ATG Personalization and Scenarios modules. Includes information on setting up profile repositories, creating targeting rules and services, configuring scenario servers, and adding custom scenario events and actions.

- **Repository Guide**
  Describes the Oracle ATG Web Commerce repository API. Presents programming concepts for advanced users, including SQL repositories, LDAP repositories, secured repositories, and composite repositories. Includes examples and reference information to help programmers develop applications using the repository API.

- **Web Services and Integration Framework Guide**
  Describes Oracle ATG Web Commerce platform support for creating and calling Web services, to share data and business logic with external applications. Also describes other data integration tools in the Oracle ATG Web Commerce platform.
Topic 1: Introduction to ATG Web Commerce Suite

Objectives:
- Describe the features and benefits of all products in the ATG Web Commerce Suite

Training Options:
- Online Training
  - Introduction to ATG
  - Oracle ATG Spaces 2 Commerce Vision Demo
  - ATG Personalization Workshop (Functional Focus – Key Benefits/Features)

Reference Materials:
- Commerce Guide to Setting Up a Store
- Merchandising Guide for Business Users

Sample Question:
- Identify three benefits of using Oracle ATG Adaptive Scenario Engine to support a personalized customer experience strategy.

A. enables dynamic management of customer profiles and segments, which can be updated continuously based on new interactions
B. supports content administration workflows to create new content for publishing
C. provides choreographed customer interactions to drive predesigned interactions with individuals and segments, which dynamically adapt to customers’ changing circumstances
D. provides relevant experiences across the full customer life cycle
E. provides mobile and social media APIs
**Topic 2: Introduction to ATG Technical Overview**

**Objectives:**
- Describe ATG technical architecture and its core platform constructs  
  Learner
- Use the ACC to view and administer the ATG Application  
  Practitioner

**Training Options:**
- Online Training
  - ATG Technology Essentials
  - ATG 10 Administration Essentials
- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

**Reference Materials:**
- Platform Programming Guide
- Multisite Administration Guide
- Business Control Center Administration and Development Guide
- Multiple Application Integration Guide
- Page Developer’s Guide
- Repository Guide
- Personalization Programming Guide
- Web Services and Integration Framework Guide
- Commerce Programming Guide

**Sample Question:**
- Provided that the rmiEnabled flag is set to true, which statement must be true to accept connections from the ACC?

A. ACC Module must be running on the server.

**B. DAS-UI Module must be running on the server.**

C. DPS Module must be running on the server.

D. No other requirement is necessary to accept connections from the ACC.
Topic 3: Introduction to ATG Nucleus

Objectives:
- Create and configure ATG Nucleus components to build applications from JavaBeans
- Assign the appropriate component scope for an application

Level
Practitioner
Practitioner

Training Option:
- Online Training
  - Introduction to ATG Nucleus
  - ATG Nucleus Component Scope and CONFIGPATH Layering
- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:
- Platform Programming Guide

Sample Questions:
1. Which statement is true about making a change to the object property of a request scoped component?
   A. When a request scoped component has an object property, the changes made to the instance object property in place are visible to all the other instances.
   B. When a request scoped component has an object property, the changes made to the instance object property in place are in the request scope and do not affect other instances.
   C. When a request scoped component has an object property, the changes made to the instance object property in place are not visible to other instances only if getter and setter are used to access this property.
   D. When a request scoped component has an object property, no in place changes are allowed to request scoped instance object properties.

2. Identify two mechanisms used by ATG to match browser requests to a server session.
   A. Cookies
   B. IP Address
   C. Rewritten URLs
   D. MAC Address of the machine
   E. A combination of IP Address, Browser, and Referral URL
Topic 4: Introduction to ATG Page Development

Objectives:

• Utilize the appropriate JSTL and DSP tags, as well as Expression Language Constructs to build ATG Dynamo Pages. Practitioner
• Use out-of-the-box droplets and create custom droplets to deliver dynamic content Practitioner
• Use DSP forms, out-of-the-box ATG and custom form handlers to accept, validate and process user input. Practitioner

Training Option:

• Online Training
  – ATG Web Commerce 10 Page Development Essentials
  – ATG Web Commerce 10 Introduction to Droplets
  – ATG Web Commerce 10 Introduction to Forms and Form Handlers

• Instructor-led Training
  – Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:

• Page Developer's Guide

Sample Questions:

1. If a Servlet Bean has parameters that are of the same name as the page parameter, what behavior can be expected?

   A. They are the same variable. The servlet beans parameter will overwrite the page parameter for the remainder of the page.
   B. The servlet beans parameter value temporarily overrides the page parameter within the servlet bean and is reverted.
   C. The page parameter takes precedence. The servlet beans parameter is ignored.
   D. Causes the exception IllegalParameterName and should be avoided

2. What is the best way to display the contents of an open parameter in a Custom Droplet?

   A. Use the getParameter to get the open parameter and print it out in the droplet.
   B. Use the request.render method to render the open parameter.
   C. Use the response.redirect method to redirect to the JSP fragment in the open parameter.
   D. Use the request.serviceParameter method to render the open parameter.
Topic 5: Introduction to ATG Repositories

Objectives:

- Configure SQL Repositories using ATG’s Data Anywhere Architecture [Practitioner]
- Query the ATG Repository using RQL and out-of-the-box Droplets and APIs [Practitioner]

Training Option:

- Online Training
  - ATG Web Commerce 10 Repository Essentials
  - ATG Web Commerce 10 Repository Data Model
  - ATG Web Commerce 10 Repository Item Properties
  - ATG Web Commerce 10 Repositories UI Integration
  - ATG Web Commerce 10 Advanced Repository Topics

- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:

- Repository Guide

Sample Question:

- What does the provided snippet demonstrate?

```xml
<item-descriptor name="user">
  <table name="user" type="primary" id-column-names="emp_id">
    <property name="id" column-name="emp_id"/>
    <property name="login" column-name="login" data-type="string" required="true">
      <attribute name="unique" value="true"/>
    </property>
  </table>
</item-descriptor>
```

A. Item descriptor has `emp_id` as the ID column and `login` as unique.
B. Item descriptor has `emp_d` as the ID column and `login` as unique but login can have null value for login.
C. It is illegal to have an ID column and a unique key in the same item descriptor.
D. Item descriptor has `emp_id` as a transient computed property and `login` is used as a database ID and unique key.
Topic 6: Introduction to ATG Personalization

Objectives:
- Configure User Profiles to capture and update user preferences, and track session data to create personalized user experiences
- Create and Configure custom scenarios, slots, targeters, custom actions, events and conditions to support site personalization strategies

Training Options:
- Online Training
  - ATG Web Commerce 10 Personalization Essentials
  - ATG Web Commerce 10 Extending Profile and User Directory
  - ATG Web Commerce 10 Scenarios and Slots
  - ATG Web Commerce 10 Targeters
  - ATG Web Commerce 10 Advanced Personalization
- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:
- Personalization Programming Guide
- Personalization Guide for Business Users

Sample Questions:
1. You want to remove items from being displayed in a slot, and choose to use "Destructive" item retrieval. Which statement describes the expected outcome?

   A. Once retrieved, the item is removed from the repository.
   B. Items are retrieved and displayed once. They are then removed from the slot.
   C. Do not use this retrieval type. It is for testing purposes only.
   D. Once retrieved, the item can never again be populated in this slot from a targeting rule.

2. The targeter parameter of the TargetingForEach droplet accepts which kind of objects?

   A. It must be a targeter. A slot can be used by using the bean="SLOT.targeter" option.
   B. It must be a slot. A targeter can be used by using the bean="TARGETER.enclosingSlot" option.
   C. It can be a slot or a targeter.
   D. It must be a class that implements DynamicContent. You can use bean="SLOT.content" OR bean="TARGETER.content" because both expose dynamicContent.
Topic 7: Introduction to ATG Commerce

Objectives:
- Describe the individual components that comprise an ATG Commerce Site
- Configure and administer commerce site via the BCC

Level
Learner
Practitioner

Training Option:
- Online Training
  - ATG Web Commerce 10 Commerce Essentials
  - ATG 10 Administration Essentials
  - ATG Web Commerce 10 Using the BCC
  - ATG Web Commerce 10 Personalization Essentials
  - ATG Web Commerce 10 Promotions Essentials
- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:
- Commerce Programming Guide
- Commerce Guide to Setting Up a Store
- Merchandising Guide for Business Users

Sample Questions:

• Your business users want to offer $10 off the price of a specific product. How can this be achieved?

  A. Ask a developer to create and code a promotion for deployment on the site.
  B. Log on as a Merchandiser, and then create and configure a promotion in the BCC.
  C. Create and configure a promotion in the CSC.
  D. Log on to the ACC as an administrator to create and configure a promotion, and then log on as the Merchandiser to approve the promotion in the BCC.
  E. This promotion cannot be created.

• In ATG, at what level can assets be merged?

  A. At the item property level only. Each property must be compared with yours and what is current and one needs to be selected.
  B. At the item property level. You may also choose to accept all changes that are yours or all the current changes for the item.
  C. At the item level only. You must choose at an item level if you want to select your version or current version.
  D. At the project level. You must choose if you want to accept all your items in the project or all of the current version items in the project.
Topic 8: ATG Commerce Product Catalog Detail

Objectives:
• Design a Product Catalog based on application requirements
• Use and extend the Product Catalog

Level
Practitioner
Practitioner

Training Option:
• Online Training
  – ATG Web Commerce 10 Product Catalog Essentials
  – ATG Web Commerce 10 Advanced Product Catalog

• Instructor-led Training
  – Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:
• Commerce Programming Guide

Sample Questions:

1. What is the expected behavior when a product is deleted?
   A. All child SKUs of the product are also deleted except for those that have bundle links.
   B. All child SKUs of the product are also deleted.
   C. All child SKUs of the product are also deleted except those SKUs that are also children of other products.
   D. Only the product is deleted. The SKUs are left intact.
   E. ATG mandates that an SKU should be deleted before a product is deleted.

2. What are Catalog folders used for?
   A. They are used to determine if certain categories can be shown to a customer.
   B. They are used only in the administrator user interface, not in the commerce site itself.
   C. They help in running catalog maintenance on specified catalog folders.
   D. They are used to define sub catalog hierarchies.
   E. They are used for multisite to define site groups.
Topic 9: Basic Pricing and Inventory

Objectives:
- Configure ATG pricing services using pricing engine, calculators and price lists
- Use ATG’s inventory system

Level
Practitioner
Practitioner

Training Option:
- Online Training
  - ATG Web Commerce 10 Pricing Essentials
  - ATG Web Commerce 10 Advanced Pricing Topics
- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:
- Commerce Programming Guide

Sample Questions:
1. Which three pricing engines are configured to load global promotions?
   - A. ItemPricingEngine
   - B. OrderPricingEngine
   - C. ShippingPricingEngine
   - D. SKU PricingEngine
   - E. TaxPricingEngine

2. The inventory data is located in the same schema as which other ATG data objects by default?
   - A. User Profiling data
   - B. Product Catalog data
   - C. Publishing data
   - D. Agent data
   - E. Data Warehousing
Topic 10: Promotions

Objectives:
- Offer discounted pricing using promotions
- Extend promotion functionality in your application by using qualifiers

Training Option:
- Online Training
  - ATG Web Commerce 10 Advanced Pricing Topics
  - ATG Web Commerce 10 Promotions Essentials
- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:
- Commerce Programming Guide
- Commerce Guide to Setting Up a Store
- Business Control Center User’s Guide
- Merchandising Guide for Business Users
- Personalization Guide for Business Users

Sample Questions:
1. Which three valid ATG 10 promotion types ship with the product?
   - A. Payment Discount
   - **B. Order Discount**
   - C. Tax Discount
   - D. Item Discount
   - E. Shipping Discount

2. Which three pricing engines use the Qualifier class to determine the objects to which it should apply a discount?
   - A. ItemPricingEngine
   - B. DiscountPricingEngine
   - **C. OrderPricingEngine**
   - D. PromotionEngine
   - E. ShippingPricingEngine
Topic 11: Advanced Repository Concepts

Objectives:

- Apply transaction management features to ensure data integrity  
  Practitioner
- Apply caching strategies to optimize access to the database  
  Practitioner
- Create a versioned repository  
  Practitioner

Training Option:

- Online Training
  - ATG Web Commerce 10 Advanced Repository Concepts
  - ATG Web Commerce 10 Advanced Repository Concepts, Part II
- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:

- Repository Guide

Sample Questions:

1. Suppose that you are working with an item descriptor whose cache mode is set to simple caching, and a property in this item-descriptor is set to disabled at some point along the config path.
   What must be done to reset the property cache mode to match the parent cache mode in your current layer?

   A. Set the cache-mode of the property to “reset.”
   B. Set the cache-mode of the item-descriptor to “reset.”
   C. Set the cache-mode of the property to “inherit.”
   D. Set the cache-mode of the property to empty string.
   E. Set the cache-mode of the item-descriptor to “reset” and the cache-mode of the property to empty string.

2. When is the column sec_asset_version added to a table?

   A. to maintain many-to-many relationships across versioned data
   B. to maintain security on the versioned tables
   C. to maintain secondary or historic version IDs
   D. to maintain versions of a parent item when it is a supertype of the child item
   E. It is a legacy field that is not used.
Objectives:

• Create and manage the lifecycle of an order and its sub-components
• Use and extend the ATG Commerce Pipeline to meet application requirements

Level
Practitioner
Practitioner

Training Option:

• Online Training
  – ATG Web Commerce 10 Purchase Flow Essentials
  – ATG Web Commerce 10 Purchase Form Handlers
  – ATG Web Commerce 10 Purchase Flow Business Layer and Pipelines
  – ATG Web Commerce 10 Order Fulfillment Pipelines and Integrations

• Instructor-led Training
  – Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:

• Commerce Programming Guide

Sample Questions:

1. What do you need to do to disable ATG's Out-of-the-Box behavior of persisting order change?

   A. Set /atg/commerce/order/OrderTools.persistOrders=false
   B. Set /atg/commerce/order/OrderManager.persistOrders=false
   C. Set /atg/commerce/ShoppingCart.persistOrders=false
   D. ATG does not allow you to modify this behavior.

2. What is the state of a newly created order?

   A. CREATED
   B. INCOMPLETE
   C. PROCESSING
   D. NO_PENDING_ACTION
Topic 13: Fulfillment and Integrations

Objectives:

- Configure the Order Fulfillment Framework to fulfill hard and soft goods order items  
  Level: Practitioner
- Integrate fulfillment framework with external systems  
  Level: Practitioner

Training Option:

- Online Training
  - ATG Web Commerce 10 Order Fulfillment Essentials
  - ATG Web Commerce 10 Order Fulfillment Pipelines and Integrations

- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:

- Web Services and Integration Framework Guide
- Commerce Programming Guide

Sample Questions:

1. What is the role of the allocateItemRelQuantity chain?

   A. to mark Shipping group as shipped
   B. to purchase items from pre-order, back order, or regular stock using inventory manager
   C. to reorganize items across shipping groups
   D. to allocate items related to the quantity on hand

2. What is the role of the allocateElectronicGood chain?

   A. to invoke the processElectronicShippingGroup chain
   B. to create gift certificates using ClaimableManager and deliver them
   C. to notify the hardgood filler that items are shipped as electronic items need not be shipped
   D. It is an empty chain that needs to be extended to get the appropriate behavior.
Topic 14: Multi-Site

Objectives:

- Install and configure multiple applications
- Apply component sharing strategies to support application requirements in a multi-site environment

Training Option:

- Online Training
  - ATG Web Commerce 10 Multisite Essentials
  - ATG Web Commerce 10 Multisite URLs and JSPs
  - ATG Web Commerce 10 Creating Multisite Applications

- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:

- Multisite Administration Guide
- Multiple Application Integration Guide

Sample Questions:

1. What must you do to render part of a JSP Page in a site context other than the current site?
   A. Use SiteContextDroplet.
   B. Use SiteContextSwitchDroplet.
   C. Use the site attribute on ForEach or other OOTB Droplets.
   D. Use the dsp:page tag with the siteid attribute at the beginning of the page.
   E. Site Context cannot be switched for a given request.

2. When is the creationSiteld property of an order set?
   A. when the user visits the site
   B. when the Order object is first created
   C. when the first CommerceItem is added to the order
   D. No Such property exists, it only contains the Siteld property to track the last site the item was added from.
Topic 15: Advanced Commerce Concepts

Objectives:
- Configure and manage wishlist and/or giftlist feature  
  Practitioner
- Use the abandoned order service to increase conversions  
  Practitioner
- Explain ATG B2B Features  
  Practitioner

Training Option:
- Online Training
  - ATG Web Commerce 10 Wish Lists and Gift Lists
  - ATG Web Commerce 10 Handling Abandoned Orders and B2B
- Instructor-led Training
  - Oracle ATG Web Commerce 10 Implementation Developer Bootcamp

Reference Materials:
- Commerce Programming Guide

Sample Questions:
1. What should be the scope of the GiftlistSearch component?
   A. GiftlistSearch should be request-scoped.
   B. **GiftlistSearch should be session-scoped because multiple pages are typically involved in gathering and displaying information.**
   C. GiftlistSearch should be global scoped as it is a stateless component invoking GiftlistManager.
   D. GiftlistSearch scope cannot be changed as it is overridden by ATG when it initializes and its life cycle is timer based.

2. Which property is checked by the default implementation of the checkRequiresApproval chain?
   A. approvalRequired property on the Order
   B. approvalRequired property on the Account to which the customer belongs
   C. **approvalRequired property in the customer’s profile**
   D. checkRequiresApproval itself is a property and needs no additional check.
Exam Registration

**How to register for the exam?**
You can register for all Oracle certification exams with Pearson VUE. Before a registration can be submitted, a Pearson VUE profile must be created using your Company ID. Your Company ID can be obtained by contacting your local Oracle Partner Business Center or by signing in to your OPN account. Your Company ID is located in the section on the right under "Company information".

Please follow these instructions in order to properly set-up your Pearson VUE account for the first time.

**Have you completed an Oracle Certification Exam in the past?**
Due to systems enhancements, each partner who has completed an Oracle Certification Exam will need to update their Pearson VUE profile in order to receive credit and for those records to appear in the OPN Competency Center.

**How to get full recognition as Certified Implementation Specialist?**
To get full recognition as a Certified Implementation Specialist you need to:
A. Update your Pearson VUE profile with your Company ID
B. Activate your Certview Account

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