



Oracle

Exam 1z0-478

Oracle SOA Suite 11g Certified Implementation Specialist

Version: 7.4

[Total Questions: 75]

Question No : 1

View the Exhibit.

```
<?xml version="1.0"?>
<purchaseOrder orderDate="2012-03-02">
  <shipTo country="US">
    <name>John Doe</name>
    <street>123 Courthouse Square</street>
    <city>Hill Valley</city>
    <state>CA</state>
    <zip>12104</zip>
  </shipTo>
  <description>PurchaseOrder for Marty Mcfly</description>
  <comment>Flux capacitor and others</comment>
  <items>
    <item partNum="FX-123">
      <productName>Flux Capacitor</productName>
      <description>Good one</description>
      <quantity>1</quantity>
      <USPrice>1295.00</USPrice>
      <comment>1.44 jigawatts</comment>
    </item>
    <item partNum="DL-24">
      <productName>Delorean</productName>
      <description>Good one as well</description>
      <comment>Nice car</comment>
      <quantity>1</quantity>
      <USPrice>20000.00</USPrice>
      <shipDate>2012-05-23</shipDate>
    </item>
  </items>
</purchaseOrder>
```

For the XML shown, which XPath expression returns exactly one node?

- A. /purchaseOrder/orderDate
- B. /purchaseOrder/items/item[0]/quantity
- C. /purchaseOrder//item
- D. /purchaseOrder//comment[not(following: : description)]

Answer: B

Question No : 2

Why would you use the Mediator component in a Service Component Architecture (SCA) application Instead of using Oracle Service Bus?

- A. Oracle Service Bus runs out side of a SCA application. Therefore, the Mediator is the only choice for translation and transformation tasks in an SCA application.
- B. The Mediator is much faster than Oracle Service Bus.
- C. The Mediator supports transactions, but Oracle Service Bus does not.
- D. It is always better to use Oracle service Bus Instead of the Mediator.

Answer: A

Explanation: Whereas Oracle Service Bus provides service virtualization and protocol transformations for an Oracle SOA Suite application containing multiple composites, Oracle Mediator is an intra-composite mediation component that is deployed within an application.

Note:

* Analogous to a load balancer routing HTTP traffic, the Oracle Mediator routes data from service providers to external partners. In addition, it can subscribe to and publish business events.

Using Oracle Mediator, you create routing services and rules for them. A routing service is the key component for moving a message across the enterprise service bus – from its entry point to its exit point. The rules determine how a message instance processed by the routing service gets to its next destination. Using the rules, Oracle Mediator can perform the following actions:

Route: Determines the service component (BPEL process, business rule, human task, and mediator) to which to send the messages.

Validate: Provides support for validating the incoming message payload by using a schematron or an XSD file.

Filter: If specified in the rules, applies a filter expression that specifies the contents (payload) of a message be analyzed before any service is invoked.

Transformation: If specified in the rules, transforms document data from one XML schema to another, thus enabling data interchange among applications using different schemas.

Question No : 3

A customer demands access to your Service Composite Architecture (SCA) application.

However keeping with the customer's company standards, the interface must be EJB 3.0.

Which solution meets the needs of the customer while requiring the least amount of time, effort, and architectural change for you?

- A.** Create a small EJB 3.0 application that interfaces directly with your SCA application. This approach hides the web service interface from your customer while adding the smallest amount of overhead in the process
- B.** Create an EJB 3.0 interface using Oracle Service Bus, which, in turn, invokes the SCA application through its native web service interface. This approach hides the web service Interface from your customer while adding the smallest amount of overhead in the process.
- C.** Use the Mediator component to provide an EJB 3.0 interface in addition to the existing web service interface. This approach adds the least amount of overhead to each call.
- D.** Explain to the customer the importance and flexibility of modern web services, and encourage the customer to learn some new skills.

Answer: B

Question No : 4

Which two options are allowed in a decision table?

- A.** An action modifying an output fact
- B.** Asserting an output fact in a decision rule action
- C.** Calling a rules function in an assertion
- D.** Having rules specifying different actions

Answer: A,D

Explanation:

Note:

* After you create a Decision Table there are operations that you may want to perform on the Decision Table, including the following:

Compact or split cells in a Decision Table

Merge a condition or split a condition in a Decision Table

Finding and resolving conflicts between rules in a Decision Table

Find and fix gaps in a Decision Table

Question No : 5

Identify two correct descriptions of Oracle Web Services Manager (OWSM).

- A. It enables you to externalize web services security from the applications you build.
- B. It manages policies in a distributed policy manager that serves as a single policy enforcement point.
- C. Use security and management events, captured by OWSM agents, are displayed using Oracle BAM.
- D. It supplies predefined security policies that enable declarative security and management definition.
- E. It uses Oracle Event Processing (OEP) to determine when security violations have occurred.

Answer: B,C

Explanation:

Note:

* Oracle WSM allows companies to (1) centrally define and store declarative policies applied to the multiple web services making up a SOA infrastructure, (2) locally enforce security and management policies through configurable agents, and (3) monitor runtime security events such as failed authentication or authorization.

* Oracle Web Services Manager offers a comprehensive and easy-to-use solution for policy management and security of service infrastructure. It provides visibility and control of the policies through a centralized administration interface offered by Oracle Enterprise Manager.

Question No : 6

Which three statements are true about enabling streaming support in adapters?

- A. Enabling streaming allows larger payloads to be read by the adapters.

- B. Enabling streaming improves message throughput and latency.
- C. Enabling streaming leverages features of the scalable DOM in Oracle XML Developer Kit (XDK).
- D. The benefits of enabling streaming are better when payloads are of relatively large.

Answer: A,C,D

Explanation: Streaming Large Payload

To enable support to stream payload, you must select the Enable Streaming check box while specifying polling options. When you enable this feature, the payload is streamed to a database instead of getting manipulated in SOA run time as in a memory DOM. You use this feature while handling large payloads. When you select the Enable Streaming check box, a corresponding Boolean property StreamPayload is appended to the ActivationSpec properties defined in the respective .jca file.

Question No : 7

Which statement is correct about a JCA common client interface?

- A. The JCA binding component uses the JCA common client Interface APIs to communicate with the resource adapter.
- B. The resource adapter uses the common client interface APIs to communicate with the EIS.
- C. The resource adapter implements the standard MessageListener interface to poll for events from the EIS.
- D. The application server uses the common client interface APIs to commune with the EIS.

Answer: A

Explanation:

Note:

* The Common Client Interface (CCI) is the JCA-recommended client API for all resource adapters.

* A resource adapter is a system-level software driver that enables J2EE components to communicate with a back-end enterprise information system (EIS) through a JCA-compliant application server when a resource adapter for the specific EIS is deployed to the server.

Question No : 8

Identify two correct descriptions of Oracle Event Processing (OEP).

- A. It is technology used to develop near-real-time, event driven systems
- B. It uses standard SQL to run some of the same queries that are executed in transactional systems.
- C. It is a time driven and request-focused form of traditional business intelligence (BI)
- D. It distills information value from many simpler events into a few more useful summary level events.

Answer: A,B

Explanation: A: Oracle Event Processing is a complete solution for building applications to filter, correlate and process events in real-time.

B: Built on industry-standards including ANSI SQL, Java, Spring DM and OSGI, Oracle Event Processing provides an open architecture for sourcing, processing, and publishing complex events throughout the enterprise.

Question No : 9

How is a SAML token used by OWSM for identity propagation?

- A. As each web service in a chain is invoked, OWSM generates a SAML token and inserts it in the WS-Security header of the request message.
- B. A SAML token is generated on invocation of the first web service in a chain and is stored in the Java Authentication and Authorization (JAAS) Subject so it can be used throughout the transaction by subsequent web services.
- C. A SAML token is used to determine the destination address of the next web service in the chain.
- D. The SAML token, embedded in the X.509 certificate or Kerberos ticket, is extracted by OWSM and delivered to the next web service in the chain.

Answer: A

Explanation: Propagating Identities through a Chain of Web Services

A web service may invoke another web service which in turn may invoke yet another web service

to complete a single transaction (this pattern is known as “chained web services”). Each of the services in the chain may be protected. Instead of checking which service is calling which other service, Oracle WSM allows you to check who the original user invoking the chain of web services is. Oracle WSM policies can be used to propagate the original user’s identity across the chained web services. Following successful authentication to the first web service in the chain, Oracle WSM sets the user as a Java Subject used throughout the transaction. When invoking another service, the Oracle WSM client policy picks up the user identity from the Java Subject, generates a SAML token based on the Subject’s information, and inserts the SAML token in the WS-Security header of the request message to be sent to the service provider. This allows all the web services in a chain to track the identity of the actual user calling a web service endpoint instead of having the identity of the prior service in the chain calling the first web service to get that information.

Note:

* Security Assertion Markup Language 2.0 (SAML 2.0) is a version of the SAML standard for exchanging authentication and authorization data between security domains. SAML 2.0 is an XML-based protocol that uses security tokens containing assertions to pass information about a principal (usually an end user) between a SAML authority, that is an identity provider, and a SAML consumer, that is a service provider. SAML 2.0 enables web-based authentication and authorization scenarios including cross-domain single sign-on (SSO).

Question No : 10

Which JDeveloper SOA project artifacts have references to the JNDI name of a resource adapter connection factory that is used in the project?

- A. .jca file
- B. .wsdl file
- C. .componentType file
- D. adf-config.xml file

Answer: D

Explanation: Example:

If the MDS database has a JNDI name, then use the following entries in adf-config.xml:

```
<metadata-store  
class-name="oracle.mds.persistence.stores.db.DBMetadataStore">  
<property name="jndi-datasource" value="{db.jndi.name}"/>  
<property name="partition-name" value="soa-infra"/>  
</metadata-store>
```

Question No : 11

An invoke activity in a BPEL process is dehydrated _____. (select two)

- A. immediately after execution if idempotent is set to True
- B. before execution if idempotent is set to True
- C. immediately after execution if idempotent is set to False
- D. before execution if idempotent is set to False

Answer: A,B

Question No : 12

Which statement is true about how the BPEL Process Manager works?

- A. If the transaction property for a synchronous BPEL process is set to requiresNew transaction, a new transaction is created for the execution and the existing transaction (if there is one) is suspended.
- B. If the transaction property for an asynchronous BPEL process is set to required, the BPEL process joins a caller's transaction (if there is no one) or creates a new transaction (if there is no transaction)
- C. If the delivery policy for a synchronous BPEL process is set to sync, the instance-

initiating message is not temporarily saved in the delivery layer.

D. If the delivery policy for a synchronous BPEL process is set to `async.persist`, messages to the system are saved in the delivery store before being picked up by the service engine.

Answer: A

Explanation: With `bpel.config.transaction` Set to `requiresNew` a new transaction is always created and an existing transaction (if there is one) is suspended.

Question No : 13

Which two features are provided by decision tables?

- A.** Sets of input data can be bucketed and reviewed for gaps.
- B.** Data sets can be reviewed for conflicts.
- C.** Data can be used for only one rule evaluation.
- D.** A rule evaluation can be used only to enter new output data.

Answer: A,B

Explanation: After you create a Decision Table there are operations that you may want to perform on the Decision Table, including the following:

- (A) Find and fix gaps in a Decision Table
- (B) Finding and resolving conflicts between rules in a Decision Table
- Compact or split cells in a Decision Table
- Merge a condition or split a condition in a Decision Table

A: * Compact the Decision Table

In this step you compact the rules to merge from eighteen rules to nine rules. This automatically eliminates the rules that are not needed and preserves the no gap, no conflict properties for the Decision Table.

* The Conditions area in a Decision Table includes one or more condition rows. Each condition row has a condition expression and, for each rule, a condition cell. A condition expression is an expression that you build in Rules Designer. The condition expression is often a fact property or a function result, but it can be any expression that has a type that

can be associated with a bucketset.

B: A Decision Table displays multiple related rules in a single spreadsheet-style view. In Rules Designer a Decision Table presents a collection of related business rules with condition rows, rules, and actions presented in a tabular form that is easy to understand. Business users can compare cells and their values at a glance and can use Decision Table rule analysis features by clicking icons and selecting values in Rules Designer to help identify and correct conflicting or missing cases.

Question No : 14

Composite A has two versions deployed to the SOA runtime. Version 2.0 is the default revision, and Version 1.0 is an earlier (but active) revision. Version 2.0 has 100 instances in the Running state also hits 50 instances that are waiting for a callback on a mid-process < receiver> within a BPEL component in the composite. You undeploy Version 2.0.

Which statement describes what happens after undeployment completes?

- A. All running Instances and the callbacks are allowed to complete on Version 1.0, but all new requests are served by Version 1.0.
- B. All running Instances are allowed to complete, the callbacks fail after undeployment and all new requests are served by Version 1.0.
- C. All running instances immediately go stale, including the instances that are awaiting callbacks on the mid process <receive>.
- D. All running instances immediately go stale, but the callbacks are processed by Version 1.0.

Answer: C

Explanation:

Note:

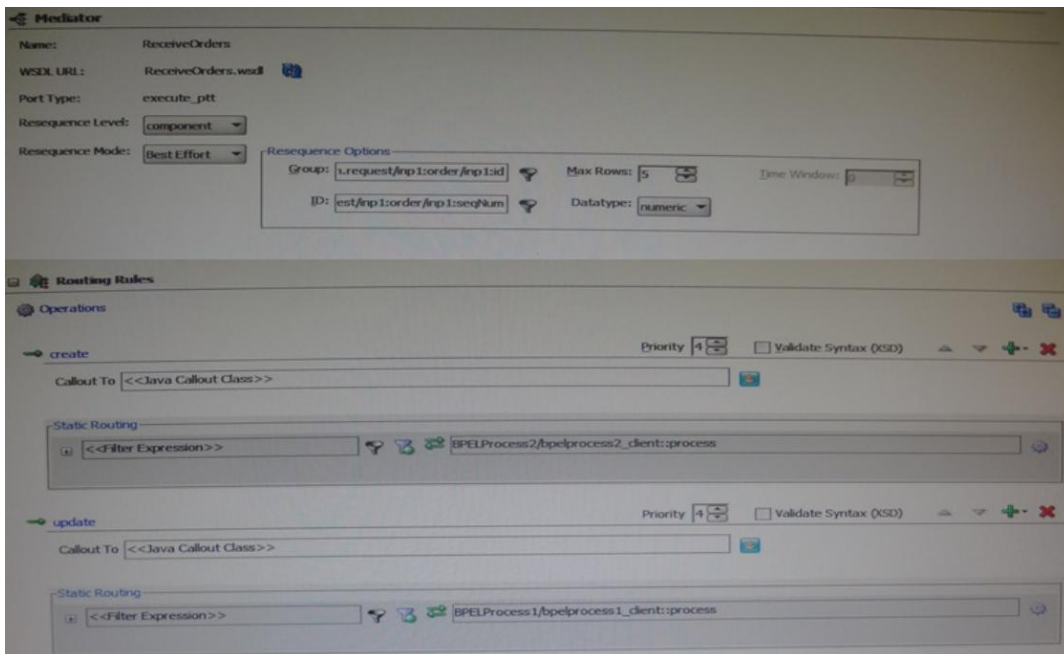
You can undeploy SOA composite applications from Oracle Enterprise Manager Fusion Middleware Control with the Undeploy SOA Composite wizard. Using the Undeploy SOA Composite wizard has the following consequences:

* The instance state of the undeployed composite application is set to stale. The instance state is available in the instance listing, and you can access audit trail and flow trace details.

- * If you undeploy the default revision of the SOA composite application (for example, 2.0), the next active, available revision of the application is automatically designated as the new default (for example, 1.0).
- * You can no longer configure and monitor this revision of the application.
- * You can no longer process instances of this revision of the application.
- * The state of currently running instances is changed to stale and no new messages sent to this composite are processed.
- * A warning message is displayed at the end of this wizard when you undeploy the default composite revision.

Question No : 15

View the Exhibit.



A user has configured Mediator M1 to receive and route product Information from System X into its internal applications in chronological order. For each product1 M1 receives one create number of "update" events from an AQ Queue via a JMS adapter. M1 can receive updates to the product at any time of day.

The user claims that incoming messages for each product are received and processed in the correct chronological order 95% of the time. However, the messages are being processed out of order 5% of the time. This results in critical errors in the target systems. The user expects all messages pertaining to a product to be unconditionally processed in the order of arrival at M1.

What causes this discrepancy?

- A. The user is running on a four node SOA cluster and has not configured the inbound JMS adapter to be a singleton.
- B. The user is running a single-node SOA environment but has configured the number of inbound adapter threads to be a value greater than 1.
- C. The given Mediator configuration does not address this sequencing requirement.
- D. The user has configured resequencer worker threads to a value greater than 1 for the Mediator service engine.

Answer: C

Explanation: * From the exhibit we see:

Resequence Level: component

Resequence Mode: Best Effort

* It is important to note that the messages to outbound services of the Oracle Mediator service component configured for best effort resequencing are not guaranteed to arrive in order of a sequence ID. At any given time, a snapshot of the available messages is taken and sequencing is performed only on those messages. Therefore, unlike a standard resequencer, it is not guaranteed that a message with a lesser sequence ID value is sent before a message that has a greater sequence ID value but that arrived earlier. Messages with a lesser sequence ID value that arrive later might be processed in the following cycle when a snapshot of available messages is taken again and the messages are reordered.

Question No : 16

You want to define a new event to be managed by the Event Delivery Network (EDN). The XSD is in place that defines the element that is to be the basis of the new event.

Which step do you perform next?

- A. Create a new event definition in the SOA Composite Editor.
- B. Use an editor to create the event using Event Definition Language (EDL) syntax.

- C. Create the new event definition as you configure the invoke activity that publishes the event in your BPEL process.
- D. Use Enterprise Manager to register the new event to EDN.

Answer: A

Question No : 17

What does service abstraction do?

- A. It hides the implementation details of a service. Including the location of the service, the interface, and the idempotence of the operations.
- B. It creates services quickly and easily for a variety of back-end technologies.
- C. It translates and transforms messages.
- D. It mediates security models.

Answer: A

Question No : 18

Identify the correct description of a business service.

- A. It is a service that is closely aligned with the goals of the business.
- B. It is metadata about an external service interface that enables Oracle Service Bus to integrate with the external service.
- C. It is programmable entity that enables Oracle Service Bus to connect to a Wide variety of interfaces.
- D. It is a complicated object that often takes days or weeks to implement, but it is highly scalable and reliable after it is complete.

Answer: B

Question No : 19

Suppose that you pass some data from a process variable as a parameter into a human task. The variable is then updated at a later time in a parallel stream of execution in the BPEL process while the human task still executing (that is, before is auctioned by the assignee)

What does the assignee see after opening the task in the workspace and looking at the parameter?

- A. The parameter contains the values of the process variable as it was when the task was created.
- B. The parameter contains the values of the process variable as it is at the current time (that is, when the user opened the human task in the workspace).
- C. The parameter is empty, and the task must be restarted to pick up the new values of the processes variable.
- D. It is not possible to determine from the information.

Answer: A

Explanation:

Note: The BPEL process specification does not provide a mechanism to ensure the thread safety of BPEL variables (that is, a lack of a synchronized qualifier such as in Java), which is necessary for true multithreaded programming.

Question No : 20

You have modeled a composite that has two BPEL processes: X and Y. The WSDL for Y defines a single portType with a one-way operation. The WSDL for X defines a single portType with a request-response operation. The component property `bpel.config.transaction` is set to `requiresNew` for Process X, and the component property `bpel.config.oneWayDeliveryPolicy` is set to `async.persist` for process Y. You have wired these components so that Y invokes X.

What is the result when X throws a `remoteFault` at runtime, assuming that X has no catch blocks defined within it?

- A. The transaction of X is rolled back, and process Y gets a `remoteFault` that can be caught and handled.
- B. A Fault policy defined for X for handling the `remoteFault` is triggered and handles the fault.
- C. The transaction of X is committed, and process gets a Fault back that can be caught and handled.
- D. The transactions of X and Y are both rolled back even if you have fault handlers configured for handling the remote fault in Y.

Answer: B

Explanation: * Main Process Calls the Subprocess Asynchronously

If onewayDeliveryPolicy=async.persist

(The BPELCallee process runs in a separate thread/transaction.)

then If The Subprocess Throws Any Fault...

The BPELCaller does not get a response because the message is saved in the delivery service. The BPELCallee transaction is rolled back if the fault is not handled

Question No : 21

In your solution, a web service client needs to invoke a series of three web services in support of a single transaction. The third web service needs the identity of the original web service client.

Which statement describes how the identity is made available by Oracle Web Services Manager (OWSM)?

- A.** The transaction manager accesses an internal table that maintains credentials used to invoke each individual web service in the chain.
- B.** Each web service in the chain does its own authentication so the third web service handles its own identity checking.
- C.** OWSM sets the user in the Java Authentication and Authorization (JAAS) Subject when the first web service successfully authenticates, and the Java Subject is used by subsequent web services to access the identity.
- D.** OWSM stores a SAML token from the first web service invocation in a database table, and that table is accessed by subsequent web services in the chain to retrieve identity.

Answer: C

Explanation: Propagating Identities through a Chain of Web Services

A web service may invoke another web service which in turn may invoke yet another web service to complete a single transaction (this pattern is known as “chained web services”). Each of the services in the chain may be protected. Instead of checking which service is calling which other service, Oracle WSM allows you to check who the original user invoking the chain of

Web services is. Oracle WSM policies can be used to propagate the original user’s identity across the chained web services. Following successful authentication to the first web service in the chain, Oracle WSM sets the user as a Java Subject used throughout the transaction. When invoking another service, the Oracle WSM client policy picks up the user

identity from the Java

Subject, generates a SAML token based on the Subject 's information, and inserts the SAML token in the WS-Security header of the request message to be sent to the service provider. This allows all the web services in a chain to track the identity of the actual user calling a web service endpoint instead of having the identity of the prior service in the chain calling the first web service to get that information.

Reference: Securing Web Services and Service-Oriented Architectures with Oracle Web Services Manager 11g, Oracle White Paper

Question No : 22

Your solution needs to validate, transform, and route data. You want to deploy the capability as a Service Component Architecture (SCA) composite application. You would most likely use a _____ to provide the functionality.

- A. Proxy service
- B. Business service
- C. BPEL service
- D. Spring component
- E. Mediator

Answer: E

Explanation: The primary building block of a mediation flow is called a mediation task. Mediation tasks are primitives that implement ESB functions such as logging, data transformation, routing, and so on.

Question No : 23

Composite X invokes an outbound DB adapter to write data to a database table. You have configured JCA at the binding component as follows:

```
<property name = "jca.retry.count" type = "xs:int" many = "false" override = "may" >
```