



Oracle

Exam 1z0-543

Oracle Application Integration Architecture 11g Essentials

Version: 6.0

[Total Questions: 70]

Question No : 1

What is the purpose of harvesting?

- A. to parse the implementation artifacts and persist their metadata to the AIA backend
- B. to source control the implementation artifacts
- C. to test the implementation
- D. to collect the produced artifacts and store them

Answer: A

Explanation: Harvesting of Artifacts. The metadata can be submitted to Oracle Enterprise Repository either from the command line, from Oracle JDeveloper, or using an Ant task. The Harvester scans for artifacts and harvests those artifacts to detect the dependencies that exist between them. The Harvester creates entities for these artifacts in Oracle Enterprise Repository and creates the relationships between them.

Reference: Oracle Fusion Middleware Configuration Guide for Oracle Enterprise Repository, Harvesting of Artifacts

Question No : 2

Which statement is true about the AIAConfigurationProperties.xml file?

- A. All the service-level configuration properties are stored within the module-level properties.
- B. All the module-level configuration properties are stored within the service-level properties.
- C. All the module-level configuration properties are stored within the system-level properties.
- D. All the service-level configuration properties are stored within the system-level properties

Answer: C

Explanation: AIA provides external configuration properties to influence the run-time behavior of system, infrastructure components, and services. These properties are provided as name-value pairs at the system, module, and service levels in AIAConfigurationProperties.xml.

The AIAConfigurationProperties.xml supports two types of configurations:

* System level, including module level

Contains system-level configuration name-value pairs and module-level configuration name-value pairs within the system level.

* Service level

Contains service-specific configuration name-value pairs.

Note: The AIA framework has this configuration file, `AIAConfigurationProperties.xml`, which groups a lot of information about the environment - logging levels, notification recipients, and a great deal of error handling behaviour.

Question No : 3

How do you jump start standards-compliant service deployment?

- A. By using AIA code generator tool to create a skeleton of ABCS
- B. By creating ABCS manually and by executing PIP Auditor to check compliance
- C. By enforcing sticker qa checks
- D. By manual code walkthrough

Answer: A

Explanation: AIA Service Constructor is an application that helps jump-start ABCS development by pregenerating AIA artifacts complying with architectural recommendations. It generates artifacts according to the AIA architecture naming recommendations and relieves developers of performing repeatable mundane tasks, making them focus more on value-added business scenario-specific tasks.

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack, Constructing an ABCS Using Service Constructor

Question No : 4

For upgrades, knowing what custom mappings have been done can be very useful for

customers to identify whether the upgrade will cause any functional issues. How will you identify the functional issues?

- A. XMAN (mapping compliance reports) reports in the CSV can be analyzed to find duplicate EBM mappings that also contain extended records.
- B. XMAN (mapping compliance reports) CSV reports can be analyzed to find the ABCS name that has changed.
- C. PIP Auditor reports can be analyzed to figure out the compliance of upgraded PIP.
- D. EOL2CSV reports can be analyzed to find the correct ABCS for specific business flow.

Answer: B

Explanation: The reuse of artifacts and effective information sharing are key principles of SOA governance. The XSL Mapping Analyzer (XMAN) analyzes mapping information that exists in cryptic Application Business Connector Service (ABCS) XSLT files and provides it in a more readable format so that existing connector mappings can be easily considered for reuse.

Being able to comprehend the mappings between an Application Business Message (ABM) and an Enterprise Business Message (EBM) becomes imperative when developing a connector based on existing connectors.

When preparing for an upgrade, use XMAN to compare customized mappings to Oracle-supplied mappings. Evaluate the results of these comparisons and make any necessary changes before performing the upgrade.

Reference: Oracle Application Integration Architecture, Infrastructure Components and Utilities Guide

Question No : 5

Which two statements are true for a requester ABCS?

- A. It receives the ABM as pay load and optionally returns the ABM as the response.
- B. It cannot have additional interactions with the requester application to enrich the ABM.
- C. It is supplied by the provider application to interface with an EBS.
- D. It enables the participating application to invoke an EBS either to access data or to perform transactional task.

Answer: A,D

Explanation: An ABCS (Application Business Connector Services) can be requester-specific or provider-specific. A **requester ABCS** accepts the request from the client application through a client-specific Application Business Message (ABM) and returns the response to the client application through a client-specific ABM. The role of the requester ABCS is to act as a vehicle to enable the participating application to invoke the EBS either to access data or to perform a transactional task. (D) The client side ABM is the payload that is passed by the requester application to the requester ABCS.

The requester application that wants to leverage an action must define the requester-specific ABCS. The requester application that wants to implement this ABCS could be Siebel CRM, PeopleSoft Enterprise CRM, or Oracle eBusiness Suite CRM. The requester application-specific ABCS must take the requester application-specific ABM as input and provide the requester application-specific ABM as output.

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack, Introduction to ABCS

Question No : 6

Which two statements are true about Enterprise Business Flow (EBF) in context of Oracle AIA?

- A. The EBF will have no activity that needs human-to-human interaction.
- B. The EBF will involve only human-to-human or service-to-service Interaction.
- C. The EBF will involve only system-to-system or service-to-service Interaction.
- D. The EBF will involve only system-to-system or human-to-human interaction.

Answer: A,C

Explanation: The EBF involves only system-to-system or service-to-service interaction. The EBF has no activity that needs human intervention.

Note: The EBF is used for implementing a business activity or a task that involves leveraging capabilities available in multiple applications. The EBF is about stringing together a set of capabilities available in applications to implement a coarse-grained business activity or task and composing a new service leveraging existing capabilities.

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack, Introduction to Enterprise Business Flows

Question No : 7

Which one best defines where an EBO is defined?

- A. WSDL document
- B. XSD document
- C. Java source file
- D. .cfg configuration file

Answer: B

Explanation: EBOs(Enterprise Business Objects)have the following characteristics:

* They contain components that satisfy the requirements of business objects from the source and target application data models.

* EBOs differ from other data models in that they are not data repositories.

Instead, they provide the structure for exchanging data. XML provides the vocabulary for expressing business data. The XML schema is an XSD file that contains the application-independent data structure to describe the common object.

* Each EBO is represented in an XML schema (XSD) file format.

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack,Introduction to EBOs

Question No : 8

On your project, you are ready to generate a Deployment Plan. What three parameter values will you need to be ready for?

- A. BOM file location as output file
- B. BOM file location as input file
- C. Deployment Plan file location as Input file
- D. Deployment Plan file location as output file
- E. Harvester Settings file location as output file

Answer: B,D,E

Explanation: B: ODI BOM is a hand-coded xml file with the list of artifacts to be imported

to ODI along with the list of tokens to be replaced and encrypted. This ODI BOM is provided as input to the Deployment Plan Generator to generate the ODI deployment plan.

D: The command to generate a deployment plan for ODI is similar to the command to generate a deployment plan for the Project Lifecycle Workbench BOM.

E: -DHarvesterSettings=<output path for the runtime Harvester setting file along with file name>

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack, Generating a Deployment Plan for ODI

Question No : 9

What should you define for an EBS before you begin implementing its operations?

- A. contract
- B. .cfg file
- C. XSD
- D. cross-reference

Answer: A

Explanation: The methodology for designing and implementing an EBS is a contract-first methodology, that is, the contract is defined and created before the EBS is implemented. The contract for an EBS is defined as a WSDL document.

Note: EBS(Enterprise Business Services)are the foundation blocks in the Oracle Application Integration Architecture (AIA). EBS represent the application or implementation-independent web service definition for performing a business task. The architecture facilitates distributed processing using EBS.

An EBS is a service interface definition, currently manifested as an abstract Web Service Definition Language (WSDL) document, which defines the operations, message exchange pattern, and payload that are applicable for each operation of a service.

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack, Designing the EBS

Question No : 10

In which two ways is an EBF similar to an EBS?

- A. They operate only on EBMs.
- B. They are external application-independent.
- C. They are developed at the same time in the life cycle.
- D. Both are modeled to implement only a single operation.

Answer: B,C

Explanation: Note on EBF (Enterprise Business Flow): The EBF is used for implementing a business activity or a task that involves leveraging capabilities available in multiple applications. The EBF is about stringing together a set of capabilities available in applications to implement a coarse-grained business activity or task and composing a new service leveraging existing capabilities. The EBF involves only system-to-system or service-to-service interaction. The EBF has no activity that needs human intervention. In a canonical integration, the EBF is an implementation of an Enterprise Business Service (EBS) operation and calls other EBSs. It never calls an Application Business Connector Service (ABCS) or the applications directly. In other integration styles, the caller invoking the EBF can be either an application or any other service.

Note on EBS: EBSs are the foundation blocks in Oracle Application Integration Architecture (AIA). An EBS represents the application or implementation-independent Web service definition for performing a business task, and the architecture facilitates distributed processing using EBS. Since an EBS is self-contained, it can be used independently of any other services. In addition, it can be used within another EBS.

You must construct an EBS when the business process integration is between multiple source applications and target applications using the canonical model.

The purpose of the EBS is to:

- * Provide the mediation between the requesting services and providing services.
- * Provide different operations invoked from a requester Application Business Connector Service (ABCS), an EBS, or an Enterprise Business Flow (EBF).
- * Route an operation to a suitable EBS, EBF, or provider ABCS based on the evaluation of the various routing rules for an operation.

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack, Introduction to Enterprise Business Flows

Question No : 11

Which tool is used to update existing CBP Implementation?

- A. Because it is implemented at a service, the AIA Service Constructor will be used.
- B. Because it is implemented as a Mediator component, the Oracle SOA Suite will be used.
- C. The Oracle BPEL Designer will be used.
- D. The Deployment Plan Generator will be used.

Answer: C

Explanation: Composite Business Processes (CBPs) are the implementation of process services. Process services orchestrate a series of human and automated steps, including enterprise-wide policies captured in business rules. These services run the implementations of the business processes in the Oracle Application Integration Architecture (AIA) Reference Process Models.

AIA recommends using BPEL for implementing CBPs. CBPs are long-running processes that may run from few seconds to days. A CBP has an interface and message structure that is detailed enough to capture all of the information about the source of the triggering event. In most cases, the event is triggered by customer-facing applications.

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack:

Designing and Constructing Composite Business Processes

Question No : 12

How will you ensure high performance and scalable design and coding without incurring the significant manual effort of PIP code walkthrough?

- A. by executing XMAN tool to produce mapping reports
- B. by adding more error handlers in the BPEL flows
- C. by using PIP Auditor to scan the source code of ABCS to check for adherence to standards and policies
- D. by creating complex test cases using CAVS

Answer: C

Explanation: The PIP Auditor is run against your BPEL and ESB code to check whether they follow the AIA methodology for coding conventions. The output is a static HTML

report. Therefore, the results are a single snapshot of your code at the time it was run. The PIP Auditor can be run against Oracle out-of-the-box PIPs, against PIPs that you have customized, or against your custom code that follows AIA design and development guidelines. Thus, in some cases, you may want to run the report weekly to continuously monitor your progress (or lack thereof) of coding compliancy.

The PIP Auditor reports on compliancy to coding standards.

The PIP Auditor also provides suggestions for fixes for each of the identified violations.

The PIP Auditor generates what is called a “Technical Compliance Report”, reporting code violations based on rules, priority, category, project, and test suite.

Reference: White Paper, OVERVIEW OF THE ORACLE AIA FOUNDATION PACK PIP AUDITOR

Question No : 13

For security reasons, one of your clients has a requirement to change AIA schema passwords every 30 days. What sequence of steps should the IT administrator perform, after the passwords are changed, to ensure that all the AIA applications work correctly?

- i. Update the new passwords in AIAInstallProperties.xml.
- ii. Encrypt the passwords using UpdateStore utility.
- iii. Return Foundation Pack Deployment Plan.
- iv. Execute only configuration section of the Foundation Pack Deployment Plan.
- v. Update passwords in all AIA Datasources from Weblogic admin console.
- vi. Launch OUI installer and execute only configurations section using the OUI configuration assistant.
- vii. Encrypt the passwords using CreateStore utility.

- A. i, vii, v, vi
- B. i, ii, iii and v
- C. i, ii and v
- D. i, vii, and vi

Answer: D

Explanation: First manually change the passwords in the file AIAInstallProperties.xml. Then we encrypt the passwords with the CreateStore utility. Use Oracle Universal Installer (OUI) to apply the appropriate section.

Question No : 14

Which two statements are true about the purpose of Bill-of-Material on the AIA Project Workbench?

- A. Bill-of-Material has no significance.
- B. Bill-of-Material visually displays decomposition on UI.
- C. Bill-of-Material is the input to auto-generate the Deployment Plan.
- D. Bill-of-Material indicates the composite membership to a given project.

Answer: B,C

Explanation: B: In Project Lifecycle Workbench, seed data can be categorized into two areas:

* Bill of material (BOM) data

Bill of material seed data contains information about the SOA composites in a Project Lifecycle Workbench project. You can produce a BOM.xml file from the Project Lifecycle Workbench user interface (UI) based on seed data residing in the Project Lifecycle Workbench backend.

* Functional decomposition data

C: Deployment Plan Generator takes the following four command line inputs.

* BOM.xml: The BOM (bill-of-material) file is exported from the Project Lifecycle Workbench UI for the projects that are selected. BOM.xml contains the annotations to the services that are specified by users. These annotations are read by the Deployment Plan Generator to generate the deployment plan for the selected services. This deployment plan is used to configure the required configuration and deploy the services to the FMW server.

* ODIBOM.xml

* File path for the Deployment Plan to be generated

* File path of the HarvesterSettings.xml to be generated

Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack:

Working with Project Lifecycle Workbench Seed Data

Generating Deployment Plans and Deploying Artifacts

Question No : 15

Which approach would you use to implement coordination of asynchronous activities in creating an EBF?

- A. Mediator
- B. Java
- C. WSDL
- D. BPEL

Answer: D

Explanation: How to Implement the EBF as a BPEL Service

To implement the EBF:

1. Create a new WSDL.

Create a WSDL for the EBF following the EBF naming standards and the WSDL templates provided.

- 2. Implement the EBF as a synchronous or asynchronous BPEL process.
- 3. Enable error handling and logging.
- 4. Enable extensibility points in the EBF.

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack:

Designing and Constructing Enterprise Business Flows

Question No : 16

Identify the correct command to manually deploy Custom Built Services.

- A. `ant -DDeploymentPlan = /home/oracle/Desktop/DD.xml-DpropertiesFile = < AIA_HOME >aia_instances/ < AIA_INSTANCE>/config/AIAInstallProperties.xml -f<AIA_HOME>/Infrastructure/Install/AID/AIAInstallDriver.xml -1 /home/oracle/Desktop/Deploy.log`
- B. `ant-DDDeploymentPlan=/home/oracle/Desktop/DD.xml-DPropertiesFile =< AIA_HOME`

```
>aia_instances/ < AIA_INSTANCE>/config/AIAInstallProperties.xml-  
f<AIA_HOME>/Infrastructure/Install/AID/AIAInstallDriver.xml  
C. ant-DDeploymentPlan=/home/oracle/Desktop/DD.xml- DPropertiesFile =< AIA_HOME  
>aia_instances/ < AIA_INSTANCE>/config/AIAInstallProperties.xml- 1  
/home/oracle/Desktop/deploy.log  
D. ant-DDeploymentPlan=/home/oracle/Desktop/DD.xml-  
f<AIA_HOME>/Infrastructure/Install/AID/AIAInstallDriver.xml- 1  
/home/ oracle / Desktop / deploy.log
```

Answer: A

Explanation: How to Deploy Custom-Built Services

To deploy custom-built services:

1. Run <AIA_HOME>/aia_instances/<instance_name>/bin/aiaenv.sh command.
2. Run the following command:

```
ant -DDeploymentPlan=<absolute path of the file> -  
DPropertiesFile=<absolute path of the file> -f  
<AIA_HOME>/Infrastructure/Install/AID/AIAInstallDriver.xml -l <  
absolute path of the log file>
```

* The DeploymentPlan is the file that was generated in the previous step.

* The PropertiesFile, AIAInstallProperties.xml, contains the details of the AIA environment and is located here: <AIA_HOME>/aia_instances/<instance_name>/config.

Reference: Oracle Application Integration Architecture, Development Guide

Question No : 17

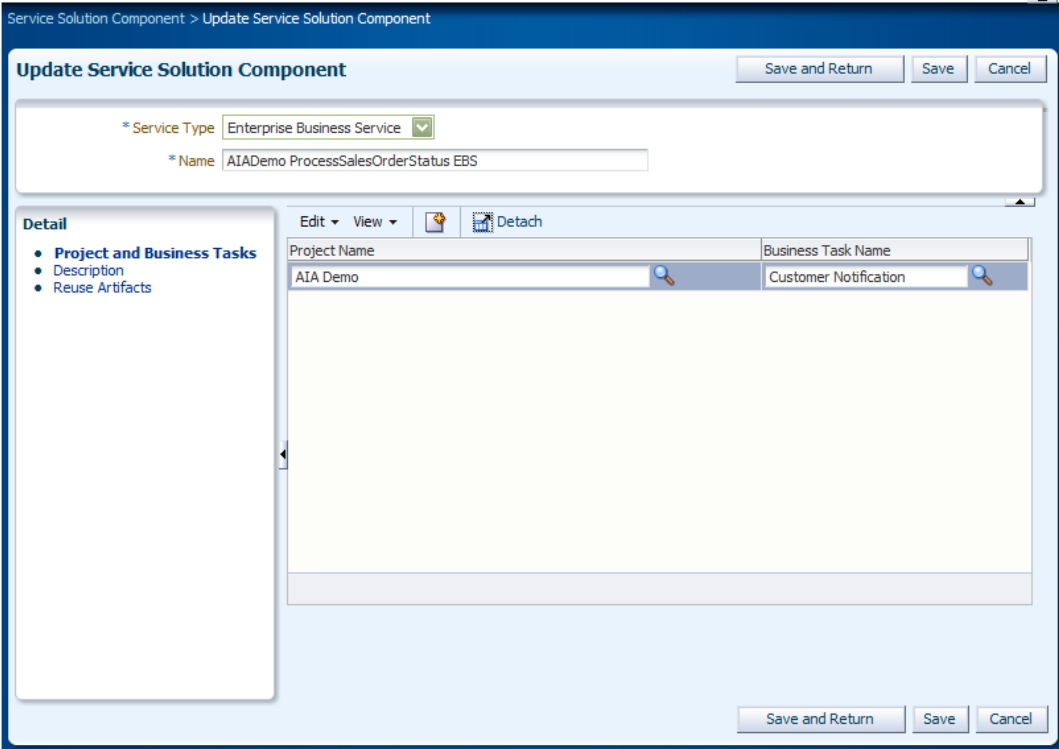
Which two statements are true about Service Solution Component?

- A. EBO is an example of Service Solution Component.
- B. Service Solution Component can represent an existing service/composite implementation to be reused.
- C. Service Solution Component can represent a new service/composite implementation to be built.
- D. EBM is an example of Service Solution Component.

Answer: B,C

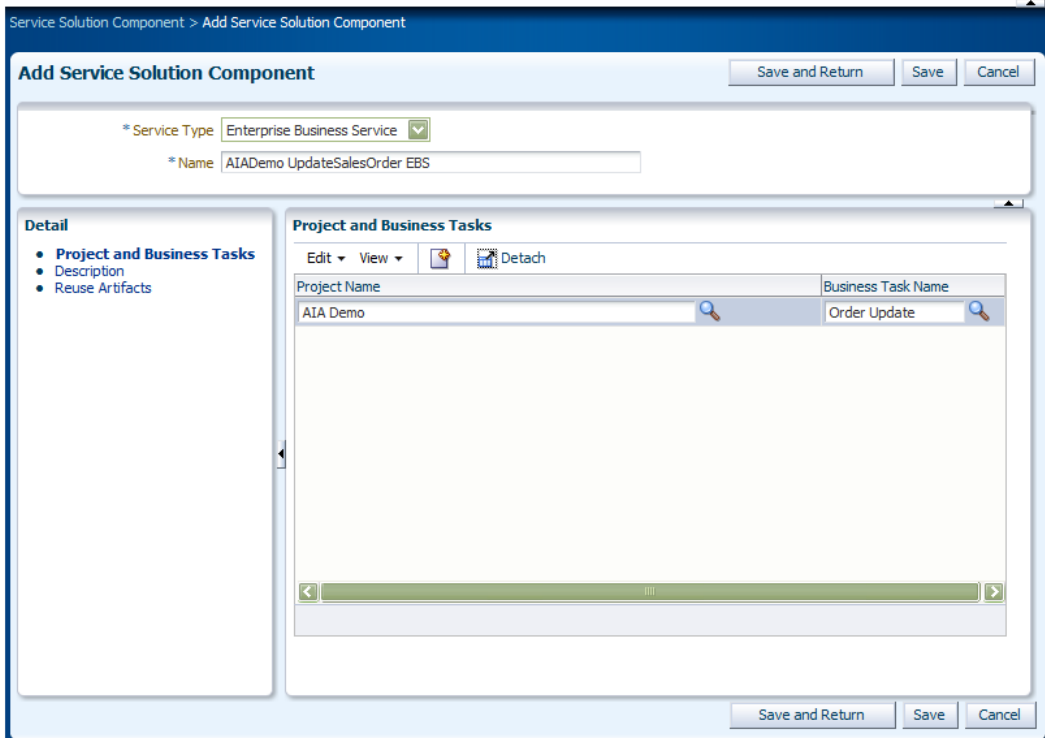
Explanation: B: You can reuse and update an existing Service Solution Component.

Update Service Solution Component Page



C: Select a Service Type value: Requestor ABCS, Provider ABCS, Enterprise Business Flow, Enterprise Business Service, Composite Business Process, or Others.

Add Service Solution Component Page



Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack:

Working with Project Lifecycle Workbench

Question No : 18

What are the two potential extensibility points for a requester ABCS supporting a request/response MEP?

- A. Just before the transformation of ABM to EBM
- B. just before the invocation of the ABCS
- C. Just before the invocation of the application service
- D. just before the transformation of EBM to ABM

Answer: A,D

Explanation: For request/response Requester ABCS, you can hook your custom code to four extensibility points:

* Just prior to the execution of transformation of application business message (ABM) to Enterprise Business Message (EBM). Use this configuration property name:

ABCSExtension.PreXformABMtoEBM. (A)

* Just prior to the invocation of the enterprise business service (EBS). Use this configuration property name: ABCSExtension.PreInvokeEBS.

* Just prior to the execution of transformation of EBM to ABM and after invoking the EBS. Use this configuration property name: ABCSExtension.PostInvokeEBS. (D)

* Just prior to the invocation of callback service or response return and transforming EBM to ABM. Use this configuration property name: ABCSExtension.PostXformEBMtoABM.

The third and fourth extension points are available only in ABCS implementing request-response pattern.

Note:An ABCS, regardless of whether it is requester or provider specific, can invoke custom code a minimum of either two or four times during its execution. These serve as extensibility points.

The ABCS supporting request-response pattern in either synchronous or asynchronous mode has four extensibility points. An ABCS supporting fire-and-forget patterns has two extensibility points. You can develop "add-ins" and have them hooked to these extensibility points. These "add-ins" - customer-developed services- behave as an extension to the delivered ABCS. Each extension point allows one hook so only a single customer extension can be plugged in.

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack:

Developing Extensible ABCS

Question No : 19

Which statement best describes the relationship between JDeveloper and CAVS?

- A. CAVS is an extension for JDeveloper to help Jumpstart the development of AIA artifacts, such ABCSs.
- B. CAVS configuration settings can be changed from JDeveloper.
- C. JDeveloper provides wizards to set up simulator definitions.
- D. CAVS functionality is not integrated Into JDeveloper.

Answer: D

Explanation: During the service construction phase, **Developers** extend available AIA services, if needed, or design and develop new services.

The tasks of this phase include the following tools:

*The **Composite Application Validation System (CAVS)** supports process and service testing.

* The **Service Constructor**

*The **error handling framework**

*The service solution components defined in the **Project Lifecycle Workbench**

Note 0: JDeveloper is a freeware IDE supplied by Oracle Corporation. It offers features for development in Java, XML, SQL and PL/SQL,HTML, JavaScript, BPEL and PHP.

JDeveloper covers the full development lifecycle from design through coding, debugging, optimization and profiling to deploying.

Note 1: For AIA development and testing, the setup of development and test environments

consists of the following activities:

* Set up Oracle JDeveloper for AIA.

JDeveloper is the integrated development tool of choice.

* Set up Oracle Fusion Middleware for AIA.

The Oracle Fusion Middleware environment is for deploying the AIA service and artifacts and for running through all Quality Assurance test cases.

* Set up AIA Workstation.

AIA Workstation is the designated machine where the AIA Foundation Pack is set up.

Note2:The Composite Application Validation System (CAVS) enables you to configure test data, execute tests, review test results, and migrate tests using the following user interface (UI) components: **Test Definitions, Simulator Definitions, Group Definitions**

Question No : 20

Which object is used to pass data from the EBF to the EBS and then on to the ABCS that accesses a provider system?

- A. CBP
- B. EBO
- C. EBM
- D. ABM

Answer: C

Explanation: The Oracle Application Integration Architecture (AIA) methodology for designing and implementing an EBF is contract first methodology. Hence, the contract must be defined and created before the implementation of the EBF.

To define the contract:

1. Identify the EBF.
2. Identify the pattern for the EBF.
3. Identify the Enterprise Business Message (EBM) to be used for the requests and responses (if any).

Note: Any application invoking the Enterprise Business Services (EBSs) has to generate the EBM to pass the EBM as a payload to the EBS.

At the most basic level, EBMs (Enterprise Business Messages) are the messages that are

exchanged between two applications. The EBM represents the specific content of an EBO needed for performing a specific activity.

Reference: Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack:

Designing and Constructing Enterprise Business Flows

Note #1: The Enterprise Business Flow (EBF) is used for implementing a business activity or a task that involves leveraging capabilities available in multiple applications. The EBF is about stringing together a set of capabilities available in applications to implement a coarse-grained business activity or task and composing a new service leveraging existing capabilities. The EBF involves only system-to-system or service-to-service interaction. The EBF has no activity that needs human intervention.

In a canonical integration, the EBF is an implementation of an Enterprise Business Service (EBS) operation and calls other EBSs. It never calls an Application Business Connector Service (ABCS) or the applications directly. In other integration styles, the caller invoking the EBF can be either an application or any other service.

Note #2: EBSs (Enterprise Business Services) are the foundation blocks in Oracle Application Integration Architecture (AIA). An EBS represents the application or implementation-independent Web service definition for performing a business task, and the architecture facilitates distributed processing using EBS. Since an EBS is self-contained, it can be used independently of any other services. In addition, it can be used within another EBS.

Question No : 21

Which two roles have permission to revise the functional decomposition of an AIA Project?

- A. AIALifecycleUser
- B. AIALifecycleDeveloper
- C. AIALifecycleInstallDeveloper
- D. AIAApplicationUser

Answer: A,B

Explanation: The ability to view a BOM using the View Bill Of Material link is available only to a user with the AIALifeCycleUser or AIALifeCycleDeveloper role assigned.

Not C: Users with the AIALifeCycleInstallDeveloper role assigned will not see the View Bill