

# **Oracle 1z0-574**

# **Oracle IT Architecture Essentials**

Version: 4.0



# **QUESTION NO: 1**

Which of the following are ORA Engineering logical categories?

- A. Integrated Development Environment
- **B.** Quality Manager
- C. Asset Manager
- D. Monitoring and Management

Answer: A,B

**Explanation:** The Engineering logical view shows the logical components of the Engineering environment and

show how they are connected to each other. T

The primary logical categories as shown are:

- \*Modeler
- \*Integrated Development Environment (IDE)
- \*Quality Manager
- \*Deployment Manager
- \*Metadata Repository
- \*Asset Repository

Reference: Oracle Reference Architecture, Software Engineering, Release 3.0, Engineering Logical View

## **QUESTION NO: 2**

Which of the following options best describes the concept of data-driven testing?

- **A.** Data-driven testing is a strategy used to perform load testing.
- **B.** Data-driven testing is used to perform functional tests by iterating through data sets in a databank.
- **C.** Data-driven testing uses a single predefined data set to perform repeated testing.
- **D.** Data-driven testing uses database triggers to initiate and run test cases.

#### **Answer: B**

**Explanation:** One of the best ways to perform functional testing is through data-driven testing, in which a databank is created to cover the various functional use cases and is used to drive the testing. This requires the ability to iterate through a list of data sets in the databank, substitute them for the input values, and run the tests.

Reference: Oracle Reference Architecture, Software Engineering, Release 3.0, Data driven testing



#### **QUESTION NO: 3**

As part of a company-wide IT Initiative to simplify and rationalize the technology and products used you have been tasked with defining an Enterprise Architecture. The Enterprise Architecture will be used to communicate the desired future state where redundant, deprecated, and undesired technology and products have been eliminated. Oracle products will be included. In the Enterprise Architecture, it will be products from other vendors, including products that directly compete with Oracle products.

Which option best describes how IT Strategies from Oracle (ITSO) material can be used while creating the Enterprise Architecture?

- **A.** The ITSO material cannot be used because ITSO applies to Oracle products only.
- **B.** The ITSO material can be used without modification because it has no Oracle product dependencies.
- **C.** The ITSO material can be used as reference material but will require customization to reflect specific products selected by the company.
- **D.** The Oracle Reference Architecture component of ITSO can be readily applied, but the Rest of ITSO cannot, because of product dependencies.
- **E.** The Oracle Reference Architecture component of ITSO cannot be applied due to pre dependencies, but the rest of ITSO can be applied.
- F. The ITSO material is not applicable to rationalization of IT asset

## **Answer: C**

**Explanation:** IT Strategies from Oracle (ITSO) is a series of documentation and supporting collateral

designed to enable organizations to develop an architecture-centric approach to enterprise-class IT initiatives. ITSO presents successful technology strategies and solution designs by defining universally adopted architecture concepts, principles, guidelines, standards, and patterns.

ITSO is made up of three primary elements:

- \* Oracle Reference Architecture (ORA) defines a detailed and consistent architecture for developing and integrating solutions based on Oracle technologies. The reference architecture offers architecture principles and guidance based on recommendations from technical experts across Oracle. It covers a broad spectrum of concerns pertaining to technology architecture, including middleware, database, hardware, processes, and services.
- \* Enterprise Technology Strategies (ETS) offer valuable guidance on the adoption of horizontal technologies for the enterprise. They explain how to successfully



execute on a strategy by addressing concerns pertaining to architecture, technology, engineering, strategy, and governance. An organization can use this material to measure their maturity, develop their strategy, and achieve greater levels of success and adoption. In addition, each ETS extends the Oracle Reference Architecture by adding the unique capabilities and components provided by that particular technology. It offers a horizontal technology-based perspective of ORA.

\* Enterprise Solution Designs (ESD) are industry specific solution perspectives based on ORA. They define the high level business processes and functions, and the software capabilities in an underlying technology infrastructure that are required to build enterprise-wide industry solutions. ESDs also map the relevant application and technology products against solutions to illustrate how capabilities in Oracle's complete integrated stack can best meet the business, technical and quality of service requirements within a particular industry.

Reference: IT Strategies from Oracle, An Overview, Release 3.0

## **QUESTION NO: 4**

The three common goals of Information security are known as the CIA triad. CIA stands for:

- A. Confidentiality, Integrity and Auditing
- B. Confidentiality, Integrity and Availability
- C. Confidentiality, Integrity and Access Control
- **D.** Confidentiality, Integrity and Authentication
- E. Confidentiality, Integrity and Authorization

# Answer: B

**Explanation:** For over twenty years, information security has held confidentiality, integrity and availability (known as the CIA triad) to be the core principles of information security. There is continuous debate about extending this classic trio.

#### Note:

Confidentiality is the term used to prevent the disclosure of information to unauthorized individuals or systems.

In information security, integrity means that data cannot be modified undetectably. For any information system to serve its purpose, the information must be available when it is needed.



#### **QUESTION NO: 5**

Which statements best describe how architecture principles are used within the Oracle Reference Architecture (ORA)?

- **A.** The architecture principles for Oracle products are identified whenever an Oracle product incorporated into the architecture.
- **B.** ORA uses multiple architecturalviews where each view has its own architecture principles.
- **C.** ORA documents describe the architectural principles upon which the architecture is based.
- **D.** Architecture principles provide recommendations (based on industry best practices) that should be followed.
- **E.** Architecture principles are rules that must be followed in order to comply with the documented architecture.

# **Answer: C**

**Explanation:** The purpose of ORA is to provide a reference architecture for designing, building, and

integrating solutions based on modern technology from Oracle and other vendors. The reference architecture offers architecture principles and guidance based on recommendations from Oracle product development architects and field experts. Information provided by ORA gives architects an understanding of how to design solutions for the Oracle environment and best leverage its capabilities.

Note:Oracle Reference Architecture (ORA) defines a detailed and consistent architecture for developing and integrating solutions based on Oracle technologies. The reference architecture offers architecture principles and guidance based on recommendations from technical experts across Oracle. It covers a broad spectrum of concerns pertaining to technology architecture, including middleware, database, hardware, processes, and services.

Reference: IT Strategies from Oracle, An Overview, Release 3.0

# **QUESTION NO: 6**

Which statement best describes the relationship between a SOA Service and service Infrastructure?

- **A.** Service infrastructure is a primary part of an SOA Service.
- B. Service Infrastructure exposes the Service Interface and may satisfy some capabilities of the



Service Implementation.

- C. Service infrastructure fulfills the Service Contract.
- **D.** A SOA Service depends on the service infrastructure to satisfy some required capabilities.
- E. A SOA Service uses the service infrastructure to generate the Service Interface.

**Answer: B** 

**Explanation:** The Service Infrastructure side typically provides the Service enablement capabilities

for the implementation. These capabilities may include, exposing the interface as a Web Service, handling SLA enforcement, security, data formatting, and others. Service infrastructure should be utilized when possible, as it reduces the burden on Service providers, from an implementation standpoint.

Reference: Oracle Reference Architecture, SOA Foundation, Release 3.1

#### **QUESTION NO: 7**

Which WebCenter product Improves efficiency and productivity by enabling users to connect with others, regardless of their location, via web and voice conferencing, instant messaging, presence, and chat rooms?

- A. Oracle WebCenter Intelligent Collaboration
- B. Oracle WebCenter Anywhere
- C. Oracle WebCenter Real-Time Collaboration
- D. Oracle WebCenter Spaces

#### **Answer: C**

**Explanation:** Oracle WebCenter Real-Time Collaboration improves efficiency and productivity by enabling users to connect and collaborate with others via instant messaging, presence, chat rooms, and web and voice conferencing. It complements other Enterprise 2.0 services available in Oracle WebCenter by offering real-time collaboration capabilities to users who require direct interaction and immediate response.

#### **QUESTION NO: 8**

Bottom-up service Identification analyzes existing systems to Identify SOA Services. Top-down service identification analyzes business processes to identify SOA services.

Which statement best describes the relationship between top down and bottom-up service



identification in Service-Oriented Integration?

- **A.** Only a bottom up approach shouldbe used because the goal of SOIis to provide SOA Services exposing existing systems.
- **B.** Only a top-down approach should be used because the goal of SOI is composite application assembly.
- **C.** A bottom-up approach should be used to identify which SOA Services are built; then a top-down approach should be used to determine which SOA Services are used by each composite application.
- **D.** A top-down approach should be used to determine the needed SOA Services; then a bottom-up approach should be used to determine how existing source systems can meet the requirements top-down approach should be used by business, and a bottom-up approach should be used by IT.Theoverlap between the SOA Services Identified by the two methods are the ones that should

# Answer: D Explanation:

Note: There are three schools of thought around "how to build an Enterprise Service Oriented Architecture." They are:

- \* Top down central group decides everything and the dev teams adopt them.
- \* Bottom up central group provides a directory and dev teams make whatever services they want. Dev teams go to the directory to find services they can use.
- \* Middle out central group provides key elements of the interface, including numbering schemes, message exchange patterns, standard communication mechanisms, and monitoring infrastructure, and encourages the dev teams to use it to build services that can be shared.

#### **QUESTION NO: 9**

Which of the following are the key drivers for Grid computing?

- **A.** Improved server utilization Grid computing allows companies to lower costs through the efficient use of resources.
- **B.** Better agility and flexibility Businesses experience constant change and the underlying IT Infrastructure should be agile enough to support that kind of change.
- **C.** OpEx model Enterprises require pay-as-you-go services to reduce the dependency on capital expenditure and take advantage of the benefits of operational expenditure.
- **D.** Lower Initial cost-There is a need to reduce the Initial investment at the cost of an increased operational cost.

Answer: A,B,D

**Explanation:** Using a grid computing architecture, organizations can quickly and easily create a



large-scale

computing infrastructure from inexpensive, off-the-shelf components (D). Other benefits of grid computing include

- \* Quick response to volatile business needs (B)
- \* Real-time responsiveness to dynamic workloads
- \* Predictable IT service levels
- \* Reduced costs as a result of improved efficiency and smarter capacity planning (A)

Note: One way to think about grid computing is as the virtualization and pooling of IT resources—compute power, storage, network capacity, and so on—into a single set of shared services thatcan be provisioned or distributed, andthen redistributed as needed.

As workloads fluctuate during the course of a month, week, or even through a single day, the grid computing infrastructure analyzes the demand for resources in real time and adjusts the supply accordingly.

Grid computing operates on three basic technology principles: Standardize hardware and software components to reduce incompatibility and simplify configuration and deployment; virtualize IT resources by pooling hardware and software into shared resources; and automate systems management, including resource provisioning and monitoring.

Grid computing operates on these technology principles:

- \* Standardization.
- \* Virtualization.
- \* Automation.

Reference: Oracle Grid Computing, White Paper

# **QUESTION NO: 10**

Which of the following statements are true about an end-to-end security strategy?

- **A.** End-to-end security and point-to-point security are virtually identical strategies proposed by different security vendors.
- **B.** End-to-end security strives to protect data at rest, even in temporary queues.
- **C.** End-to-end security often involves some form of message-level protection.
- **D.** When end-to-end security is enabled. Point-to-point transport-level encryption should be disabledin order to avoid cryptography conflicts between layers.
- E. End to-end security is highly beneficial for distributed computing environments where many



point-point connections and intermediaries exist, because it offers seamless data protection.

Answer: B,C,E

**Explanation:** B:End to end security is an information-centric perspective of security where information is protected throughout the entire computing environment. That is, from the points where system interactions originate, through all points of integration, processing, and persistence.

End to end security is often associated with the secure transmission, processing, and storage of data, where at no time are data unprotected

## Note:

For a typical web-based application, end to end security generally begins at the client/browser, and ends at the application database and all external dependencies of the application.

A common challenge in providing end to end security is finding a suitable way to secure data in all states and points along the processing path that does not interfere with any transmission, routing, processing, and storage functions that need to occur along the way. Sensitive data will usually need to be decrypted at certain points in order for processing or message routing to occur.

#### **QUESTION NO: 11**

Conceptually, the ORA model of a "modern UI" defines which three layers from the following list?

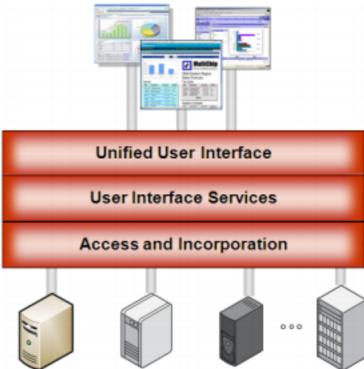
- **A.** Unified User Interface layer provides the control and visual elements that define the interaction that the user has with the system.
- **B.** Integration layer provides connectors to simplify and standardize Interaction with back-end-terns.
- **C.** Device Management layer provides transformation and transcoding to support a wide variety of devices.
- **D.** Browser Mediation layer adapts output to conform to the standards and capabilities of each browser type.
- E. User Interface Services layer provides reusable functions specialized to the needs of the end
- **F.** Access and Incorporation layer provides the capability to Incorporate data and functionality from any number of back-end systems into the user interface.

Answer: A,E,F

**Explanation:** Note:



# Conceptual View



A: The Unified User Interface layer provides the control and visual elements that define the interaction the user has with the system. This layer separates the way the user interacts with the system from the underlying functionality provided by the system. This has many advantages including allowing different display devices to be supported via control and visual elements specialized for the device since, for example, mobile devices do not have nearly the screen real estate of a desktop computer.

E: The User Interface Services layer provides a set of functionality that can be used and reused in a variety of ways to deliver various user interfaces specialized to the needs of the end user. This illustrates that the underlying functionality is separated from the visual and control elements built into the user interface. The services provided by this layer may come from a variety of sources located anywhere that is network accessible. F: The Access and Incorporation layer provides the capability to incorporate data and functionality from any number of backend systems into the user interface. Generally, there are two types of backend systems that need be incorporated into the user interface: systems that are designed for use with user interface (e.g. LDAP, dedicated database) and systems that are not (e.g. legacy applications). The former type systems can be access directly by the user interface architecture. Ideally the latter type should be accessed via a robust integration architecture rather than relying on point-to-point integrations.

This distinction is the reason that the term "incorporation" is used in this Conceptual