Question 1

As an Enterprise Architect, you must ensure that future extensions to the Digital Core of the enterprise guarantee stable and reliable operations. The architecture guideline demands to follow the clean-core strategy. What does this demand ensure and entail?

Options:

A- Extensions do not break an upgrade, and upgrades do not break an extension. Such extensions can access SAP business objects only through well defined, upgrade-stable interfaces.

B- Extensions may access SAP tables directly and in a well-documented, clean way. Therefore, the code of extensions can be adapted quickly to accommodate future changes.

C- Extensions are kept strictly separate from the SAP application, Extensions are developed in accordance with the SAP Application Extension Methodology. Side-by-side extensibility options are always preferable to on-stack extensibility options.

Answer:

C

Explanation:

The clean-core strategy is fundamental to ensuring that the Digital Core remains stable and reliable during operations and future upgrades. By following this strategy, any extensions made are guaranteed not to affect the core system upgrades, and likewise, system upgrades will not disrupt the functionality of the extensions. This is achieved by using well-defined and stable interfaces for extensions to interact with SAP business objects, ensuring compatibility and stability across system updates. Reference = The SAP architecture guidelines which prescribe maintaining a clean core, detailing how to develop extensions that are compatible with SAP's upgrade strategy and protect the integrity of the core system.

Question 2

Question Type: **MultipleChoice**

Which runtime environments does SAP directly support an SAP BTP?

Options:

A- SAP BTP, Cloud Foundry environment/SAP Business Technology Platform (BTP), ABAP environment/SAP BTP, Kyma runtime

B- Kubemetes/SAP Business Technology Platform (BTP), ABAP environment

C- OpenJDK for Java applications/Openshift for Kubernetes

Answer:

A

Explanation:

SAP Business Technology Platform (BTP) is a suite of cloud-based platform-as-a-service (PaaS) offerings from SAP. BTP provides a variety of runtime environments for running applications, including:

SAP BTP, Cloud Foundry environment:This is a popular runtime environment for running Java, Node.js, and Python applications.

SAP Business Technology Platform (BTP), ABAP environment:This is a runtime environment for running ABAP applications.

SAP BTP, Kyma runtime:This is a runtime environment for running Kubernetes-based applications.

In addition to these runtime environments, BTP also provides a number of other services, such as:

Database services:BTP provides a variety of database services, including SAP HANA, MySQL, and PostgreSQL.

Messaging services:BTP provides a variety of messaging services, such as SAP Cloud Platform Integration and SAP Cloud Platform Event Mesh.

Storage services:BTP provides a variety of storage services, such as SAP Cloud Platform Object Storage and SAP Cloud Platform File Storage.

BTP is a comprehensive platform that provides a variety of services for running applications and managing data. The different runtime environments available in BTP allow you to choose the right environment for your specific needs.

SAP BTP supports multiple runtime environments for different purposes and skill sets. A runtime environment is any runtime that hosts applications and services.An SAP BTP environment provides integration into the SAP BTP account model, cockpit, and permissions management10. The following are the runtime environments that SAP directly supports on SAP BTP:

SAP BTP, Cloud Foundry environment: This environment allows you to create polyglot cloud applications in Cloud Foundry. It supports various programming languages, such as Java, Node.js, Python, Go, and PHP. It also provides a code-to-container packaging and deployment model, platform-managed application security patching and updates, automatic application routing, load balancing, health checks, and multilevel self-healing. It also supports the Cloud Application Programming Model (CAP), which is an opinionated framework for developing business applications.

SAP Business Technology Platform (BTP), ABAP environment: This environment allows you to create ABAP-based cloud applications within the Cloud Foundry environment. It supports the ABAP programming language and the ABAP RESTful Programming Model (RAP), which is a framework for developing RESTful services and user interfaces. It also provides an integrated development lifecycle and enables you to reuse existing on-premise ABAP assets.

SAP BTP, Kyma runtime: This environment provides a fully managed cloud-native Kubernetes application runtime based on the open-source project "Kyma". It supports various programming languages and models, such as Node.js, Python, Go, Java, CAP, and serverless functions. It also provides a built-in service mesh, eventing framework, API gateway, service catalog, and service binding capabilities. It enables you to develop highly scalable, microservice-based applications and user-centric process extensions.

Verified Reference:10: https://help.sap.com/docs/btp/architecture-and-development-guide-for-industry-cloud-solutions/runtimes-environments-and-programming-models | : https://help.sap.com/docs/btp/sap-business-technology-platform/environments

Question 3

As a result of solution mapping, business capabilities might require services which partners have implemented in SAP BTP. Which SAP components and services, if any, are required to integrate such BTP partner services with an on-premise SAP S/4HANA system (hybrid scenario)?

Options:

A- SAP HANA Cloud Connection, and the corresponding SAP Data Provisioning Agent, to make the on-premises system available to applications and services in a given SAP BTP sub account. Preferably use the SAP BTP Destination Service.

B- No other components are required to make an SAP on-premise backend system securely accessible over SAP BTP SAP BTP automatically establishes secure connections in SAP backend systems.

C- SAP Cloud Connector to make the on-premises system available to applications and services in a given SAP BTP sub account. Preferably use the SAP BTP Destination Service in combination with Cloud Connector.

Answer:

C

Explanation:

In a hybrid scenario, where business capabilities require services which partners have implemented in SAP BTP and an on-premise SAP S/4HANA system, the following SAP components and services are required to integrate such BTP partner services with the on-premise system:

SAP Cloud Connector:The SAP Cloud Connector is a software component that allows you to connect your on-premise SAP systems to SAP BTP. The Cloud Connector provides a secure connection between your on-premise system and SAP BTP, and it also makes your on-premise system available to applications and services in SAP BTP.

SAP BTP Destination Service:The SAP BTP Destination Service is a service that provides a single point of entry for accessing on-premise systems from SAP BTP. The Destination Service makes it easy to manage and secure connections to on-premise systems, and it also provides a way to federate data from different on-premise systems.

In order to integrate BTP partner services with an on-premise SAP S/4HANA system, you will need to install the SAP Cloud Connector on your on-premise system and register the Cloud Connector with SAP BTP. You will also need to create a destination in the SAP BTP Destination Service for your on-premise system. Once you have done this, you will be able to access the on-premise system from applications and services in SAP BTP.

It is important to note that you can also use other SAP components to integrate on-premise systems with SAP BTP. However, the SAP Cloud Connector and the SAP BTP Destination Service are the most commonly used components for this purpose.

To integrate BTP partner services with an on-premise SAP S/4HANA system, you need to use the SAP Cloud Connector, which is a reverse proxy that establishes a secure connection between your on-premise system and your SAP BTP subaccount5.The Cloud Connector acts as a bridge between your on-premise network and a trusted subaccount on SAP BTP6.It allows you to access resources in your on-premise network from applications running on SAP BTP without exposing your internal landscape to the internet7.

To simplify the configuration and consumption of the Cloud Connector connection, you can use the SAP BTP Destination Service, which is a service that allows you to define and manage destinations for accessing remote systems from applications running on SAP BTP8.A

destination is a set of properties that contains information such as the URL, authentication method, proxy type, and additional parameters of a remote system9. By using the Destination Service, you can centrally manage and securely store the connection details of your on-premise system and consume them from your BTP partner services.

Verified Reference:5: https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/e6c7616abb5710148cfcf3e75d96d596.html |6: https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/8d3b28a7c1644a1c9d1ee165ec0a8cf4.html |7: https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/e54cc8fbbb571014a4d9e7f02f9fa8e4.html |8: https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/3cb7b81115c44cf594e0e3631291af94.html |9: https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/e54f70d327154aa0a4ba36ce7ac49c83.html

Question 4

Question Type: MultipleChoice

As Chief Enterprise Architect, you want to select an extension option that follows SAP's clean-core strategy. What are your recommendations to implement the clean-core strategy best?

Options:

A- To follow the clean-core strategy, the so-called 'Developer Extensibility' of S/4HANA isn't allowed. Extensions must use 'Side-by-Side Extensibility' on the SAP Business Technology Platform. These extensions use corresponding public remote APIs of the S/4HANA backend system.

B- Follow SAP's Tier 1 to Tier 2 extension model, which enables different extension options: Cloud Extensibility Model and Cloud API Enablement. This allows the development of cloud- ready and upgrade-stable applications and extensions.

C- Use 'Key User Extensibility' functions of S/4HANA for simple extensions. 'Developer Extensibility must comply with the rules for a Tier-1 or Tier-2 extension.

D- Use of public local APIs or public remote APIs for 'Developer Extensibility.

Answer:

A

Explanation:

The clean-core strategy is a SAP initiative to keep the core of SAP S/4HANA as clean as possible by moving customizations and extensions to the side-by-side layer. This allows SAP to more easily deliver new releases of S/4HANA without having to worry about breaking custom code.

There are two main ways to extend SAP S/4HANA:

Developer Extensibility:This allows developers to extend the core of SAP S/4HANA by modifying the source code. This is not allowed under the clean-core strategy.

Side-by-Side Extensibility:This allows developers to extend SAP S/4HANA by creating new applications that run alongside the core system. These applications can communicate with the core system using public APIs.

The following are the benefits of using Side-by-Side Extensibility:

Flexibility:Side-by-Side Extensibility allows developers to extend SAP S/4HANA in any way they see fit.

Scalability:Side-by-Side Extensibility can be scaled to meet the needs of any organization.

Maintainability:Side-by-Side Extensibility is easier to maintain than Developer Extensibility, because custom code is not embedded in the core system.

Therefore, the best way to implement the clean-core strategy is to use Side-by-Side Extensibility. This will allow you to extend SAP S/4HANA in a flexible, scalable, and maintainable way.

Question 5

Question Type: MultipleChoice

What are important factors of the SAP BTP. Cloud Foundry environment during runtime that you need to consider?

Options:

A- Programming language and buildpacks

B- CPU capacity and memory size of the application

C- Number of users and API calls

Answer:

A

Explanation:

In the SAP BTP Cloud Foundry environment, several factors are critical during runtime to ensure optimal application performance and scalability. The correct answer, A, highlights two fundamental aspects:

Programming language: This determines the specific buildpack to be used, as Cloud Foundry supports multiple programming languages through different buildpacks which provide framework and runtime support for applications.

Buildpacks: These are key components in the Cloud Foundry architecture that provide runtime and framework support necessary to build and deploy applications in various programming languages effectively.

These elements are crucial as they directly impact how applications are built, deployed, and run within the Cloud Foundry environment, influencing performance, compatibility, and scalability.

SAP BTP Cloud Foundry documentation.

Buildpacks and programming language support in SAP BTP.

Question 6

Which artifacts does SAP provide as part of the SAP Reference Business Architecture content?

Options:

A- Business Capability Model/Business Data Model/Business Role Model/Product Map

B- Business Process Model/Solution Process Model

C- Business Capability Model/Business Process Model

Answer:

A

Explanation:

SAP provides a comprehensive set of artifacts as part of its SAP Reference Business Architecture content to support enterprises in designing their business architecture efficiently and effectively. The correct answer, A, encompasses a broad range of these artifacts:

Business Capability Model: Defines the capabilities an organization requires to achieve its business objectives and outcomes.

Business Data Model: Outlines the structure of the data elements within an organization and their relationships.

Business Role Model: Describes roles within the organization and their responsibilities.

Product Map: Provides an overview of the products and services an organization offers and how they relate to business capabilities and processes.

These artifacts are foundational for understanding and designing the enterprise's business architecture, ensuring alignment with strategic goals, technological capabilities, and operational processes.

SAP Reference Architecture documentation.

SAP Business Architecture Services.