

EMC

Exam E20-918

IT-as-a-Service Expert Exam for Cloud Architects

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[Total Questions: 96]

Question No : 1

While transitioning to ITaaS, an IT department is developing a service management methodology. They are uncertain about how much of the measurement data should be stored, and the period of retention. One consideration is the trade-off between storage cost and data granularity.

What would you, the cloud architect, recommend as a best practice?

- A.** Keep only peaks and averages for a longer period of time. This minimizes query time, protection, and recovery issues.
- B.** Keep more granular data than just peaks and averages. This allows a higher level of monitoring at reasonable cost, given deduplication and compression.
- C.** Store as much monitoring data as possible given cost constraints. This enables future diagnosis and offers visibility into SLA compliance.
- D.** Keep very granular data, and delete the oldest data when storage becomes constrained. This provides the highest level of monitoring for the required period of time.

Answer: A

Question No : 2

The first phase of a new service introduces the offering to 10% of the engineering organization. The IT organization leverages the existing management tools used in their traditional data center to provide visibility into silos and control of the infrastructure. They also have adapted some ITSM concepts as a framework for their management practices.

During the initial phase of the service deployment, a problem was encountered in one of the virtual machines. An extensive amount of time and resources were spent determining the cause of the issue, which concerned the IT organization.

As a consultant, what should you recommend to prevent these types of service issues?

- A.** Upgrade the management tools to provide holistic visibility into the dependencies of a service.
- B.** Configure the incident management system to identify issues and resolutions.
- C.** Redesign the service offering with an emphasis on reduced complexity and interdependence.
- D.** Contract with an external organization that has extensive experience in resolving cloud service issues.

Answer: A

Question No : 3

A company wishes to transform its IT organization into a full ITaaS provider for the business. Their IT team is skilled, disciplined, and exhibits strong teamwork. They have demonstrated the ability to deliver services with supporting processes and regulations.

As their ITaaS consultant, you need to take them to the next level in the service orientation maturity model.

What is the next level?

- A. Service Aligned
- B. Service Aware
- C. Service Capable
- D. Service Neutral

Answer: A

Question No : 4

A small company has been using a public cloud IaaS provider for several months. During this time the company has seen significant growth in revenue. This growth has generated a rush in hiring, which has forced the company to repeatedly purchase additional services at premium cost from their Cloud Service Provider (CSP).

The company has leased a data center and started designing a cloud infrastructure to deploy a private cloud environment. The underlying hypervisor technology which provides virtualization capabilities is different than that of the CSP. Once the initial infrastructure has been implemented, they will transition to a hybrid cloud model. New services will only be deployed in the private cloud.

A new CIO with limited cloud experience has just been hired. You are a Cloud Architect who has been asked to consult on several aspects of the design.

The first service must be deployed in the private cloud within the next month. The CIO does not want to rely solely on the existing single sign-on solution hosted in the public cloud,

because network disruption between the clouds would impact user access.

What is the best option for an interim single sign-on solution that can be replaced once the private cloud is fully implemented?

- A. Identity Provider
- B. Public Key Infrastructure using public and private key pairs
- C. SAML
- D. OAuth

Answer: A

Question No : 5

An enterprise company has a large, virtualized data center. They are currently auditing their servers to ensure they are in compliance with regulatory requirements.

Why would they choose to deploy VMware vCenter Configuration Manager?

- A. It maintains continuous compliance with out-of-the-box templates
- B. It maps applications quickly with agentless discovery across physical and virtual machines
- C. It maintains a continuous inventory of virtual server security updates with out-of-the-box-templates
- D. It automatically scans virtual machines for missing security patches and remediates them

Answer: D

Question No : 6

An enterprise has decided to implement a new service that will process credit card information. They will deploy this service within their private cloud. They have a affiliation with a public cloud provider that claims to be PCI compliant.

The enterprise would like to implement a service that is PCI compliant with a minimal amount of effort. The service is protected by a policy-based intrusion detection system (IDS). Cardholder data is securely communicated to the web interface.

Which additional design considerations would best be suited for this implementation?

- A.** The card number is masked as it is typed and is immediately encrypted, stored, and securely sent directly to the credit card processing system. Credit card information is stored within the public cloud provider using AES 128 encryption.
- B.** The card number is masked as it is typed and is immediately encrypted and securely sent directly to the credit card processing system. No credit card information is stored locally within the application.
- C.** The card number is masked as it is typed and is immediately encrypted and securely sent directly to the credit card processing system. Credit card information is backed up to the private cloud system and stored using AES 256 encryption.
- D.** The card number is masked as it is typed and is immediately encrypted and securely sent to both the credit card processing system and to private cloud for historical tracking and reporting only.

Answer: B

Question No : 7

A financial services company has a large, private cloud solution. They are currently in the process of auditing their virtual servers to ensure they are in compliance with regulatory requirements.

They want to be able to check new and existing virtual servers for compliance and automatically remediate any virtual servers that are not in compliance.

As a Cloud Architect, which product would you recommend for this purpose?

- A.** VMware vCenter Configuration Manager
- B.** Cisco Intelligent Automation for Cloud (CIAC)
- C.** VMware Update Manager
- D.** RSA Archer eGRC Platform

Answer: A

Question No : 8

A large service provider is designing a solution to protect itself against attacks such as viruses in a SOAP attachment, and denial of service attacks.

Which type of firewall is most appropriate for their needs?

- A. Linked VPNs and packet filtering
- B. XML
- C. Federated
- D. Reverse proxy servers

Answer: B

Question No : 9

Resource allocation models are being examined by a startup cloud provider for the purpose of reserving client resources. Their service offering targets software development and testing.

Which model would be most suitable?

- A. Guaranteed
- B. Pay-as-you-go
- C. Fixed
- D. Reserved

Answer: B

Question No : 10

As the IT Manager of a health care company, you have decided to move to the public cloud and are evaluating various public cloud providers.

What characteristic would the best public cloud provider have, and why?

- A. A direct path between the company's ISP and the public cloud using peering relationships.
- B. Uses the same firewall technology as your current ISP, to synchronize security rules and policies
- C. Be PCI compliant, to avoid any future penalties to the company
- D. Be a small company, so you will have more flexibility to negotiate with them

Answer: A

Question No : 11

An enterprise decided to place some sensitive data - intellectual property - in the public cloud and implemented security mechanisms to protect this data.

Recently the public cloud provider's systems had a security breach. The enterprise security group was not concerned because they felt their data had been completely protected and in no way compromised. All of the services housing the data are protected by an IPS application and no alerts were generated by the system.

How did the enterprise protect its data?

- A.** All data in the public cloud environment was encrypted at-rest and in-transit. The encryption keys were under complete control of the enterprise and were not available to the public provider. The cloud provider's logs showed that the enterprise's services were copied.
- B.** All data in the public cloud environment was encrypted at-rest and in-transit. Copies of the encryption keys were secured by the public cloud provider using 1024-bit encryption. The cloud provider's logs revealed that the enterprise's services were neither accessed nor copied.
- C.** All data in the public cloud environment was encrypted in-transit only. The encryption keys were under complete control of the enterprise and were not available to the public provider. The cloud provider's logs indicated that the enterprise's services were neither accessed nor copied.
- D.** The data was not encrypted but the enterprise preserved a backup of the data in a secure off-site location. The cloud provider's logs disclosed that the enterprise's services were not copied.

Answer: A

Question No : 12

A commercial bank is beginning its journey to IT-as-a-Service (ITaaS), and has employed a Cloud Architect to assist them. The architect completes an assessment of the current environment and a list of final requirements is being generated.

What should the Cloud Architect recommend as the next step?

- A. A gap analysis to compare the current state to the enterprise goals and IT strategic goals
- B. A controls matrix to evaluate GRC vulnerabilities
- C. A Balanced Scorecard to identify risks from the current state
- D. Right-sourced workloads to look at applications and where to put them

Answer: A

Question No : 13

The operations department of a major hosting provider is under pressure to deliver services more quickly. They have a large number of tools for managing IT technologies across the data center.

Although investments in virtualization and automation have been made, it still takes months to provision basic IT services to meet new customer demands. Hence, the provider is considering offering cloud services.

What is a key focus area for driving higher operational efficiency and associated profits?

- A. Deliver customer services that are derived from an approved set of standardized service templates. Establish change control to manage the life cycle of the templates.
- B. Deliver custom services using automation tools. Apply change control to the tools to minimize change. Develop reusable components to build environments.
- C. Deliver a custom capability for each customer based on analysis of the application architecture. Use shared services where possible.
- D. Re-design and strengthen the architecture to ensure that the components within the data center are modular and can be reused.

Answer: A

Question No : 14

You have been hired by a large, global manufacturing company to conduct a consolidation assessment.

During discussions with the local employees, you document which applications are most

important to the business. You also gather and document key performance metrics. You find:

- ✍ Some applications are rarely used
- ✍ Mission critical applications require 99.99% uptime to meet the SLAs
- ✍ Corporate email is proprietary and confidential information
- ✍ Certain applications must comply with country specific regulations

What should you use to determine proper application placement?

- A. Workload analysis for right-sourcing
- B. Application level gap analysis
- C. Cloud security alliance controls matrix
- D. Cloud services assessment

Answer: A

Question No : 15

An organization is expanding its private cloud to a hybrid cloud deployment to accommodate growth in its web / database application. The CIO is concerned about the security risks associated with the public cloud. They do not view firewall security as adequate to protect important company data. Encryption is being considered as a security measure.

As the Cloud Architect, what would you recommend?

- A. Utilize database encryption.
Tell the CIO that search look-ups can be resource intensive.
- B. Utilize database encryption.
Tell the CIO that the level of control is highly granular, but substantial developer resources are required.
- C. Utilize application encryption.
Tell the CIO that search look-ups can be resource intensive.
- D. Utilize application encryption.
Tell the CIO that the level of control is highly granular, and developer resource requirements are minimal.

Answer: A

Question No : 16

Chargeback models are being evaluated by a health care provider. Their requirements are:

- ✍ Simple to measure
- ✍ Operational costs should be amortized over a specific time period
- ✍ Charges should be divided among the lines of business

Which chargeback model satisfies these requirements?

- A. Subscription-by-time
- B. Subscription-by-peak-usage
- C. Fixed-cost
- D. Variable-cost

Answer: A

Question No : 17

Your organization has been researching the benefits of using a cloud service provider. Their marketing material clearly describes how their predefined service catalog would dramatically reduce service commissioning timing and guarantee a consistent user experience. However, the presentation does not associate a direct financial value to the service catalog.

You are helping to create an initial justification report for using the cloud service provider's services. What category would the non-financial benefits of the service catalog fall under?

- A. Time-to-value
- B. Time-to-implement
- C. Time-to-deliver
- D. Time-to-deploy

Answer: A

Question No : 18

A financial institution is building a private cloud. They plan to offer services to customers and administrative staff. Each group has access to different levels of sensitive data with different performance characteristics. In addition, the bank must comply with PCI regulations when handling certain types of data on a limited subset of services.