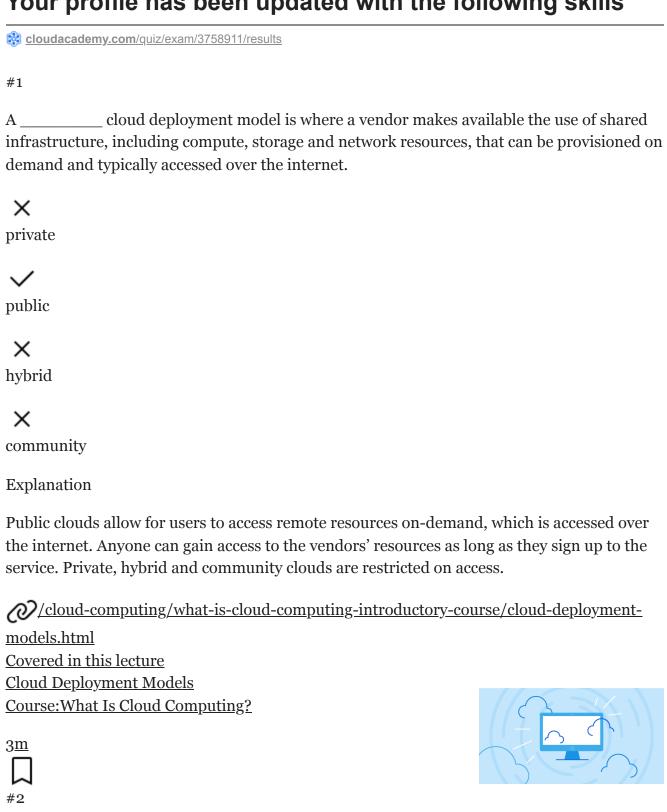
Your profile has been updated with the following skills



Which service model allows you to configure and customize your environment from the base up?



Software as a Service (SaaS)



Infrastructure as a Service (IaaS)



Platform as a Service (PaaS)



'Anything' as a Service (XaaS)

Explanation

IaaS provides the greatest level of customization as you can configure the environment from the ground up, starting from which operating system to install and up. Other service models have fixed components which you are unable to change or manage.

<u>//cloud-computing/what-is-cloud-computing-introductory-course/cloud-service-models.html</u>

#3

What is the most accurate definition of cloud computing?



Cloud computing is a pool of servers offering compute resources that are designed to be issued exclusively to individual tenants (users and organizations).



Cloud computing is a remote virtual pool of on-demand shared resources offering compute, storage, and network services that can be rapidly deployed at scale.



Cloud computing is a term used to describe virtualized technology.



Cloud computing is a physical pool of compute, storage, and network resources that cannot be accessed over the internet.

Explanation

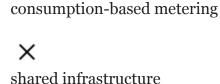
Cloud Computing is based on Virtualization technology and therefore provides virtual pools of compute, storage and network resources that can be accessed over the internet to shared tenants which can be quickly deployed into new and existing environments. The incorrect answers here either refer to physical pools or resources, or individual tenants, which isn't accurate when describing Cloud Computing.

accurate when describing Cloud Computing.
/cloud-computing/what-is-cloud-computing-introductory-course/what-is-cloud-computing.html #4
What cloud resource type stores structured data used by cloud applications?
X Storage
X Compute
X Network
✓ Database
Explanation
Cloud database resources store structured data used by applications, and in the classic resource model, it is comparable to MySQL, Oracle and database servers.
/course/what-is-cloud-computing-introductory/what-is-cloud-computing-1/ Covered in this lecture What is Cloud Computing?
Course: What Is Cloud Computing? 6m
#5

The public cloud allows you to pay only for the time that you use cloud resources, not for the

cost of ownership. This concept is known as ______.

3/12





economy of scale



scalability

Explanation

Consumption-based metering simply means you pay for what you use. Public cloud vendors offer different services at different units of time, some reserved for multiple years, and others charged based on milliseconds.



#6

One can argue that security on the public cloud is superior to on-premise security. Why is this? (Choose 2 answers)



Public cloud vendor services must meet international security requirements.



Public cloud vendor services must meet multiple business industries' security and governance requirements.



Public cloud vendor datacenters use superior security technology.



Public cloud vendor services are entirely separate from the public internet.

Explanation

Security is one of the most discussed topics within cloud computing, and many enterprises still have concerns over how secure it is. However, public cloud vendors such as AWS and Microsoft Azure are considered to be more secure than your own data center. This is down to

the fact that they have to adhere to global compliance programs across multiple industries and by applying the shared responsibility model.

<u>/course/what-is-cloud-computing-introductory/key-cloud-concepts/</u>

<u>Covered in this lecture</u>

Key Cloud Concepts

Course: What Is Cloud Computing?

<u>5m</u>

#7



As an example of an important cloud characteristic, let's say you deploy a small website today. Next week, you add complex artificial intelligence services to it that are provided by a public cloud vendor. The following week, you deploy your website to multiple regions around the globe. What concept or characteristic of cloud computing does this represent?



High availability



Security



Growth



Utility-based metering

Explanation

The hypothetical scenario above is an example of growth which the cloud makes possible. You start with something simple, then innovate with advanced, easy to provision services hosted by the cloud vendor, and expand to a global market.

//course/what-is-cloud-computing-introductory/key-cloud-concepts/

Covered in this lecture

Key Cloud Concepts

Course: What Is Cloud Computing?

<u>5m</u>



Public cloud vendors have a common definition of what aspects of security are the vendor's responsibility and what aspects of security are the end user's responsibility. This is referred to as the Shared Responsibility Model. Under the Shared Responsibility Model, which of the following would be the end user's responsibility?





Access to the physical datacenter



Operation and administration of the hardware hosting virtual resources



Availability of a cloud storage service



Creating authentication and authorization mechanisms for a cloud storage service

Explanation

The vendor will operate to an exceptionally high standard of security for the underlying infrastructure of the cloud, but it's up to you as the end-user to then architect security in the cloud by using the tools, services, and applications available.

//course/what-is-cloud-computing-introductory/key-cloud-concepts/

Covered in this lecture

Key Cloud Concepts

Course: What Is Cloud Computing?

<u>5m</u>



#9



What is a key benefit of Virtualization?



Increased operational cost

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Quicker remote connectivity



Reduced network latency



Reduced capital expenditure

Explanation

As Virtualization allows for multiple VMs to be installed on the same physical host, it maximizes the optimization potential and reduces the requirement to purchase additional servers, resulting in a reduced capital expenditure

<u>O/cloud-computing/what-is-cloud-computing-introductory-course/what-is-cloud-computing.html</u>

#10

You have been hired as an IT summer intern for a small, but quickly expanding, restaurant chain. The restaurant chain owner wants to expand her online presence by creating a website that will add more online features such as downloadable menus, real-time reservations, online ordering, web-based email, and a possible interactive chat during restaurant hours. The website will have high access demands from the 4:00 pm to 11:00 pm peak hours, and slower access demands during off-peak hours. The owner does not have any IT experience, and does not want to become involved in the extra work of maintaining IT equipment. What do you recommend she do?



Implement a hybrid cloud-computing environment.



Implement a private cloud-computing environment.



Implement a public cloud-computing environment.



Implement a matrixed cloud-computing environment.

Explanation

Public clouds utilize cloud resources (like servers and storage) that are owned and operated by a third-party cloud service provider and delivered over the Internet. With a public cloud, all hardware, software, and other supporting infrastructure are owned and managed by the cloud provider. The public cloud model provides several advantages for the restaurant chain owner. First, there are lower costs because there is no need to purchase hardware or software, and you pay only for the service you use.

Second, there are no maintenance issues as your service provider provides the maintenance. Third, there is near-unlimited scalability because on-demand resources are available to meet the business's needs. Fourth, there is high reliability because a vast network of servers ensures against failure.

//course/what-is-cloud-computing-introductory/cloud-service-models/
#11
The model requires no software installation and focuses on
design simplicity and ease of use. It offers a minimal level of service customization.
×
Infrastructure-as-a-Service
×
Platform-as-a-Service
✓
Software-as-a-Service
×
Traditional on-premise
Explanation

The SaaS cloud service model focuses on the delivery of an application to a large audience and requires the smallest amount of user administration. As a trade-off, it offers very few customization options.

//course/what-is-cloud-computing-introductory/cloud-service-models/

Covered in this lecture

Cloud Service Models

Course: What Is Cloud Computing?

<u>3m</u>



You have deployed a small web app to AWS. You place a load balancer in front of the application and deploy a second version of the app into a second availability zone. What are you hoping to accomplish with this design?





High availability



Security



On-demand resourcing



Consumption-based metering

Explanation

The hypothetical scenario above is an example of high availability. The load balancer will evenly distribute traffic between the two instances in each availability zone to ensure all traffic is handled appropriately.



#13

Migration to the cloud presents numerous potential benefits, but it will not solve all of a business's challenges. Which of the following is not an immediate benefit provided by the cloud?



Improved application performance



Utility-based metering



On-demand resourcing



Economy of scale

Explanation

Economy of scale, on-demand resourcing, and utility-based metering are each available in the public cloud, but improved application performance is not guaranteed by hosting one's services in the cloud. Optimization, experimentation, and innovation may be easier to implement, depending on your application's requirements, but this still requires a dedicated team to review and redesign an application to gain the true benefits of the cloud.

<u>//course/should-your-business-move-to-the-cloud/is-the-cloud-right-for-you/</u>

Covered in this lecture

Is the Cloud right for you?

Course: Should Your Business Move to the Cloud?







You are leading a team of developers on a project whose goal is to improve customer experience on a credit card company's website. The solution requires custom code without the overhead of managing operating systems or infrastructure. Which of the following cloud offerings would you suggest to your client?



Infrastructure as a Service (IaaS)



Platform as a Service (PaaS)



On-premises infrastructure



Software as a Service (SaaS)

Explanation

Platform as a Service (PaaS) allows the development, testing, and hosting of apps in the same environment but provides no user control over the infrastructure. It is the best choice for creating customized apps.

Infrastructure as a Service (IaaS):

- Provides complete control over the data, apps, middleware, operating system
- Automated hardware deployment
- Virtualized management workload

Function as a Service (FaaS)

- Helps the developers in running and managing the microservices
- Facilitates event-based-triggered code execution
- Software as a Service (SaaS)

Provides subscription-based model

- No control over the infrastructure to users
- An apt choice for short-term projects requiring collaboration



#15

In what way is a private cloud model similar to a public cloud model?



Both private and public cloud models physical hardware are managed by the end users hosting their applications on the hardware.



In both private and public cloud models, the cloud infrastructure is hosted on the premises of a business using it.



Using both private and public cloud will increase a business' capital expenditures to acquire hardware hosting the cloud.



Both private and public cloud models use virtualization to differentiate themselves from traditional on-premise servers.

Explanation

The only correct statement is that both private and public cloud models use virtualization to differentiate themselves from traditional on-premise servers.

<u>//course/what-is-cloud-computing-introductory/cloud-deployment-models/</u>

Covered in this lecture
Cloud Deployment Models
Course: What Is Cloud Computing?

3<u>m</u>

