

Unit-2 - Cloud Computing Technology

Question 1: What is Mobile Clients?

Answer

Mobile clients run the from laptops to PDAs (Personal digital Assistant-Handheld PC) and smartphones, like an iPhone or BlackBerry, cannot run robust application on a PDA or smartphone, Mobile clients have security and speed worries

Question 2: What is thin and thick clients?

Answer

Thin clients are client computers that have no hard drives, no DVD-ROM drives, It simply display what is on the server.

Thick clients are the clients normal PC. It is used to connect to applications in the cloud. Security-wise, thick clients are more risk to attack than thins. If a thick client fails, whatever data is stored on the machine, including the operating system and all the configuration settings, is lost.

Question 3: Define Data leakage?

Answer

Data leakage is the unauthorized transmission of data from within an organization to an external destination or recipient. The term can be used to describe data that is transferred electronically or physically. Data leakage threats usually occur via the web and email, but can also occur via mobile data storage devices such as optical media, USB keys, and laptops. Data leakage, also known as low and slow data theft, is a huge problem for data security, and the damage caused to any organization,

Question 4: What do you mean by offloading work?

Answer

It is transfer of resources computational task to a separate processor or platform or to cloud. Offloading to a coprocessor can be used to accelerate applications including; image rendering and mathematical calculations.

Question 5: What is logging as a service?

Answer

logging is the process of collecting and storing data over a period of time in order to analyze specific trends or record the data-based events/actions of a system, network or IT environment. It is collecting any type of log files coming from any given source or location such as servers, applications, devices etc.

Question 6: What is Compliance and auditing in cloud computing?

Answer

Compliance- The term 'cloud compliance' can relate to many different industry standards and regulations that cloud customers need to comply with. For example, in the healthcare industry, a set of laws called HIPAA make strict guidelines and security protocols mandatory for certain kinds of patient health data.

Auditing- It is the responsibility of the auditor to report on all the risks an organization may face. In Auditing, Auditor have to verify that only authorized individuals have access to cloud computing resources based on their roles and responsibilities and Auditor have to check about the type and sensitivity of data stored in the cloud. As loss, leakage or unavailability of data can cause loss to business

Question 7: Define Web Application Breaches?

Answer

It is a act of breaking or failing to observe a law, agreement, or code of conduct. A Web Application Breaches is a security incident in which information is accessed without authorization. Web Application Breaches can hurt businesses and consumers in a variety of ways. They are a costly expense that can damage lives and reputations and take time to repair. OR Web applications such as microsites, portals and online tools differ from webpages as they allow users to perform actions, rather than just display content. When cybercriminals access the data that sits behind these web apps it's referred to as a breach. And some of these breaches can be huge, both in terms of the amount of data stolen and the reputational and financial damage that can follow.

Question 8: What is key management? Write any two types of keys? is Grid Computing?

Answer

Key management refers to management of cryptographic keys in a cryptosystem. A key management service is a software-only approach that allows the client to create and manage the encryption keys used to protect sensitive data held in the cloud. Encryption keys reside within the cloud provider's infrastructure and are accessible only by the client.

Two types of keys are

- 1) File encryption keys
- 2) Hardware storage keys

Question 9: What are Basic Public Internet and Accelerated Internet?

Answer

Basic Public Internet- 1. The public Internet is the most basic choice for cloud connectivity office or home. 2. This is the type of access that you buy from an Internet service provider (ISP) and connect with via broadband or dial-up, based on your location.

Accelerated Internet- Accelerated Internet Access is a service that uses various software techniques to speed up the delivery of web pages to your web browser. Accelerated internet. Faster internet through combining multiple internet connections.

Question 10: Define Optimized Internet Overlay?

Answer

An optimized Internet overlay approach allows customers to access the cloud via the public Internet. But enhancement occurs on the providers cloud.

Question 11: Define Cloud providers give any two providers name ?

Answer

Cloud providers use the services that spread across the cloud with a strong connection method. Cloud providers that are growing, might face big costs as network bandwidth charges increase. Providers name : Google , IBM, Microsoft

Question 12: What are cloud identity and cloud Integration in cloud services?

Answer

Cloud Identity- To accomplish this, the application asks for a digital identity—a set of bytes—to describe the user. Based on this information, the application can determine who the user is

and what he or she is allowed to do. Clouds, however, have to use their own identity services. If you sign on to Amazon cloud services, you have to sign on using an Amazon-defined identity.

Cloud Integration-Cloud integration is a system of tools and technologies that connects various applications, systems, repositories, and IT environments for the real-time exchange of data and processes. Cloud integration is the act of combining different cloud-based systems into an integral whole.

Question 13: What are cloud mapping and cloud payment and cloud search in cloud services?

Answer

Cloud Mapping-Cloud mapping is a services such as Google Maps and Microsoft's Virtual Earth provide this cloud-based function, allowing developers to embed maps in web pages. For example, hotel and restaurant web sites show their locations on their web sites and allow visitors to enter their addresses to get customized directions.

Cloud Payment-Cloud payment is a cloud service that you might configure your hardware appropriately for payments. You can simply sign up with a service to accept credit cards, or you can go the route of PayPal. With an online payment service, customers can send money directly to your organization

Cloud search: The ability to embed search options in a web site, it is a rich feature that you might want to employ in your own web or application development. Microsoft's Live Search allows on-site and cloud applications to submit searches and then get the results back, two types of results—what's stored in the company database as well as what is on the entire Web.

Question 14: What is accessing the Cloud and cloud platforms?

Answer

Cloud Accessing-it is How you will interact with your cloud ,There are a number of development tools that allow you to build your applications and several browser options that you can use to access those applications.in accessing the cloud tools you can use to connect with the cloud so you can realize which tools will work best for your organization and your particular needs.

Cloud Platforms- A platform is how a cloud computing environment is delivered to you, it is how the cloud can be produced and presented to you.

Question 15: Define any two tools you can use to connect with the cloud?

Answer

Amazon Elastic Compute Cloud :(<http://aws.amazon.com/ec2>) is a web service that provides resizable compute capacity in the cloud

Mosso: Mosso is the home of The Hosting Cloud and CloudFS, providing enterprise-grade hosting and storage services

Azure :The Azure Services Platform is Microsoft's cloud solution that areas from the cloud to the enterprise datacenter

Python Django: Django is an open-source web application framework written in Python. The Google App Engine includes Django.

Question 16: Define web hosting services- Amazon Elastic Compute Cloud and Mosso?

Answer

Amazon Elastic Compute Cloud: (<http://aws.amazon.com/ec2>) is a web service that provides resizable compute capacity in the cloud. Amazon EC2 quickly scale capacity, both up and down, as a client's computing requirements change.

Mosso: is the home of The Hosting Cloud and CloudFS, providing enterprise-grade hosting and storage services. It is high-performance cloud-based storage service. Mosso offering: Cloud Sites (put sites on cloud), Cloud Files(unlimited storage), cloud Servers .

Question 17: What are Azure and force.com?

Answer

Azure: The Azure Services Platform is Microsoft's cloud solution that areas from the cloud to the enterprise datacenter. The Azure Services Platform provides developers with the ability to create applications while taking advantage of their existing skills, tools, and technologies such as the Microsoft .NET Framework and Visual Studio.

Force.com: Force.com, a PaaS from Salesforce.com, is another way to create and deploy business applications, The Force.com platform gives customers the ability to run multiple applications within the same Salesforce.com instance,

Question 18: What is cloud web application and cloud web API?

Answer

cloud web application: These are the application to use on cloud that is online applications. These application are created by someone and it is simply a matter of using what they have created. For example, Force.com allows you and others to create your own apps and then make them available for others to use. Example : Google Apps Premier Edition

cloud web API: Different cloud providers use different APIs. An application programming interface (API) is a set of programming instructions and standards for accessing a web-based program. Software companies release their APIs to the public so that other software developers can design products that are powered by its service. For example, Amazon released its own API so that web site developers could more easily access information maintained at the Amazon web site.

Question 19: Define cloud web browser a) Internet Explorer b) Firefox c) Safari?

Answer

Web browser- Web browser is a software application for accessing information on the world wide web.

*Internet Explorer-*Internet explorer is a world wide web browser that comes bundled with the Microsoft windows operating system. *Firefox-Firefox* is a web browser that is smaller,faster,and in some ways more secure than Mozilla browser from which much of its code was originally derived. free, open-source web browser.

Safari-Safari is a graphical web browser developed by Apple,based on yhe WebKit engine. Safari features a drag-and-drop bookmarks, easy-to organize tabs.

Question 20: What is cloud storage? What it is used for?

Answer

Cloud storage involves exactly what the name suggests—storing your data with a cloud service provider rather than on a local system. Many clients use cloud storage because of safety. If something happens to their building, then they haven't lost all their data. Used For- If you store your data on a cloud, you can get at it from any location that has Internet access. Workers do not need to use the same computer to access data nor do they have to carry around physical storage devices.

Question 21: Define Storage as a Service? Mention any two provider name?

Answer

The term Storage as a Service means that a third-party provider rents space on their storage to end users who does not have a budget to pay.

Two Provider Name – Google Docs allows users to upload documents, spreadsheets, and presentations to Google's data servers. Web email providers like Gmail, Hotmail, and Yahoo! Mail store email messages on their own servers.

Question 22: Write any four advantages of storage as a service?

Answer

1. Storage service providers are popular for backup, duplication, and disaster recovery among small and medium-sized businesses.
2. The biggest advantage to SaaS is cost savings.
3. The end user does not have to pay for infrastructure; they simply pay for how much they transfer.
4. Storage is rented from the provider using a cost-per-gigabyte-stored or cost-per-datatransferred Model

Example: Flickr and Picasa host millions of digital photographs. Users can create their own online photo albums. YouTube hosts millions of user-uploaded video files.

Question 23: Define Amazon Simple Storage Service and Google Bigtable Datastore?

Answer

Amazon Simple Storage Service: Amazon S3 is designed to make web-scale computing easier for developers. Amazon S3 provides a simple web services interface that can be used to store and retrieve any amount of data, at any time, from anywhere on the Web. Amazon S3 functionality: Write, read, and delete objects containing from 1 byte to 5 gigabytes of data each.

Google Bigtable Datastore: Google Bigtable is database capable of handling numerous users on on-demand basis. Bigtable was developed with very high speed, flexibility, and extremely high scalability in mind. A Bigtable database can be petabytes (one thousand million bytes 10^{15}) in size and span thousands of distributed servers. Bigtable is available to developers as part of the Google App Engine, their cloud computing platform..

Question 24: Define Nirvanix and Mobileme and Live Mesh?

Answer

Nirvanix - Nirvanix uses custom-developed software and file system technologies running on Intel storage servers at six locations on both coasts of the United States. It has Built-in data disaster recovery and automated data replication

Mobileme - MobileMe is Apple's solution that delivers push email, push contacts, and push calendars from the MobileMe service in the cloud, Used in applications on iPhone, iPod touch, Macs, and PCs. MobileMe also provides a suite of ad-free web applications that deliver a desktop like experience through any modern browser.

Live Mesh - Live Mesh is Microsoft's "software-plus-services" platform, Live Mesh has the following components: The Live Mesh software, called Mesh Operating Environment (MOE), is available for Windows XP, Windows Vista, Windows Mobile, Mac OS X

Question 25: What are cloud standards and cloud application?

Answer

Cloud Standards - Using Standards, it is possible to connect to the cloud and at a same time help to make it possible to develop and deliver content. established standards that make cloud computing possible, and also the sorts of standards that are used to develop applications on the cloud.

Cloud Application - A cloud application is the software that is run on client computer without installing application. There are many applications that can run, but there needs to be a standard way to connect between the client and the cloud