

Final Term Paper (Spring - 2020)
Cloud Computing

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Question No. 1:

- a. Explain in detail network and cloud-based storage.

Answer : Network: The network is when two or more computers connected to share resources (such as printers and CDs), or exchange files, or to allow electronic communication. Computers on the network can be connected by cable, telephone cables, radio waves, satellites or light beams.

benefits of networks:

- with the help of network we can share information between different users that interact with computers .
- it can rise your profile ,with the help of network u well be able to communicate with many newly faces ,
- with the help of network it well let you to the job opportunities all the time it well let u know about fresh news etc.
- Gaining the advice of experienced peers is an important benefit of networking.

there are two types of computer network which is given below:

(1):LAN(local area network) :

- in this network computers are connected in a small area with each other example software houses ,offices etc .
- in this network the computers are connected with the help of a cables etc that work as a medium between two computers for communication between them.
- the main thing in local area network is the data transfer rate is vary high mean the speed is high .
- the local area network is vary high security.
- By continually putting yourself out there and meeting new people, you're effectively stepping outside your comfort zone and building invaluable social skills and self-confidence that you can take with you anywhere. The more you network, the more you'll grow and learn how to make lasting connections.

(2)WAN(Wide area network):

- this network are connected in high geographical areas are in states or countries.through wan the school in one state can communicate with school in other state
- to communicate through wan It uses multiplexers, bridges, and routers to connect.
- it is vary bigger network as compare to LAN.
- internet is also one of the biggest WAN in the word.
- Wide Area Network is widely used in the field of Business, government, and education.

cloud-based storage.

This is basically a data storage centers that can store your data online ,you can acces that data with the help of internet connected in your device.the user can pay them according to there ussage ,i,e if you want to buy one gb storage for your data then you need to pay them and thay well provide a storage for you on cloud to store your data. Cloud data is stored on hard drives (much the way data is usually stored). And yes, it's probably more secure than conventionally stored data.

Types of cloud storage

Public cloud storage: Public cloud storage is the storage of data among pools of resources that are abstracted from hardware not owned by the end user.

Private cloud storage

Private cloud storage is the storage of data among pools of resources abstracted from resources solely dedicated to the end user—usually within the user's firewall and sometimes on premise.

Hybrid cloud storage

Hybrid cloud storage is the storage of data among multiple cloud environments with some degree of workload portability, orchestration, and management among them. While the public and private cloud environments that make up a hybrid cloud are separate entities, migrating data between them is facilitated by a complex network of local-area networks (LANs), wide area networks (WANs), application programming interfaces.

Question No. 2:

(20)

- a. Explain in detail web application and multitenant technology.

Answer

Web application: it is basically an any computer program that performs a specific function by using a web browser as its client. The application can be as simple as a message board or a contact form on a website or as complex as a word processor or a multi-player mobile gaming app that you download to your phone.

Web applications commonly use a combination of server-side script (ASP, PHP, etc) and client-side script (HTML, Javascript, etc.) to develop the application. The client-side script deals with the presentation of the information while the server-side script deals with all the hard stuff like storing and retrieving the information.

the following is example of web application:

- **Crome browser.**
- **vlc media player.**
- **sublime text .**
- **asp.net**
- **kohana etc.**

- b. Explain in detail cloud security threats.

Answer:

The following is cloud security threats:

1. **2. Data Loss**

sometimes while using cloud services, data loss often happens due to natural or man-induced disasters, as a result of the physical destruction of the servers or human error. However, it can also be a result of a targeted attack. Regardless of the cause, the result will be the same: you lose all of the data you've been collecting for years.

2.Account Hijacking

so even if your employees aren't using default, insecure passwords, hackers still can "guess" the credentials, gain access to your cloud using your staffs' accounts, and, as a result, steal or manipulate your data or sabotage your business processes in general. This is called, "account hijacking

2. **Loss of Trust** : It is sometime difficult for a cloud service user to recognize his provider's trust level due to the black-box feature of the cloud service. There is no measure to check who is good server cloud provider and who is bad.
3. **Data loss and leakage** The loss of encryption key or privileged access code will bring serious problems to the cloud service users.

Question No. 3:

(10)

- a. Briefly describe following.
 - a. Advantages and disadvantages of cloud computing.

ANSWER:

Advantages:

1. Easy implementation. Cloud hosting allows business to retain the same applications and business processes without having to deal with the backend technicalities. Readily manageable by the Internet, a cloud infrastructure can be accessed by enterprises easily and quickly.
2. Accessibility. Access your data anywhere, anytime. An Internet cloud infrastructure maximizes enterprise productivity and efficiency by ensuring your application is always accessible. This allows for easy collaboration and sharing among users in multiple locations.
3. No hardware required. Since everything will be hosted in the cloud, a physical storage center is no longer needed. However, a backup could be worth looking into in the event of a disaster that could leave your company's productivity stagnant.
4. Cost per head. Overhead technology costs are kept at a minimum with cloud hosting services, enabling businesses to use the extra time and resources for improving the company infrastructure.
5. Flexibility for growth. The cloud is easily scalable so companies can add or subtract resources based on their needs. As companies grow, their system will grow with them.
6. Efficient recovery. Cloud computing delivers faster and more accurate retrievals of applications and data. With less downtime, it is the most efficient recovery plan.

Disadvantages:

No longer in control. When moving services to the cloud, you are handing over your data and information. For companies who have an in-house IT staff, they will be unable to handle issues on their own. However, Stratosphere Networks has a 24/7 live help desk that can rectify any problems immediately.

May not get all the features. Not all cloud services are the same. Some cloud providers tend to offer limited versions and enable the most popular features only, so you may not receive every feature or customization you want. Before signing up, make sure you know what your cloud service provider offers.

Doesn't mean you should do away with servers. You may have fewer servers to handle which means less for your IT staff to handle, but that doesn't mean you can let go of all your servers and staff. While it may seem costly to have data centers and a cloud infrastructure, redundancy is key for backup and recovery.

bandwidth issues. For ideal performance, clients have to plan accordingly and not pack large amounts of servers and storage devices into a small set of data centers.

B: Collaborative meeting in cloud:

Answer: Collaboration Meeting allows anyone in your organization to enjoy consistent video collaboration experiences from mobile, desktop, or room systems, with services and solutions they can use at home or in the office. Users can meet any way they want, instantly, or by scheduling a meeting.

Example: zoom meeting .

whatsapp meeting by vadio calls etc.

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