By OnlineInterviewQuestions.com

Cloud Computing Interview Questions

Practice Best Cloud Computing Interview Questions

Cloud computing is new technology to make available resources such as storage and computational power, without complex management by the client. Thus, the term is used to describe data centers available to users over the Internet, moreover, large clouds, often have functions distributed over multiple locations from servers and if the connection is closer to the user, it is designated an edge server.

Clouds may be concentrated on an organization (called enterprise or private), or to multiple organizations (public) and rely on sharing the resources to achieve coherence and scalability.

In today's industry, **Cloud Computing** is emerging at a vast pace. Many organizations are trying to adapt it in several ways which helps them to get many benefits. It is a fruitful career option for any person who has good knowledge in this field. There are a plethora of companies that are offering the jobs and giving a salary that ranges from small to large scale according to the position of the job. To get a good job, you definitely need to crack the interview. So, to help you, here we provide you the **20+ Best Cloud Computing Interview Questions** which may be asked in interviews. Give a look at them:

Q1. What do you understand by Cloud Computing?

Cloud computing is an efficient method of distribution of computer resources and services such as the database, networking, intelligence often over the internet. It is meant to achieve consistency and marketing of scales, just as like public utility.

Q2. What are the advantages of using cloud computing?

- **Access unique capabilities**:

Cloud computing has a unique and fascinating feature that helps the user in their work and makes them rely on a good thing.

- **Create resilient architectures**:

Tired from so many Interruptions, but you can secure great availability by powering repetitious clouds for failover and catastrophe recovery.

- **Ease of Use**:

Cloud computing is user-friendly. It is not just downloaded simply and installed, as these all are given by cloud computing itself. Also, the cloud keeps software up-to-date with the latest version, so you will never bother about doing software update yourself.

- **Increased Storage Capacity and Automation**:

It provides you with virtually more storage relative to the hard disk to store your data for all intents and purposes and it is flexible —if any by chance your business needs more space you can easily arrange by paying more.

- **Cost Savings**:

Among the most fascinating motives to move the system to the cloud to save extensive cost. With this, it is not needed to pay for the extra storage. The old method of necessity to compensate for vast amounts of disk and storage space is instantly shut off. With cloud computing, you are not required to pay for unnecessary applications, in fact, the cloud provides so many applications without any charge.

- **Freeing up Your IT Staff**:

Cloud uses to ease of the primary storage needs of the businesses, which allow the management of an organization to reduce their human needs. By implementing this, the management of a business organization become capable of freeing up their IT staffs and engage them in other tasks. Besides, it also ensures a higher level of storage facility than the human controlled inventory efforts.

- **Agility, Flexibility, and Scalability**:

Cloud computing refers to more agility and flexibility related to earlier computing methods. It is now easy to make changes within a minute instead of wasting months just as happened in the past. Since all the precious data is kept in the cloud it will be easy for your employer to access software from anywhere and anytime simply by making the internet connection. Now, your employer will not need to tie with a desk to work they can easily access from anywhere.

Q3. Mention some platforms which are efficiently used in cloud computing ?

Some platforms that uses Cloud Computing are: -

- Apache Hadoop
- MapReduce

Even more than this, many global companies like Google, IBM are working on this project too.

Q4. How mobile computing is different from cloud computing?

The main difference between cloud computing and mobile computing is that the Smartphones and Tablet are emerging with operating systems or iOS whereas cloud computing means that serve the network to these devices and others.

Q5. What are the different layers of cloud computing?

The different layer of cloud computing is: -

- **SaaS (Software as a service)**

It is also known by the phrase 'service on demand'. It is the software providing service over the internet which is provided by the third-party companies. It is very helpful and efficient for the consumer as it eliminates the necessities to run and install software on their computers. This is useful to reduce the cost of provisioning, maintenance, hardware expenses etc.

- **IaaS (Infrastructure as a service)**

Virtualized computing resources are provided by IaaS platform over the internet. The main purpose of the IaaS model is to hosts the infrastructure components which are traditionally present in on-premises data centers. In addition to data centers, the components are also present in servers, virtualization or hypervisor layers as well as storage and networking hardware. So, in IaaS, a cloud handles all this.

- **PaaS (Platform as a service)**

It is also referred to as Application Platform as a service. It needs to provide a platform to the customer to develop, run and organize the various application avoiding complication of management and architecting. It is also capable to provide service that makes applications easy for development and install like procedure.

Q6. Write some security laws that are used to secure data in cloud computing?

The laws which are used to secure the data in cloud computing are:

- Input Validation: Helps to control the data
- Output reconciliation: Controls data which has reconciled from input to output
- Processing: Control the data which are in processing state or is being processed completely and correctly.
- File: It manages and controls the data.
- Security and Backup: It controls the security breaches logs

Q7. Layers which could define the architecture of cloud computing?

1. **Front end platform**- It is a type of platform that includes thin clients, mobile devices, fat clients. It is the portion that is visible to the user
2. **Backend platforms**- This type of platform has been taken care of server and storage. It is the side used

portion utilized by the service provider. It includes security, data storage system, traffic, protocol. That's why the name is back-end platform. The backend is behind the interfaces while front-end is the visible interface.

3. **A cloud-based delivery**- It is the cloud software which is on trending everywhere right now. In this, the user can buy the cloud storage and utilize it to store their data.
4. **Network**- It includes internet and intranet.

Q8. Write some characteristics of cloud computing?

- **Flexibility**: It is very useful for the workers as they can do their work even if they are not at the office. They can connect to their workplaces very easily and quickly. This makes the workers more reliable.
- **Scalability**: Scalability is the other key characteristic of cloud computing. As the business may be grown or may be down as per the time change. Cloud computing provides you the storage as much as the company needs very quickly. It supports customers at the time of business growth without taking many charges.
- **Collaboration efficiency**: It accesses the workers to cooperate between themselves that will helpful for them to share and work on document and data at the real-time
- Security: The main feature of cloud computing is security. As the main attachment point for the companies and businessman is security so they try to build it more secure. Many companies and organization hold their power to these cloud companies so they make sure to build high securities on accessing, hacking, cracking, individual's data, key management, data encryption
- **Global network**: It is also the key point that needs to be discussed here. Instead of all the above feature cloud computing serves an important feature that is "back up". Even by chance or at the time the data is not needed it can be deleted as you can back up at the time of its requirement. By this, it not only and also gives a pleasant relief by ensuring that data is secure and also gives you more storage. It helps the company to keep the data safely which help to run your data or application more conveniently. Not only this, but it also provides a lot of IT resources, servers and it does not need to invest plenty of money.

Q9. Which data types are used in cloud computing?

A numerous number of data types are used in cloud computing. These include Locale, emails, decimal, number, text, contracts, Boolean, date, images, messages, audios etc.

Q10. What is a cloud service and explain different types of cloud?

Cloud service is highly beneficial to build the applications as it provides serves in a network often on the internet. These services provide flexibility to the application and lower the complexities of its management. Different types of Cloud are: -

Professional cloud: It is used by various companies and organizes for the following reason: -

- To plot a cloud computing structure

- Maintain and supply the cloud computing base
- A plot for safety and acquiescence
- Investigate and enhance technological and marketing methods
- Pilot fulfilments of cloud structure
- Assure resolution and action dependability

Personal cloud: It is a network type storage cloud. This type of cloud is for the individual or small companies where they can store their data, keep them secure and also back up their data anytime they want. It is a device attached based cloud computing. Seagate Personal Cloud media storage is a perfect example of a Personal cloud.

Performance cloud: It is one of the cloud computing which helps in management. It is used to evaluate different stats and tests for cloud computing so that it can function more properly and also can be improved where ever it can be.

Q11. What are the different components required in Cloud architecture?

There are main five components which are required for the architecture of cloud computing. These are:

- Processor Speed
- Cloud Storage devices
- Cloud Ingress
- Intra Cloud Communications
- Services provided by cloud

Q12. What are the different components required in cloud computing?

There are 11 components which are shown here:

- Management-as-a-service
- Security-as-a-Service
- Database-as-a-Service
- Platform-as-a-Service
- Integration-as-a-Service
- Testing-as-a-Service
- Storage-as-a-Service
- Infrastructure-as-a-Service
- Process-as-a-Service
- Application-as-a-Service
- Information-as-a-Service

Q13. What are the top applications of cloud computing nowadays?

As we know, the demand for cloud computing is increasing at a vast speed. All users want more space and speed up their devices. Currently, it has set its realm in the IT industry and left others behind. The major applications that are using Cloud computing these days are:

- Dropbox
- LinkedIn
- Zomato
- Rapportive
- TripIt
- ShareTHis
- SlideRocket

Q14. What is the use of cloud computing?

- Data analysis
- Implant intelligence
- Software on demand
- Global distribution with audio and video
- Data protection
- Devise applications

Q15. Is cloud computing save money. If yes then How?

Cloud computing saves a lot of money by obliterating the cost of hardware purchase and labor maintenance. It also diminishes the expenses of electricity. Along with this, it is wonderful for the entrepreneur as it increases the productivity of the workout.

Q16. What is on-demand functionality? How cloud computing provides it?

On-demand functionality is the main and most valuable characteristics of Cloud computing. On-demand functionality means provisioned the resources at a time when the consumer needs it. The cloud computing plays it very perfectly as the whole setup is done within in a minute and with just a few clicks.

Q17. What are the different models used for deployment in cloud computing?

1. Private cloud model: It is supplied for independent used by a single organization which has many multiplied buyers like business units. This type of cloud can be controlled, maintain and administrate by the organization or maybe by a third party or may be done by both of them. In some cases, it may exist proposition
2. Public cloud model: As the name suggests, this type of cloud computing is supplied for public use. This

type of data is generally controlled, maintain and administrated by the government but sometime it may be done by some organization, academics, business companies or maybe combines of them

3. Community cloud model: This type of cloud computing is supplied for independent use by a particular type of community consisting of the consumer. These consumers are from an organization which has some shared content. The content may be of any types. It may be of security things, policies, acquiescence consideration or some kind of mission things may also be included in the plan.

   This type of cloud can be controlled, maintain and administrate by the organization or maybe by a third party or done by both of them. In some cases, it may subsist on/off proposition.

4. Hybrid cloud model: 'Hybrid cloud' suggest mixing of a cloud. It is a mixture of two or more unique clouds. It may be composed of two of any (private, public and community) these clouds or maybe they all are mixed up together. It has some unique existence but all of these are bounded mutually by standard and restrictive technology that allows the applications and data mobility

Q18. What is VPN and what it consists of?

VPN (Virtual Private Network) is a private network. It is useful for the users to exchange data across public networks. It is a point-to-point private link.

Q19. Write some examples of large cloud providers and their databases?

- Microsoft (Services: Microsoft Azure compute, Microsoft Azure Storage)
- IBM (Cloud provider)
- Oracle (Database -as - a-service)
- Amazon (Services: EC2, S3, Simple DB)
- Microsoft (Services: Microsoft Azure compute, Microsoft Azure Storage)

Q20. What are essential things that a user needs to concern about before going to cloud computing platform?

- Migration
- Scalability
- Security
- Adaptability
- Integration

Q21. What is the difference between the scalability and elasticity?

We have described the differences in the table given below:

Reason	Elasticity	Scalability

Capacity	It increases or reduces the capacity to handle the workload.	It only increases the capacity to handle the increasing workload.
Resources	In this, the current demand for resources matches closely with available resources.	In this, the available resources may exceed the current demand to meet future demands.
Workload	It adapts both increasing as well as decreasing workload by allocating resources in that manner automatically.	It adapts only increasing workload and handle it with increasing resources.
Handling Workload	It handles the varying workload with the use of computer resources dynamically.	It handles the increasing workload with' increasing the power of computer resources.
Scaling	It includes "Scaling Up" or "Scaling down" depends on the variation of workload.	It includes "Scaling Up" or "scaling out" for capacity to serve workload.
Duration	It enables the corporate to meet demands for services with short terms	It works on long terms, strategic schemes.

Q22. What is xaas in cloud computing?

Xaas stands for Anything as a service. It recognizes the vast number of products, tools and technologies that vendors now deliver to users as a service over a network. Car sharing and Uber/ Ola taxi services are an example of Xaas.

Q23. What is provisioning in cloud computing?

Provisioning in cloud computing is basically the allocation of a cloud provider's resources and services to a customer. It refers to the use of tools to automatically control the installation, configuration, and management of cloud computing services and helps enterprises make better decisions for their cloud computing resources.