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TITLE:

Case Study: Application of Cloud computing

AIM:

To create a presentation for any appropriate cloud computing application

OBJECTIVE:

To understand the importance of Cloud computing application

THEORY:

The reason for choosing the specific cloud computing example

Selecting a particular cloud computing example is contingent upon a number of criteria, including financial restrictions, industry demands, and scalability specifications. A small e-commerce firm, for example, might choose Amazon Web Services (AWS) because of its wide range of services, affordability, and simplicity of integration with well-known e-commerce systems like Shopify or WooCommerce. Conversely, a sizable company with intricate data analytics requirements could favour Google Cloud Platform (GCP) due to its sophisticated machine learning features and BigQuery's ability to manage enormous datasets. A government organisation that is worried about data sovereignty, on the other hand, might decide to use Microsoft Azure due to its strong security features and compliance certifications. The decision ultimately comes down to matching the distinct capabilities and areas of expertise of each cloud provider with the particular requirements and goals of the company. In order to guarantee the best possible results for the company, choosing the best cloud computing example necessitates a thorough assessment of elements like performance, security, compliance, support, and cost-effectiveness.

INPUT:

Creation of presentation on Cloud Computing

OUTPUT:

The presentation has been accomplished with important takeaways

CONCLUSION:

The presentation has been accomplished with knowledge gain

PLATFORM:

Linux

LANGUAGE:

C language.

FAQs

1. What are public and private clouds ?

Answer

There are two kinds of cloud computing environments: public clouds and private clouds.

Public Cloud: A cloud service provider like Amazon Web Services (AWS) or Microsoft Azure offers a vast shared pool of computer resources, including servers, storage, and networks. These resources are available to anybody via the internet for pay-per-use. It is comparable to renting a room in a big building where several occupants share common areas.

Private Cloud: Envision having your own cloud environment that is solely for your company and not shared with anybody else. It's similar to having all the computing resources managed and customised to meet your own requirements within your own gated community. This might be hosted by a third-party provider but utilised only by your company, or it could be on-premises, meaning the cloud infrastructure is housed inside your company's data centre.

2. What are the different types of services offered by clouds ?

Answer

1. **Infrastructure as a Service (IaaS):** Via the internet, this kind of service offers virtualized computer resources. Without having to purchase actual hardware, customers may install and administer their own apps thanks to its virtual machines, networking, and storage features. Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP) are a few examples of IaaS providers.

2. **Platform as a Service (PaaS):** This service provides a platform that lets users create, execute, and maintain applications without having to worry about the supporting infrastructure. It usually consists of services and tools for scalability, deployment, and application development. PaaS providers simplify the development process by providing environments for different programming languages and frameworks. Heroku, Google App Engine, and Microsoft Azure App Service are a few well-known PaaS vendors.

3. **Software as a Service (SaaS):** SaaS is a subscription-based online software application delivery model. These applications are accessible through a web browser, so users don't need to install or maintain any software locally. Updates and security patches are only two of the many software maintenance tasks that SaaS providers take care of. SaaS applications include, for example, productivity suites like Microsoft Office 365, email services like Gmail, and customer relationship management (CRM) tools like Salesforce.

3. How is distributed computing and cloud computing related ?

Answer

Two roughly similar ideas, distributed computing and cloud computing, both entail using several computers to do tasks.

The method of dividing a task into smaller components and distributing those components among several computers so they can be completed concurrently is known as distributed computing. Every computer, or node, completes the designated portion of the task on its own before combining the results to create the final product.

On the other hand, cloud computing is a particular kind of distributed computing in which users can access computer resources like servers, storage, and apps as a service over the internet. On a pay-as-you-go basis, consumers can access resources from a cloud service provider in place of purchasing and maintaining real gear. Therefore, cloud computing is a specific type of distributed computing where resources are accessed over the internet, whereas distributed computing is the general idea of dividing jobs over several computers. Although not all distributed computing systems are implemented in the cloud, cloud computing is fundamentally a type of distributed computing.