MANTECH Publications

Recent Trends in Computer Science and Software Technology
Volume 6, Issue 1, January-April 2021

Cloud Computing in the Modern Era

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Abstract

Seemingly a complicated term, cloud computing can be a simple yet liberating experience. It is rather an essential in modern computing. As for the sake of defining it, PCMag Encyclopedia defines it succinctly as "hardware and software services from a provider on the internet." In reality, cloud is a metaphor for the space that's high end and invisible, the internet. To put it simply, cloud computing is the technology that enables users to save their data on the internet instead of the device or computer.

Keywords*: - Cloud Storage, Google Drive, Apple Icloud, Internet Technology.*

INTRODUCTION

Cloud computing is not about the storage space on the device or computer hard drive, which is actually known as the local storage. The stored data in case of local stage is fast and easily accessible, provided the user has the device handy. Another drawback is the potential of data loss in case of damage it the device itself.

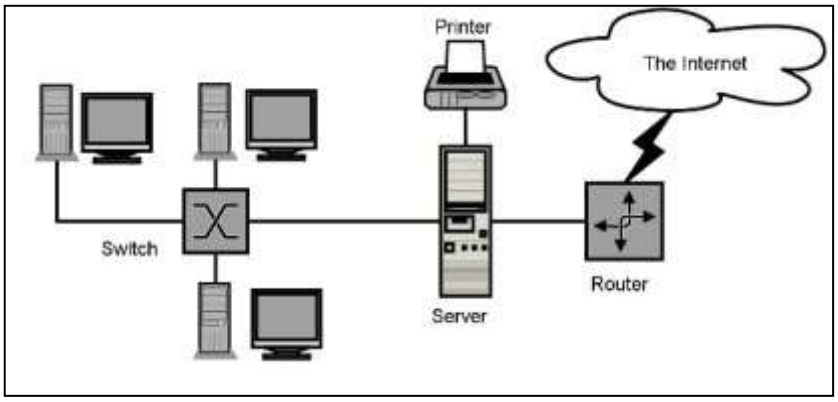


Figure 1 Internet Cloud System

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With cloud computing, the data requires an internet connection to be put up on the internet. It can then be accesses from multiple devices using login credentials of the cloud saved at. Advantages range from ease od access across devices, sustainability and security of data in case of uncertain device crashes and so on. The platform also allows users to access and edit work on data in real time together, making it fairly simple and effective for corporations and offices to work remotely.

The cloud or so to say, is not really the same thing as having dedicated network attached storage (NAS). Storing data on a home or office network does not count as utilizing the cloud. It would rather be considered "cloud computing," if the user is accessing their data or your programs over the internet, or at the very least, have that data synced with other information over the web. In bigger businesses and corporate houses, their requirements are defined for employees and as an individual user, one may never have any idea what kind of massive data processing is happening on the other end in a data center that uses more power in a day than your whole town does in a year.

The end result is the same: with an online connection, cloud computing can be done anywhere, anytime. Cloud enables users to explore further the possibilities that IoT as to offer with metered or unmetered connections, connected devices, remote work possibilities, real time connection over the internet cloud and so on, making work like never before with unmatched space for innovation.

Cloud & Business

There exists entirely different "cloud" when it comes to business activities and programs. Some businesses choose to implement Software-as-a-Service (SaaS), and on the contrary, there are certain business that opt for subscribing to an application it accesses over the internet. There's also Platform-as-a-Service (PaaS), where a business can create its own custom applications for use by all in the company.

There is another very mighty Infrastructure-as-a-Service (IaaS), where players like Amazon, Microsoft, Google, and Rackspace and other giants provide a backbone that can be "rented out" by other companies such as the case of Netflix being a cloud subscriber of Amazon.

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Figure 2- PC Mag Analysis, 2020

Cloud computing is a great innovaton and results in a space fpr creative investments and therefore offers scope for big business Amazon's dominance in the area can be seen and felt in the $100 billion a year business. A lot of businesses just rent out space from other bigger company clouds.

MOST POPULAR CLOUD SERVICES

Some major cloud services used by people, entrepreneurs, startups, companies or even government offices in some cases are the popular clouds such as Google Drive, Apple iCloud, Drop Box, Slack to name a few. In India Google drive takes the spot for the most commonly used cloud space by different users for personal or professional use.

• **Google Drive:** This is a pure cloud computing service, with all the storage found online so it can work with the cloud productivity apps: Google Docs, Sheets, and Slides. Google Drive is also available on more than just desktop computers; you can use it on tablets like the iPad or on smartphones, which have separate apps for Docs and Sheets, as well. In fact, most Google services could be considered cloud

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computing: Gmail, Google Calendar, Google Maps, and so on.

• **Apple iCloud:** Considered as the benchmark cloud storage, Apple's cloud service is primarily used for online storage, backup, and synchronization of your mail, contacts, calendar, and other basic and added features that enable a great user experience. All the data you need is available to you on your iOS, iPadOS, macOS, or Windows devices (Windows users have to install the iCloud control panel). Naturally, Apple won't be outdone by rivals: it offers cloud-based versions of its word processor (Pages), spreadsheet (Numbers), and presentations (Keynote) for use by any iCloud subscriber. iCloud is also the place iPhone users go to utilize the Find My iPhone feature when the handset goes missing. This service is used by the users of apple products and is effectively very efficient service with ease of access but limited reach.

• **Dropbox:** Still works the same way as other cloud services but it delivers a simpler and reliable file-sync and storage service for years, but is now enhanced with lots of collaboration features and is one of the most user friendly and basic ones in the range.

• **Slack:** It is considered cloud computing if you have a community of people with separate devices that need instant messaging and communication. The poster child for that is Slack, but you get the same from Microsoft Teams, Workplace by Facebook, and more.

The aforementioned file-synchronization and backup service, and others work with the cloud because they store a synced version of user's files online, but they also sync those files with local storage. Synchronization is essentially the core and cornerstone of the cloud computing experience, even if the user is accessing the file locally.

CONCLUSION

The cloud services are exemplary services that push forward the scope and innovation in the field of information technology. The prime picture of a device that is completely cloud-centric is the Chromebook which comes with other latest state of the art features and runs completely on cloud. Such range of laptops have just enough local storage and power to run Chrome OS, which essentially turns the Google Chrome web browser into an operating system best suited for the system. In case of technologically cloud based systems,

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almost everything you do is online, such as accessing the apps, media, and storage are all in the cloud. It is with these features that the expense and costs at all ends decreases and for the same reason they find a separate user base, making them incredibly popular for education and among students.

With such developments, it is clear that the cloud computing is here to stay and become more and more prevalent with newer devices and may even result in production of cheaper devices and laptops that expand the market and become available to a greater segment of the society.

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