

## Task 2

### Get started with cloud computing

In simple terms, cloud computing is a range of services delivered over the internet, or “the cloud.” It means using remote servers to store and access data instead of relying on local hard drives and private datacenters.

Before cloud computing existed, organizations had to purchase and maintain their own servers to meet business needs. This required buying enough server space to reduce the risk of downtime and outages, and to accommodate peak traffic volume. As a result, large amounts of server space went unused for much of the time. Today’s cloud service providers allow companies to reduce the need for onsite servers, maintenance personnel, and other costly IT resources.

This task mainly helps us to get familiar with various basic and intermediate topics in cloud computing. Cloud computing is a very vast area, hence there are many topics. With an understanding of each topic, we will be able to understand cloud computing in a better way. As a beginner to cloud computing, all the topics seemed new English words to me in the beginning. I didn't even know the full form of many words like MAAS, PASS and so on.

This task helped me to get a whole new idea about cloud computing. I got to know in detail about various new topics by searching through Google, YouTube and various other internet sources. I initially had difficulty getting a clear picture of these topics but I got them clarified through videos on YouTube and by asking friends. Some of the topics were easy. I understood them as soon as I go through them on the internet. This includes topics like P2P systems, JVM, etc. Some topics had the literal meaning of the word i.e. gossip which is a very familiar word and in the cloud, it also has the same meaning as in real life situations but it was in terms of cloud terms.

Some topics I could understand by going through two or more sources or by watching some videos like map-reduce, and key-value stores. Some topics I couldn't find on the internet, even if I found them it doesn't provide the best idea of concept which I wanted. For those topics, I had to refer to books. For these topics, I asked my friends to get a clear idea.

I am now capable of explaining some topics in a single sentence. For example,

Map-reduce: MapReduce is a programming paradigm that enables massive scalability across hundreds or thousands of servers in a Hadoop cluster.

Gossip: Gossiping in distributed systems refers to the repeated probabilistic exchange of information between two members.

P2P systems: peer-to-peer (P2P) service is a decentralized platform whereby two individuals interact directly with each other, without intermediation by a third party.

SAN: A storage area network or storage network is a computer network which provides access to consolidated, block-level data storage.

Like this, some topics can be explained in a sentence. There are topics if I want to share my understanding with others, sharing it in one sentence will not be good. Now, I am capable of explaining each and every topic in this task with a clear understanding of it to others which I thought was a dream when I first started this task.

As I go on gaining knowledge about each topic I found that there is still more to be learnt and I still had a long way to go. At the same time, these topics made me more curious about various opportunities in cloud computing. I got to know about various disciplines in cloud computing so that I can further explore various new fields in the cloud one by one.

Below is the link to the Github repository where I have uploaded the details of each topic:

[https://github.com/SujathaBhat/Marvel/blob/main/cloud/CLOUD%20COMPUTING%20\(1\).pdf](https://github.com/SujathaBhat/Marvel/blob/main/cloud/CLOUD%20COMPUTING%20(1).pdf)