

Cloud computing has been around for a long time. However, it became a topic of interest only in the last decade, and is now an accepted part of the technology landscape in most organizations. Essentially, cloud computing is the utilization of compute power on remote infrastructure and software networks as a service, where companies are charged for the consumption of the deployed computing resources. Clouds can largely be classified into private, public or the newer hybrid variant.

Cloud computing, as an expression, is based on the usage of cloud in science. Cloud is a term commonly used to describe a large consolidation of objects that seem like a cloud at a distance and are not looked at in detail. The term cloud is essentially used to indicate that the user has no clear idea of the actual implemented hardware or networks on which the cloud is built. The other reason cloud computing was used is because of the symbol used to indicate the Internet. The cloud symbol is being used since the early 90s to describe the Internet and Cloud computing has been a step towards using the Internet to access remote infrastructure not owned by the user.

Cloud computing like several other technologies is not an inventive step but an evolutionary step due to the merging and advancement of hardware, network, software & skills. Also, the goal of cloud computing is to reduce the high costs of procuring infrastructure as well as allow users to take benefit from all of these technologies, without the need for deep knowledge about or expertise with each one of them. The cloud aims to cut costs, and helps the users focus on their core business and not on their IT landscape.

In recent times, the proliferation of cloud has had its advantages. However, it has also led to some risks that can cause a lot of difficulties to the users. The primary risk that has cropped up is that of security breach. Several cloud providers have been forced to give data to governmental bodies as well, and this has intensified the fear among users as well as companies about the usage of cloud. To mitigate this risk, several companies across the world are looking at the option of using Hybrid clouds.

To better understand this option, readers will first need to understand the classification of clouds:

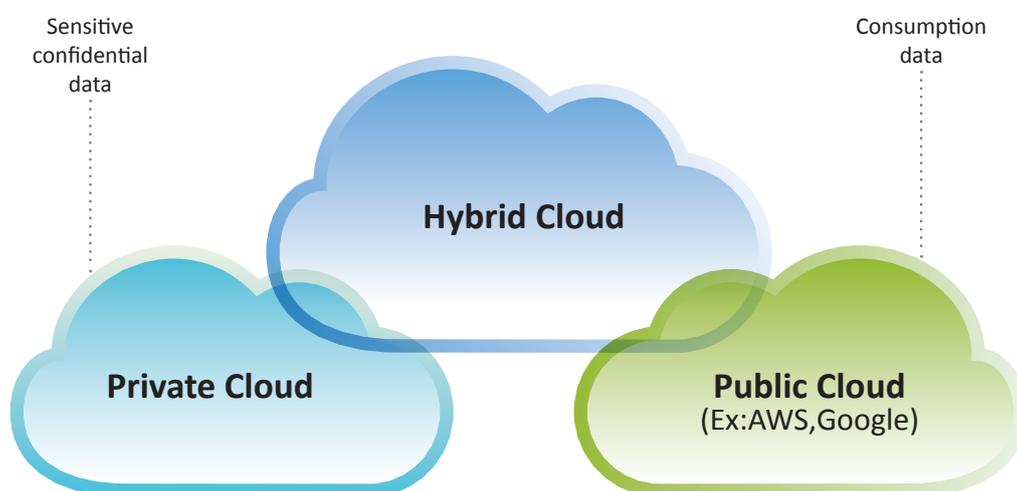
Public Cloud is one in which the services and infrastructure are provided off-site over the Internet. These clouds offer the greatest level of efficiency in shared resources; however, they are also more vulnerable than private clouds. A public cloud is the obvious choice when it's a standardized application like email used by several people, or a collaborative activity, or an urgent need for incremental capacity or a company that is using a SaaS product, which a vendor has provided on a public cloud.

Private Clouds on the other hand is one where the services and infrastructure are maintained within a private network. This is far more secure when compared to a public cloud but the costs of the underlying infrastructure as well as network has to be borne by the user. A private cloud is a good choice when the core business of the company is data and applications, and hence need all the security. Private clouds are also needed in some sectors where there is either a higher need for security controls like banks for their core banking applications or by companies that want to become cloud providers.

The cost of private cloud over public and the increased fear of hacker attacks, activism, security audits et al have led to the proliferation of hybrid clouds.



Hybrid Clouds is a mixture of both private as well as public clouds where the providers could be multiple and companies create the hybrid cloud based on the need of each application or service they want to host. Hybrid clouds are best when companies need to keep part of their data close to themselves and really guarded, while some of the data can reside in a public environment. Though hybrid cloud has strength, the biggest downside is that the spectrum of technology landscape gets fragmented. Hence, there is a need for more resources in terms of maintaining this hybrid cloud landscape. The best situations to use hybrid clouds are when you want to tailor your offerings to different geographies, and not only provide SaaS option to your customer but also give them the freedom of putting their own private cloud. Hybrid is becoming a choice now for most companies, while ensuring that both data and applications don't have the same approach.



Shifting from IT Control to IT Coordination

Some of the points to note for hybrid clouds are as follows:

1. Joint controls rather than consolidation; more resources are needed to maintain
2. Application; BYOD to workplace is driving the growth of hybrid clouds
3. Security and outreach are at loggerheads and hence hybrid clouds
4. Creation of enterprise app stores and movement away from the Intranet

