



Cloud Computing



Cloud Computing

Over the course of the last decade, Cloud Computing has become a buzz word within the IT Industry with organisations seeking to become "cloud based". In this document we will establish what the terms mean, the benefits and problems of cloud-based services and offer our advice on what solutions should be used. Cloud computing is the delivery of computing as a service rather than a product. This can be done at many levels, whether it be the delivery of a specific application, data storage or an entire desktop. However, whatever the service the goal is the same – for it to be available at all times from wherever the end user is geographically located. There are a number of different models of cloud computing, the meanings of which have been summarised below:

Public Cloud

Often seen as the traditional or mainstream definition of cloud computing. This would be the provision of services by a third-party provider such as Google offering their Gmail service or an online storage provider such as Dropbox. "The cloud infrastructure is made available to the general public or a large industry group and is owned by an organization selling cloud services"

Private Cloud

This term relates to when the infrastructure is operated solely for the use of one company or organisation. An example of this would be an infrastructure hosted in a Data Centre with resilient connectivity etc... The use of this term has been widely criticised as this type of cloud does not have the benefits that some believe are key to cloud computing. "The cloud infrastructure is operated solely for an organisation. It may be managed by the organization or a third party and may exist on premise or off premise"

Community Cloud

A shared resource between several organisations within a specific industry. Generally, will be smaller than a public cloud however the cost of creating and supporting the infrastructure is split across organisations "The cloud infrastructure is shared by several organisations and supports a specific community that has shared concerns (e.g., Mission, Security requirements, policy, and compliance considerations). It may be managed by the organizations or a third party and may exist on premise or off premise"

Hybrid Cloud

A hybrid cloud is a combination of one more other cloud types. "The cloud infrastructure is a composition of two or more clouds (private, community or public) that remain unique entities but are bound together by standardized or proprietary technology that enables data and application portability (e.g., cloud bursting for load balancing between clouds)

Benefits of Cloud Computing

We have detailed the 3 main benefits of working in a cloud computer environment below:

Reduced Capital Expenditure

As the computing power is delivered as a service, cloud computing is paid incrementally reducing the capital expenditure for organisations wanting to provision services such as email or file storage. This is not the case when working in a "Private Cloud" environment and is one of the key reasons why some IT professionals object to the term.

Scalability

You can scale your business computing and storage needs almost seamlessly – without the need to purchase additional hardware.

Remote Access

As the service exists "in the cloud" it can be accessed from anywhere with an internet connection no matter what that service may be.

Problems with Cloud Computing

There are problems and risks associated with moving data or services into a public, community or hybrid cloud. Some of those problems are detailed below:

Security

Just how secure is your data? Not a week passes without a story breaking of data being stolen or user account details being leaked from a major provider. Google, Sony, and Microsoft have all suffered major data loss over the course of the last 12 months. Hackers tend to target large companies fuelled either by financial, ethical, or political motives meaning by moving your data to one of these providers it is inherently at more risk.

Control

Once your data has been uploaded to a public cloud-based service, you lose control of it. What happens when you click delete? As the data is stored on another company's server is the data removed or simply moved to another location on the same server.

Where is your data?

Once your data is "in the cloud" you have no way of knowing where it is physically located. Since the introduction of the Patriot Act in the USA, any data that is contained on hard disks within a server located in the USA, can be interrogated by the US government. Furthermore, the service provider is prevented from telling you, the end user. If this data was on a server in your office and that you own, and the government wanted access to it, they would have to inform you.

Availability/Support

Although one of the key benefits to Cloud Computing is the availability of your infrastructure – when operating in a public cloud, if there is a problem you will be one in a very long line of customers on the end of a phone. Again, there is a lot of evidence available of Gmail accounts being disabled for weeks on end for no apparent reason, causing the interruption in mail flow, without any sort of explanation. Support SLA's with public cloud providers can be very expensive if you want to maintain a fast response time. This makes this type of support arrangement prohibitive for all but large companies.

Our Advice

Tribeca have created numerous private cloud environments for our client base and would whole heartedly recommend this as an environment for your core infrastructure. Some workloads may well be better suited to a public cloud service such as AWS or Azure. In this instance, the provision of those services and deployment of data protection tools is vital to ensure your data is secure and recoverable. Tribeca have clients working in both private and public clouds and are able to assist you with deploying services to either platform.

About Tribeca

For more than 10 years, Tribeca has delivered world-class, specialist IT services to the demanding Alternative Investment market. Our services include Business IT Support, Cyber Security, Disaster Recovery, Network Design, Data Centre Hosting and Software Development.

We now support a wide variety of clients across 15 countries and monitor their infrastructures 24/7/365 with over 9,000 monitor sensors connected. Our team is more than capable of keeping up with your business's fast pace of work and constant need for robust and reliable IT. We will ensure that your systems are working at their optimum level, enabling you to do your job as effectively as possible. We use only the latest high-performance technology to guarantee you the best service. Our instant response helpdesk can resolve over 90% of our clients' issues remotely. This is because our first line engineers are trained to a similar standard as that of other companies' second line teams. This efficiency benefits you by remedying technical issues promptly to minimise any inconvenience to your network.

Tribeca is committed to delivering the best outsourced IT support service within the financial sector. We guarantee to reduce your IT overheads, including third-party providers. As part of our dedicated service, we can assure you that you will always deal with a full-time employee, as we never use calls centres or contractors.

For further information, visit www.tribeca-it.com, email us on info@tribeca-it.com or call us on 08000 122 225



LONDON
+44 (0) 203 475 8732

NEW YORK
+1 646 781 7382

HONG KONG
+852 5808 4824

DUBLIN
+353 (0) 1485 4106