Is "The Cloud" a single platform? Understanding could save you money

By Sufyan Mkwanda   3 Jun 2015

Many times you may hear people speaking about "The Cloud" as if it's one big single platform where data is stored. Although this buzzword vaguely suggests the promise and convenience of being able to access files from anywhere, the reality is that the cloud is hardly floating like mist above our heads in anticipation of a storm to come. It's a physical infrastructure that consists of many computers housed in massive warehouses around the world. At times, you may here IT organisations and vendors throwing words around like SaaS, IaaS, PaaS, MaaS, etc.

This is simply the different components of cloud computing services available today.

Here is a brief overview of the nomenclatures of cloud computing. This will help you familiarise and identify the different aspects of cloud computing and make it easier for your business to leverage on this technology when making decisions.

Software as a Service (SaaS)

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Software as a service is simply applications that are designed for end-users, delivered over the web. How this works is that vendors install software on their servers and allow you as the user to connect to their servers over the internet. Their servers can be based anywhere in the world and as long as you have access to an internet connection, their software would be available to you. In most cases, payment involves a monthly subscription or yearly fee as a retainer. Examples of this are web applications like Google docs, CRM tools, etc. **The end user advantages are:**

• Cheaper - instead of having to pay a large once-off lump sum amount, vendors will bill you every month at a much cheaper rate.
• Don't need the expertise in-house to maintain SaaS
• Cheaper upgrades and updates

Disadvantages

• Functionality can be turned off in a heart beat
• Possibility of losing access to SaaS
• Good internet connection is vital (not many people have access to great network speeds)
• Cost of upgrading internet connection to meet reliable bandwidth speeds
• No training, support or migration assistant is usually included in the minimum fee
• Migrating data from different vendors could serve as a big problem

Platform as a Service (PaaS)

PaaS is a set of tools and services designed to make coding and deploying applications quick and efficient. This is another form of architecture based in the cloud. It's simply a base level platform where software developers, programmers, IT professionals, etc. can dump their code into. This is done by the use of a web-based application and makes it easier for software developers as there isn't any complexity of buying or maintaining any software or infrastructure underneath it.

Examples of PaaS include Heroku and Google App Engine. There are pros and cons of using this service e.g. iInput/output performance can be slow; the application needs to be highly portable in terms of where it is hosted, etc. As with most cloud

services, PaaS is built on top of virtualisation technology.

Infrastructure as a Service (IaaS)

IaaS is a way of delivering cloud computing infrastructure (servers, network services, storage) over the internet. With IaaS, you are basically renting infrastructure in the cloud over a network connection for a monthly or yearly subscription. Examples of this equipment could be your PBX systems or hosted VoIP where all you do is rent out the service and it is owned, managed, monitored and maintained by the vendor or service provider.

Essentially similar to the aforementioned services IaaS also has its pros and cons; where it becomes cheaper for management as you don't need to have a technician on-site to maintain the server on site, or where an organisation can leverage more on hosted infrastructure and on-premises servers if there is a need for much higher performances.

At the end of the day there are great advantages of transitioning into the cloud for businesses, however, it could become extremely complex when deciding on what platform would best suit your business needs.

The Emergent Research study revealed 78 percent of small businesses (companies with less than 50 employees) will be fully adapted to the cloud by 2020 - up from 37 percent in 2014. Always try and confer with your IT consultants or advisors when making these decisions owing to the fact that choosing the wrong service or solution could end up costing you money instead of reducing costs.

ABOUT SUFYAN MKWANDA

Sufyan Mkwanda is the founder of a small IT managed service company called SM Global Tech
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