Cloud computing - revolutionizing cheap computing with the Internet

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What is cloud computing?

To test the quick response of job applicants, Google just asked a seemingly simple question: "What would you do if the existing data increased by 1,000 times?". If applicants apply the "stuffed" formulas at school to this situation, they will turn the server into snails when multiplying video, photos, maps, shopping information . to 1,000 .

Therefore, in order to find a place in Google, they need to learn how to work and their dreams at a wider level. They have to know how to get that huge amount of data out of the reach of cramped data centers and put them somewhere out there - where Google experts call "cloud" - virtual clouds.

The term "cloud computing" was born in mid-2007 not to talk about a new trend, but to generalize the directions of information infrastructure that has been going on for years. This concept can be interpreted in a simple way: huge computing resources such as software, services . will be located in virtual servers (cloud) on the Internet instead of in home computers and documents. Room (on the ground) for people to connect and use every time they need it.

Thus, cloud computing is only a complete concept for a new trend because many businesses do not have their own servers, PC only installs some basic software, all depends on the cloud. For example, they subscribe to hosting services for the company website, hire revenue management tools from Salesforce.com, get market survey data from Survey Monkey . And of course, they use Google to find Search, analyze, share and store documents.

With services available on the Internet, businesses don't have to buy and maintain hundreds, even thousands, of computers and software. They just need to focus on production because someone else has taken care of their infrastructure and technology. Google, naturally, is among the companies that support the most active virtual server computing by their business based on the distribution of cloud (virtual server).

Cloud computing - cloud computing or virtual server computing.*Photo:* ***InfoWorld*** .

However, the downside is that users will be dependent on the technology that the provider offers them, making flexibility and creativity lessen. Cloud computing runs the risk of repeating the old computer model's vulnerability: companies own large central computer systems (cloud) and people will connect to them through stations. Users feel frustrated because they only have the right to do things within the allowable administrative scope so they cannot catch up with the latest improvements. Before that situation, personal computers were born and developed as "protests" against the dictatorship of the central computing model (most famous is IBM mainframe).

But "cloud" computing is now much more open and, more importantly, this is the cheap solution of businesses as well as the first choice for those who often have to go away but do not have their own laptops. Even financially capable firms appreciate this trend, as Coca-Cola recently signed an agreement to put all its e-mail accounts (about 75,000) on Microsoft Exchange Online online service.

Branches of cloud computing

Software works as a service (SaaS - Software as a Service)

With this kind of cloud computing, a software will be distributed through the browser to thousands of customers. On the user side, SaaS means they don't need to invest money for servers and software licenses. For suppliers, such as Salesforce.com, they only have to maintain a common application for many units, so the cost is cheaper than traditional hosting.

Custom Computing (Utility Computing)

This form of business that has been around for a long time is being blown away by Amazon.com, Sun, IBM and a number of other companies that offer storage and virtual servers on demand. Currently, most businesses consider utility computing as an additional solution, serving non-core tasks. But in the long run it will replace part of the database center.

Web service (Web service)

Closely related to SaaS, web service provides application programming interface (API - Application Programming Interface), such as the Google Maps API, via the Internet for software developers to exploit features.

Platform as a service (PaaS - Platform as a Service)

This is also a variant of SaaS, but this cloud computing model provides a development environment as a service: you build applications that run on the vendor's infrastructure and deliver to users through their servers. that supplier. You will not be completely free by being constrained in design and technology. Some typical examples of PaaS are Force.com of Salesforce.com, Google App Engine, Yahoo Pipes .

Management Service (MSP - Managed Service Provider)

MSP - the oldest form of cloud computing - is a primary application for professionals rather than end users, such as e-mail scanning services or desktop management programs. Some well-known providers are SecureWorks, IBM, Verizon and Everdream.

Integrated computing (Internet integration)

The process of combining "clouds" that appear on the Internet is at an early stage. SaaS Workday provider recently merged into another company in the same field as CapeClear. Their goal is similar to Grand Central, which is to become a cloud gateway to bring integrated solutions to customers.

With this final model, future cloud computing will be described as sky computing: The Internet is like a sky with a lot of individual service clouds for customers to easily connect.