– San Diego News Network - http://www.sdnn.com -

High tech: What is the cloud in Web 2.0?

Posted By helen.chang On December 8, 2009 @ 3:01 pm In Giving'em the Business | No Comments

The "cloud" has become the buzzword of the year and just like phrases such as Web 2.0, extreme programming and agile development, most people in the business world are looking for a clear definition of what, exactly, the cloud is.

Similar to a rain cloud, the Internet cloud has no specific point or boundary – it's just "out there." Many use the word cloud as a synonym for the Internet as in, "We don't store your data on our local servers, but rather, we store you files in the cloud." But it's more than that.

There are a couple ways to think of the cloud.

First, in the cloud, your servers and data have no specific location. Ten years ago,

[1]

What exactly is the Internet cloud?

someone could point to one server and say that's where a particular e-mail was stored. Today, with services like Gmail, the subject line of an e-mail might be stored on one server, the body of the e-mail on another server, and the e-mail's attachments stored on yet another server all while each server's data is redundantly copied to multiple locations.

Second, using cloud-based computer services removes many of the technical requirements for knowing the details of the underlying infrastructure. For example, a corporation can use Google Apps to set up free e-mail, for up to 50 employees, with more than seven gigabytes of storage per account.

With this service, which is a white-labeled version of Gmail, a company can be up and running with a new corporate e-mail system within an hour. Ten or 15 years ago, this task would have required purchasing and maintaining a dedicated e-mail server or, at the very least, calling a hosting company and having an engineer set up the hardware. Whereas, today, you can simply click through some forms on the web, without human intervention, to configure a cloud service.

There are many cloud-based services and Amazon leads the pack with more than a dozen different web services collectively branded as Amazon Web Services. Amazon's cloud storage (called Simple Storage Service or S3) and their cloud computing service (called Elastic Compute Cloud or EC2) are their two oldest and most popular services.

Amazon thinks of these services as "pay by the drink" meaning that there are no setup fees or contracts. A customer can literally be billed as little as a nickel or a dime each month. When using S3, Amazon charges 10 to 20 cents for each gigabyte of storage and bandwidth. EC2's costs start at 12 cents per hour to run a Windows Server with admin access or as little as 8.5 cents per hour to run a Linux system with root access.

Many companies use cloud systems as their primary configuration while others use it as a backup. Companies, such as SDNN, run their entire website, 24/7, using cloud computing servers while

others turn on cloud computing servers as a testing environment, for a few days, and then turn them off when they're done and only incur a $5 or $10 bill.

No company is too big or too small to realize the benefits of using cloud-based services. One of the biggest strengths of cloud services is that they can be accessed via an API, which allows other computer systems to interface directly without human intervention. This means that cloud web services can be configured and monitored by automated systems and additional servers can be brought on line or turned off as needed.

With cloud computing services, users no longer need to worry about procuring, configuring and maintaining the underlying hardware. Rather, they can focus on the higher level services that are most important to their business.

Joe Moreno is the president of Adjix, based in Carlsbad, and provides cloud computing consulting services to both the commercial and government sectors. You can follow Joe on Twitter @JoeMoreno [3] *or reach him at 760.444.4721.*

[2]

Joe Moreno is a cloud computing expert.

Article printed from San Diego News Network: **http://www.sdnn.com**

URL to article: **http://www.sdnn.com/sandiego/2009-12-08/blog/giving-em-the-business/high-tech-what-is-the-cloud-in-web-20**

URLs in this post:

[1] Image: **http://www.sdnn.com/sandiego/2009-12-08/blog/giving-em-the-business/high-tech-what-is-the-cloud-in-web-20/attachment/cloud**
[2] Image: **http://www.sdnn.com/sandiego/2009-12-08/blog/giving-em-the-business/high-tech-what-is-the-cloud-in-web-20/attachment/joemoreno**
[3] *@JoeMoreno*: **http://twitter.com/JoeMoreno**