

Demistifying the Cloud

by
Gary Alderson
Aldersoft

Quick Introduction

- Gary Alderson
- Owner, Founder and CCBW of Aldersoft
- 39 years experience in Information Technology
- 35 years at the University of Manitoba
- Chief Technical Architect of System Renewal
- Manager, Integration Support, IST
- Retired: September 2010
- Email: Gary.Alderson@Aldersoft.CA
- Bio: <http://CA.Linkedin.com/in/GaryFAlderson>

Clouds

- Everyone is talking about clouds these days.
- Every sales rep has one and wants to sell it.
- Microsoft has The Cloud and Skydrives.
- Apple had Mobile-Me which is now iCloud.
- Google has been living in the clouds forever.
- Amazon sells books in the cloud, but is also the largest provider of cloud services.
- Salesforce.com manages your customer relationships in the cloud.
- But what are Clouds ... really ?

Apple's iCloud faces consumer confusion ... by Neil Hughes

As Apple plans to push its iCloud service to consumers this fall, a new survey has found that most people don't even know what the term "cloud computing" means.

Most U.S. consumers do use some form of cloud computing, which refers to a software application or process accessed from the Internet rather than a local hard drive. But a new survey from the NPD Group also found that just 22 percent of consumers are familiar with the term "cloud computing".

...

"This might indicate a path to help consumers understand the value of computing in the cloud, **and allow retailers and service providers to monetize additional services.**"

TechTarget.Com defines it as ...

- Cloud computing is a general term for anything that involves delivering hosted services over the Internet.
- These services are broadly divided into three categories: Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS) and Software-as-a-Service (SaaS).
- The name cloud computing was inspired by the cloud symbol that's often used to represent the Internet in flowcharts and diagrams.

Where did clouds come from ?

- Set the wayback machine to circa 1997.
- Y2K'mania dominated the computing landscape.
- Personal computing was well established.
- Windows was predominant, typically 95%, but many versions. Windows 95, 98, 98SE, NT, ...
- Apps had grown beyond the typical workstation and could not be managed internally let alone publicly.
- Real time computing was becoming a reality.
- Customers were demanding access to information.
- Traditional competitors were merging and partnering.

The Mother of Invention

- Aside from the day to day workloads, IT organizations had to find a better way to deal with all of these challenges and become more responsive to customer demand while protecting their company assets and security.
- To make a long story short ... Service Oriented Architecture or SOA evolved in 1998.
- Put simply, SOA is a set of standards and interfaces which allow services to be provided to clients without having to be aware of internal workings at each end.
- The Cloud was born !!!

IaaS - Infrastructure as a Service

- IaaS is essentially renting a virtual computer server(s) from a service provider such as Amazon Web Services.
- This is similar to having your own server, except that the provider manages it for you. The size and power of the server can grow or shrink depending upon your needs such that you will pay only for what you use.
- Essentially this is the same model that Manitoba Hydro uses for gas and electricity.
- Often this is referred to as Utility Computing.

PaaS – Platform as a Service

- PaaS is a set of software, development tools and other services such as web sites that are running on the provider's computers.
- Today most websites run using this model as it is much more cost effective. Service providers such as MTS AllStream, NetFirms, Google, etc. offer these services.
- As well, a number of providers such as Google Apps, Force.com, PayPal, Amazon, etc. are opening their platforms to services development and use.

SaaS – Software as a Service

- SaaS is the model where most of the action is from a consumer standpoint. The provider owns and manages the hardware, software and services and provides access to them through a portal, an App, a standard Internet interface or an SOA service.
- SaaS is a very broad market. Services can be anything from Web-based email, weather forecasts, finding the best bus route, booking a trip and car.
- Since the service provider hosts the application and the data, the client is free to use the service from anywhere and from any type of computer, provided that it follows the interface standards.

SaaS - Examples

- Intuit – QuickTax, Quicken, QuickBooks
- Customs and Revenue -- Netfile
- Apple – iTunes, App Store, iCloud, Apple Mail
- Google – Google Maps, Google Earth
- Anti-Virus – Cloud Signature Scanning
- Amazon – Book Store, Retail Services, etc.
- PayPal – Internet purchase broker
- Car Rentals – provide rental services to Travel
- Banking – Teller apps, EFTs, Bill Payment, etc.

Major Consumer Service Providers

- Microsoft
 - Microsoft Live, Skydrive, Office 360 - Azure
- Google
 - Gmail, You Tube, Google Apps, MTUCSASA
- Apple
 - iCloud, iTunes, App Store, *ME (iCloud Mail)*
- Amazon
 - Books, Retail Services, Payment Broker, etc.
- PayPal
 - Purchasing Payment Broker

Motivations

- Google
 - Corporate Moto -- 'Do No Evil !!!'
 - Business strategy – Profit through advertising.
- Microsoft
 - The Evil Empire – But there are much worse.
 - Business strategy – Dominate the marketplace.
 - Hidden Agenda – Software & Service subscriptions.
- Apple
 - 'Oh and just one more thing' ... innovation leader !!!
 - Business strategy – Do it our way, buy our stuff.
 - Agenda – iCloud will generate storage cloud revenue.

Trends to Watch

- Microsoft Windows XP is still 2x the market share over Windows 7. People aren't moving.
- *NIX based Operating systems are growing in market share. Mac OS X, Ubuntu Linux, Android, etc. Open Source is winning.
- Personal computer sales are dropping. HP is leaving the desktop market.
- Tablets and Smart Phones are replacing the workstation's functionality.
- Cloud services are becoming predominant.
- The need to upgrade is becoming less critical.

And now for a Demonstration



Google Apps

Questions and Answers ?

