Cloud Computing

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"Getting information off the Internet is like taking a drink from a fire hydrant." - Mitchell Kapor

Cloud Computing – what is this you may well ask? Is it just another of these fancy terms that the geeks are introducing to confuse us? Actually, it has been around for a long time under different guises e.g. Web 2 applications are 'cloud based.'

You are a privileged group! Why? As of June 2009 a survey (http://fwd4.me/IG5) showed 41% of IT professionals did not understand what 'cloud computing' was about.

At present, if you want to do a task on your machine, such as writing a document, preparing a business spreadsheet, or a presentation, you purchase software to run on your computer (unless you are using the free open source software such as *Open Office* or similar). Once the task is complete, you store the result on your machines hard drive(s). To keep your data safe you may have purchased an external hard drive. The software and hard drives are capital expenditure. With 'cloud computing', you rely on applications that are on the web, which you just call up through your browser.

The result of 'cloud computing' is:

- limited application software

- eliminates storage

- gave a 16% reduction in energy costs (http://fwd4.me/IG3).

- reduced IT costs (but be prepared to buy a fight with your IT personnel!) A September 2009 survey showed up to an 18 % reduction in IT costs (http://fwd4.me/IG3) in organisations using 'cloud computing'.

One example of 'cloud computing' *Google Docs*, is located at http://tinyurl.com/yf9yfdx, an application suite on the web, which allows you to carry out word processing, spreadsheet operations and prepare presentations. The application even allows you to save your documents and spreadsheets in several formats, including as a PDF file. *Google Docs,* in the computer lingo, is described as Software as a Service (SaaS) – a 'cloud' component'.

You can then save your data (in a wide choice of formats) on the web, share it with named recipients (through email), or make it available publicly, through an address provided by the server. Saving the data on the web-based servers introduces more computing lingo – Hardware as a Service (HaaS). Not only have you now saved capital expenditure on software and hardware, you have saved your data in a very secure manner. Let me explain. There is a third component to 'cloud computing', apart from SaaS and Haas and that is called a distributed network – which is the backbone that connects and manages SaaS and HaaS.

If you have used *Google Docs* as your web based application software and saved it on *Google* servers it is, by all accounts, very safe. It is rumoured that *Google* will not have server storage in any country that is unstable, thus reducing the risk of security failure. It is also said, that if a countries law does not allow armed protection of a server site, then that country is bypassed. The other advantage of 'cloud' storage is that in the case of organisations like *Google* and *Microsoft,* data is distributed on various servers around the world.

Microsoft is also developing a place in 'cloud computing'. They have *Skydrive (*see http://skydrive.live.com), which is part of their Windows Live package. It allows you to store 25GB of data for free, on the web. The forthcoming version of *Microsoft Office – Office 2010*, due to be released in the middle of this year has, I understand, a cut down version of an application similar to *Google Docs* (word processing and spreadsheet), that replaces *Microsoft Works*. You can download a Microsoft Office trial version now, free. It runs in a 'bubble' i.e. not interfere with any other version of Office on your machine. It remains valid until the end of 2010. Download it from http://tinyurl.com/ycn6j96. Note that you will require a (free) *Windows Live* ID, and a genuine copy of the *Microsoft XP* or *Vista*.

To gain a perspective on where Microsoft is heading, earlier this month (in March 2009) CEO Steve Ballmer said (http://fwd4.me/IG3), "70% of the 40,000 people who work on software at *Microsoft* are in some way working in the cloud, A year from now, that will be 90 percent".

There are other organisations that provide the infrastructure for 'cloud computing' e.g., *Xero*, at http://tinyurl.com/5fkurq, a New Zealand based online accounting software company. This company is developing a wide differentiated client base. I have mentioned them specifically to indicate another way online computing is moving into the 'cloud computing' field. *MYOB* accounting software leaders have recently announced they are going 'cloud'

Having described the process of 'cloud computing', a classic example of its use in relation to 'cloud computing' is *SeniorNet Wellington*, a blog site at http://seniornetwgtn.blogspot.com. The University of Waikato School of Management uses the site as a model for non-profit organisations. One major reason is the fact that it is 'cloud' based, and as such is completely free and easy to build and maintain apart from time. Hosting is also free.

The free tools that have been used are:

- *Blogger* at https://www.blogger.com/start, to build the platform for the site. All you need is a free *Google* account to create a blog in three easy steps.

- *Google Maps* to provide a premises location (as it is said seniors don't know where they are going, when they have got there they don't know where they are and then they don't know how to get home!) as well as Northbound and Southbound bus stops and parking venues (including costs. Contact details are also provided.

- Discussion page, which is a *Google Group* where we can post miscellaneous material, conduct conversations and hold useful references.

- *Google Sites* which has our audit trails as a site page, and is also used for storing our data (see status bar when hovering over the links)

- *Google Calendar* for the Events Diary (which can also be set to call your cell phone at a time you specify before an event, with an SMS message.

- *Google Search*

- Google 'Cloud' listings showing 'most popular' blog links

- *FeedBurner* which provides free email updates

- Publications

  o Class Application Form 2010

  o Events Diary

  o Information Booklet

  o Manuals Available

  o Newsletters

  o Our archives

  o Term 1 2010 Timetable

  o Tutors' Page (with external links to articles and programmes)

  o Year Planner 2010

  o Workshop Notes Page (directing to notes held on other *Google* sites).

Extra (linked) pages can be added to a Blogger site by creating a new page and embedding your blog site template.

A new exciting application ('cloud' based) is the *Google Chrome OS*, an operating system based on the *Google Chrome* browser, whereby you can access cloud based tools to manage and store data. Google Apps is accessible through this browser. The Chromium project is at http://www.chromium.org/chromium-os. It is expected that small, cheap and lightweight computers will be available by late 2010.

Web albums such as *Picasa* and *Flickr* are cloud based services, as is *You Tube* at http://youtube.com.

A further example is *XMarks* (http://www.xmarks.com) whereby you can synchronise and store your bookmarks or favourites in the 'cloud.'

Related tools are *Gmail Drive* (http://www.viksoe.dk/code/gmail.htm), which adds a virtual drive to your *My Computer* list, allowing you to store 7 GB of data on Gmail (*GSpace* does the same thing). If you want more than 7 GB just add more Gmail and Gmail drive accounts!