Cloud Computing Services

by

Joe Budelis

Persimmon Telecommunications
http://t1guy.net/

Cloud Computing makes our lives easier. You would probably be hard pressed to find someone who is not using one or more Cloud Services. In fact, Cloud Computing has become an integral part of our digital lives. Individuals and businesses of all sizes are increasingly finding Cloud Services to be the most practical, cost-effective approach to satisfy their computing needs.

To be sure you know what we are discussing, Cloud Services are services that are provided via remote data centers rather than provided by hardware and software at your location. For many, there is little distinction between Internet services and Cloud Services. There is a numerous array of Cloud Services available, especially for businesses.

If you've ever performed a Google search, you've used a Cloud Service – in this case, a service provided by Google servers located in the cloud. Many use web-based Email services; e.g., Yahoo mail, Gmail, or Outlook. Likewise, many use a Cloud-based calendar; e.g., Google Calendar.

Services that are less widely used by individuals and businesses but which are rapidly gaining widespread acceptance are **Cloud Storage and Cloud Backup**. Basic Cloud Storage and Cloud Backup services are available at no cost from several providers. Their business model is that they charge customers for larger amounts of storage and more extensive options. To learn more about popular free and chargeable services visit <u>Cloud Storage and Backup For Personal & Small Business Use</u>.

Business Cloud Services are discussed below. American Express in its recent SmartBrief Media Services paper states "Whereas, on average, small businesses used only one type of cloud service in 2009, this is forecast to increase to seven by 2015".

All levels of businesses are turning more and more towards **Hosted PBX services**. Hosted voice services allow even small businesses to enjoy all the phone system features that used to be available only to large organizations that could afford large, expensive phone systems. Even for larger organizations, Hosted PBX service eliminates the need for ongoing maintenance and updating of their phone system and the need for staff to

perform these tasks. Hosted PBX service also facilitates mobility and Business Continuity. Many Cloud Service providers offer other collaborative communications, such as audio, webinar, and videoconferencing options.

Many businesses need a **Customer relationship management (CRM) system** and find that a cloud CRM like SalesForce is best for their situation.

Enterprises and smaller businesses that have their own servers can usually benefit from placing these servers in the cloud. By using **virtual servers**, businesses free up employees to concentrate on activities that grow or improve their business while moving the mundane tasks of operating and maintaining servers to personnel who are constantly trained on and focused on server operation. Virtual Servers are very reliable, secure, scalable, high performers and they are usually very cost effective.

Similar to virtual servers, **virtual PCs** are becoming valuable to many businesses. A virtual desktop normally is much faster than any hardware that an individual would normally have. It can be accessed from any of many devices: smart phones, tablets, laptops or desk top computers. However, the device used to access it can be a relatively slow, even out of date, device. The local device is basically sending keystrokes and receiving screen shots. On the other hand the virtual PC in the cloud is using an extremely high speed Internet connection and very fast hardware to accomplish whatever tasks are required.

For any business that uses computing as a critical part of business operations, **Backup** and **Disaster Recovery** is extremely important. When a business is struck by a disaster, whether it is a hurricane, tornado, fire, flooding or any other disaster, experience has shown that it takes an unexpectedly long period of time to restore computing services unless a good Backup and Disaster Recovery plan is in place. Note that disasters like fire and flooding can be caused not only by natural occurrences but also by a disgruntled employee, by problems on the roof, or, if the server(s) sit below other floors of a building, by problems on a higher floor. To restore operation of a damaged server, a business with its own server(s) would have to

- obtain the hardware, the Operating System, Application Software, and Security Software
- install the Operating System and apply maintenance updates
- install the Security Software and apply maintenance updates
- install Application Software and apply maintenance updates
- restore backed up databases and data
- fix the numerous issues that always arise during such a complex process

Experience has shown that these restoration activities can take weeks and that a large percentage of businesses fail as a result of this extensive down time. On the other hand, with a Cloud based Backup and Disaster Recovery plan in effect, failed servers can typically be gotten back up in operation in hours if not minutes. One may never need this capability but if a disaster ever occurs, a cloud based Backup and Disaster Recovery plan is invaluable.

For those businesses with larger computing needs, sometimes a good solution is a **Virtual Private Data Center**. Typically, a VPDC might be appropriate for businesses with a terabyte or more of data.

For more info, visit **SMB** and **Enterprise Cloud Services**.