

Lost in the Clouds

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I just took a three day class on Microsoft Azure and then after that, several weeks later, I attended a Cloud Assessment Seminar at my work which is CalPERS.

Well after attending the Assessment, I am gathering my thoughts of what I really think about it cloud services and how it is used. First let me explain that there are several tiers of cloud service.

Infrastructure as a Service

Platform as a Service

Software as a Service

Infrastructure as a Service is like building a server in your own data center, in other words, we maintain the entire Structure. We build the storage, we build the Virtual Machines, we build the Network, we build the High Availability and virtually everything we do is controlled by us. We maintain it, patch it, repair it, back it up, monitor it, everything. It is kind of like owning a house, if something breaks, we have to fix it.

Platform as a Service is different as we have an application and we just install it on a machine that we do not see. We pick a platform that suits our needs like maybe an app that requires a SQL backend. Well we purchase that platform and never worry about anything below. There is no patching, no updates, even the Operating System is transparent to us. It can be updated entirely without any changes to our application. We just monitor our application and not worry about the Machine below it. It is kind of like renting a house, we don't have to fix a thing, we just call the landlord and he/she fixes everything for us.

Software as a Service is just that. The best example of SaaS is Office365. We just run the App from the provider. We don't worry about making sure it is running or not because that is all taken care of for us. It is kind of like going on vacation and renting a Hotel. Everything is taken care of, new towels every day.

Security

So now that you understand, everyone worries about Security. All I have to say is that Microsoft has taken a very secure approach to preventing this. As our Consultant says, the Department of Defense is the most targeted place in the world and Microsoft is a close second. They have in place the highest security and are compliant with CJIS (Criminal Justice Information Security) for Network Services. If they ever get hacked, they would lose more credibility than anyone and we would no longer trust purchasing anything from them again. All other Cloud Service Providers are doing the same.

Azure Enterprise vs. Azure Government

The Enterprise Azure platform has been in testing and running for over five years. They are constantly adding feature sets to it as we speak. Azure Government however cannot adopt these features until every piece of code has been gone through and secured enough to have the high water mark of security in every aspect. To this day they are one of the highest secured industries for services.

Azure meets all which is defined in this document.

<http://azure.microsoft.com/en-us/support/trust-center/compliance/>

So to answer your question Microsoft is very, very, very SECURE!

Azure Government is in a separate and secure Data Center where the Department of Defense requires everyone working there to be Background Checked and re-certified each and every year. It has to be the most secure Data Center in place and is government certified. This includes PCI DSS compliance as well. Audits are done every time a change is made as well as Quarterly.

Cost

So now that we have discussed the structure, now we need to discuss the cost. It is not cheap. However, that being said, if you had a brand new company and zero equipment and started from scratch, going straight to the cloud would be beneficial compared to the costs of purchasing everything from the get go. The best way to show you is to use the Azure Calculator. It can give you the actual costs for each requirement you would like to put up there.

<http://azure.microsoft.com/en-us/pricing/calculator/>

Remember Azure Government is 25% more expensive than Enterprise!!!

My Personal Thoughts

I have my own thoughts about this Cloud venture. I personally think they have come a long ways in five years. It is enable that this is where everything is headed, whether it is at the Infrastructure level or at the Platform Level. I know we will be there soon. However, I also think that everyone is developing it as we go and adding features every day. That also means that Azure Government will be lagging behind with this feature sets because it has to go through strenuous testing before being released in the government site.

For a small to medium size business outside of government, it would be a costly price each and every month, but also cheaper in the long run as everything would be ran outside of the company's office. This means no special air conditioning on the weekends, not extra electricity costs, little or no consulting fees as everything could be updated from the Software as a service. You would just share files in the clouds. It might be beneficial to go to the cloud in the future. Printing would have to have each local workstation connected straight to the copier of printer as there would be no server to disperse print sharing.

Watch out for the future, it will grad you whether you want it to or not!