

Wednesday, March 20, 2013

Workshop Session 3

Time of Session: 1:30-3:00PM

Session Title: Critical Infrastructure and Resilience

A. Aligning your IT Requirements with Resilient Resources

Speaker: **Ken D'Aquin**, The University of New Orleans

Room: 250

Head Count: 4

Note Taker: Kyle Tveten

Critical Infrastructure and Resilience

Aligning Your IT Requirements with Resilient Resources - Ken D'Aquin

- Cloud Computing
 - Could cost you the geographical control of where your files will be stored, unless you look into the contract and desire it to be in certain geographical region.
- Server Virtualization
 - Could cut server costs in half
- Cloud EMail
 - Email server exists somewhere on someone else's infrastructure.
 - Once a file is deleted, it cannot be recovered. The storage company does not have a way to locate it or retrieve it in your backup files.
 - Private clouds: exist for personal, on-site use.
- Clouds go down all the time, causing retrieval issues and deleted files. People/offices need to decide what an acceptable risk is for them.

UNO CLOUD STORAGE

- Before Katrina: We were storing on site. We lost everything in Katrina. Now we are offsite

CLOUD STORAGE

- Anything past 1TB of data is expensive to store offsite with an outside storage company.
- A small amount of data better justifies online cloud storage.

SERVER VIRTUALIZATION

- Before Katrina, we had not started doing it yet.
- Usually done to save money/work.
- VM: Virtual Machine
 - You can run any software on a VM except software specifically designed not to run on a VM. This software has a program written into it that will shut it off from being uploaded onto a VM if it detects that a user is attempting to upload it onto one.
 - Makes your server less resilient.
 - With a VM, you must have cluster of physical machines to run the virtual servers. When one cluster goes down, then the other ones maintain your data until the entire

system is back up and running. However, once a problem with a machine is detected, it should be fixed. Otherwise, the other machines will eventually not be able to keep up with the entire system's tasks, and they will start deleting data to avoid having problems themselves.

ASKING THE RIGHT QUESTIONS WHEN YOU CONSIDER WORKING WITH A CLOUD SERVICE:

- Is the data stream encrypted?

 - If someone intercepts it, they can use it if it is not encrypted

- Google Docs notorious for unwarranted usage of user files. Poetry that has been stored on Google Docs has been intercepted and published in anonymous poetry compilations.

QUESTIONS:

Any books or journals that cover IT Requirements?

- A: Join a LinkedIn group about the IT industry. People ask good questions and those in the industry offer good advice.