

# Editorial | My Company's COOP is in the Cloud

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Subsequent to September 11, 2001, I initiated an effort to create high security data centers in North Dakota. There are many variables that need consideration in site selection. One of these is seismic risk. For a 99.999% uptime facility, every opportunity to minimize a risk variable becomes important. The Seismic Risk Map to the right illustrates the strength of North Dakota.

I learned that many of the major data centers around the country were, and still may be, located on or near seismic faults. The thing about a seismic event is that you cannot escape the impact of the devastation of support infrastructure that is brought about regionally. Utilities, power, and other inputs to keep a data center and its operations and operators going isn't as easy as having a diesel power unit kick-in when the grid power source is interrupted. There are other dimensions to the problem.

I made several trips to Washington D.C. to meet with my congressional delegation, resulting in a meeting with the CIO of the Treasury Department. She graciously received me and spent about an hour and a half visiting with me about the project. She stated... "I'm in the bull's eye" referring to the Treasury Department's office building that is located one block away from the White House. Treasury's information assets were being relocated as we spoke.

In our conversations, "Continuity of Operations" came up a lot. She mentioned that there were sights outside of the beltline that had been prepared for staff to retreat to in order to keep the government operational. All of this was predicated on the chance that there would be a devastating natural or man-made event. Well, terrorists had taken their shot, and then hurricane season intermittently impacted the D.C. area over the next few years. What is going to happen when a seismic event hits the Canary Islands and the Tsunami hits the east coast?

As a result of my efforts, I am probably more knowledgeable about computer networks and the operations of such enterprises than the average structural engineer. The journey was fun to follow, as I got to use the creative side of my brain to both understand the IT world as well as to develop criteria for a high security sight. I wasn't alone in this effort, as I had selected qualified fellow ACEC firms in a virtual design team with credentials necessary to catch the imagination of government agencies and private sector organizations.

Fast forwarding, today my office has a powerful RAID 5 server collecting all of our business management data and integrates with the accounting system. It actually makes the capturing time and expenses for billing projects a fun process.

Recently, I added the Cloud to our internal network. I now see that the Cloud has opened many more opportunities for me as a small firm. With the advent of the Web App, I can record my time and expenses wherever I go provided WiFi is available. I'm no longer tied to the desktop to do data entry into the business management and accounting system. Effectively, I can do it in real time. In reality, I have the best of both worlds.

One of the greater benefits is that I now have a remote backup of my business management system, off sight, in the Cloud. Currently not quite as robust a system as the desktop, the web based system has solved one of my internal office issues of backing up the data. Not only does my server have a RAID 5 data



Courtesy of W. Gene Corley, 2001.

storage configuration for the SQL database, it has a state of the art removable internal cartridge drive that I can physically take with me, when I remember it. The problem is that when you wear all of the hats, it is often difficult to remember to exchange the cartridge drives and take them with you.

You may have attended seminars where the speaker discusses the Work Flow Process to get the timecard information into the accounting department so it can be input into the system and the Project Managers can have a timely report on their several projects. I sat in multiple seminars on how to make the Project Managers more effective. Too often they just don't get reports soon enough to make a difference.

It is my observation that the Cloud may be a possible answer to correct or solve this issue for most firms. Today each employee can input time and expenses from their laptops, smart phones and tablets with a WiFi connection. Synced up to the main database, the Cloud data will allow the Project Manager to check a job's status daily. With new project delivery systems being implemented, it will be imperative that a more robust approach to collecting and processing the data will be necessary to keep the business process going. Ongoing training will also be necessary to get employees to keep their time and expenses entered into the system.

So what does this have to do with COOP? Well, in the situation of a disaster in my office, I feel more comfortable that I will be able to sit in Starbuck's and have a latte while I continue my services using my laptop, tablet, or smart phone to conduct necessary business activities.

Disaster is all around us waiting to happen. Are you prepared?■

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