Wind, Trees, Poles, Automobiles and Backhoes

By Andrew Weitzberg

Every voice and data carrier has occasional outages, since all systems operate on a hub and spoke method connections break. This should not be a bad reflection on the carrier; backhoes cut underground fiber and copper, manholes have fires, water gets into conduits. Aerial cables are subject to automobile collisions, wind storms, tornados, hurricanes, micro cells and electrical transformer explosions and fires.

Carriers strive for 99.999% up time or availability, which translates to only five (5) minutes of outage per year. Because there is a distance between your building and your carrier they do not have total control, as they may not own the poles or conduits (but rent space).

In most cases, your voice and data circuits travel on the same poles or in the same conduits going back to the carrier's location. Your Internet connectivity is just as susceptible as it travels on the same paths.

Current Back-ups

- Carriers offer dual service delivery: *two separate circuits delivered via separate paths*
- Sonet Network: delivery over Fiber Optic cable in a ring configuration so as to be bi-directional.
- Move employees to an alternate or temporary site
- Send calls to another location via call forwarding
- Back-up generator for emergency power
- Satellite telephones

Large companies with multiple locations can divert their traffic from one location to another, by preprogramming "call over flow" or "busy no answer". What can you do if your firm has a single location? The loss of your inbound voice service can upset your customers and suppliers. The minimum anticipated time of an outage is 4 to 8 hours. This can be exasperated by the fact that the telephone company can take between 24 and 72 hours to fix your lines. This does not take into consideration a major local disaster which may cause a telephone company central office to be out of commission. There are reports, almost every week, of voice communication outages in some portion of the country.

Communication is an intricate part of the infrastructure of any company. A Service Level Agreement, if your carrier will provide one, does not even to begin to cover the potential damages to your business.

An AT&T Business Continuity Study Results, January – May 2006 report that: ***A 2006 nationwide study on business continuity found that 28 percent of U.S.-based Communications companies do not have adequate plans in place to cope with natural***

or other potential disasters. Of those Communications companies with business continuity plans in place, 40 percent said that they have not tested their plan in the past 12 months.

Most continuity plans do not take into consideration the company's true susceptibility for their voice-data service and connectivity. Traditional assumptions are not "good enough". Planners need to seek out communication specialists with more in-depth expertise and knowledge to assist these areas.

NeuStar an organization chartered by the FCC to:
Telephone Number Administration
We assign and allocate telephone numbers to communications service providers (CSPs) in the United States.
Wireline and Wireless Number Portability
We permit end users in the United States and Canada to change their telephone carriers while retaining their telephone numbers.

In 2007 **NeuStar** introduced a program Disaster Recovery to decrease the time it takes to move a telephone number from 4 days to just an hour to:
Decreases risk: Helps to alleviate lost revenue, protect against corporate liability, retain customer trust, and address compliance issues
Complements existing telco solutions: Provides additional support and facilitates back-up planning in the event of a catastrophic switch failure.
Restores service to any device on any technology – "end-point agnostic":
Terminating service can be restored to any device on any existing technology – e.g., POTS, mobile, IP, or satellite phone
Provides new revenue and service opportunities for service providers:
Government agencies, first responders, large or multinational corporations, hospitals and universities, finance and banking entities, transportation providers, multi-location retail operators

As with any arrangement, it takes pre-planning and testing. *As of December 31, 2010 not a single telephone company has subscribed to this service.*

About the author: **Andrew Weitzberg** is Executive Vice President of the Brae Group Inc., a technology consulting firm. A 30 year veteran of the telecommunications industry, he has spent the last 15 years working in Transport and Provisioning of Voice and Data Services, alternate routing of service, secondary and tertiary Fiber Optic Networks. Since 2002, Andrew has worked with Business Continuity Planning and is the President of the Long Island, New York Chapter of the Association of Contingency Planners, a national association. Contact: aweitzberg@braegroup.com .