

TeraGo Networks

PLANNING FOR SERVICE INTERRUPTION

TeraGo
N e t w o r k s

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INTERNET | DATA CENTERS | CLOUD

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THE NEED FOR BACKUP INTERNET CONNECTIVITY

To survive in today's business world, you have to hope for the best, but plan for the worst. That means making sure you have a plan B for all critical systems, including Internet connectivity. Business's reliance on the Internet has grown well beyond email. Connectivity is the equivalent of the cash register for retail companies, and companies in all markets either use cloud-based business applications or plan to do so. Big businesses have always had the budgets to fund comprehensive back up plans, but how can small and mid-sized enterprises (SMEs) plan for service interruption?

Perhaps the first step to ask is why. Many SMEs have gotten along just fine with a primary Internet connection. Why spend the time and money

to create a backup scenario? The short answer is, it's getting more expensive to be out of business. Companies need to calculate a number of factors, including actual revenue loss and reputation damage, into the final analysis.

Once you're convinced on the "why," the next step is to figure out "how." The following paper explains the costs of downtime, offers affordable solutions that combine redundancy with better performance, and details steps to secure your important business data.

LOST CONNECTIVITY IMPACTS MANY AREAS OF THE BUSINESS



Revenue



Reputation



Regulations

When the internet goes down, most business ceases. The obvious impact is the loss of revenue through lost sales and/or lost productivity. But lack of connectivity also impacts the reputation of the business, and can create regulatory concerns.

THE COST OF DOWNTIME

The cost of downtime varies wildly by industry and company size; a widely quoted statistic from Dunn & Bradstreet is that 59% of Fortune 500 companies experience a minimum of 1.6 hours of downtime per week; on average, large businesses lose between \$84,000 and \$108,000 (US) for every hour of IT system downtime.¹

In a 2013 survey, research firm Aberdeen calculated that the average cost per hour of downtime was close to \$164,000. Eliminating the biggest companies from the statistic isn't that comforting: the cost for small companies was \$8,581 per hour, and the cost for medium sized organizations was \$215,638.

But there are more than just upfront dollars to consider when deciding whether or not to build a redundant connectivity solution. An article in Information Management² magazine outlines the business components that have financial impact:

REVENUE: this includes not only actual dollars, but also those that might be lost over the life of the relationship if the customer chooses another company if yours is offline.

HUMAN RESOURCES: Costs include wages and benefits of workers who are idled when they have no connectivity.

REMEDIAL IMPACT: It almost always costs money to come back from downtime. From overtime wages so the company can catch up, to recovering lost data, those costs are real.

REGULATORY AND COMPLIANCE: Even if your company isn't subject to regulatory oversight, your customers may have stipulations in their service level agreements. Will your downtime mean they can impose penalties or fines on your company?

REPUTATION: Will your customers leave if you continue to miss deadlines or aren't available? Do you want to find out?

DOWNTIME IS COSTLY FOR ALL COMPANIES



The average cost per hour for companies of all sizes



The average cost per hour for small firms



The average cost per hour for mid-sized firms

¹ <http://www.businesscomputingworld.co.uk/assessing-the-financial-impact-of-downtime/>

² http://www.information-management.com/infodirect/2009_133/downtime_cost-10015855-1.html?zkPrintable=1&nopagination=1

CHOICES FOR REDUNDANCY

The best way to protect your business is to implement a redundant Internet connection. “The vast majority of companies are reliant on a single carrier,” says Michael Stephens, VP of Marketing, TeraGo. “When they need redundancy, they ask for a second access line from their carrier, but if that carrier has problems, you may lose connectivity even with the redundant connection.”

A safer option is to choose a redundant service from a different carrier. Fixed wireless is a natural choice to supplement traditional wireline installations for redundancy. Fiber and cable networks are subject to disruption caused by weather, construction accidents, or other mishap – RF transmissions are often more reliable during severe weather events. And since they operate by line of sight, a backhoe or a road-construction crew cannot sever them.

These dual connections offer an insurance policy against downtime. When one carrier goes down, all traffic is rerouted to the other. This type of service is called Active-Passive. “The backup connection is there if you need it,” says Stephens. “But from a management point of view, you’re paying for something you’re not using.”

Large enterprises have deployed solutions that enable companies to access the bandwidth of both the primary and backup connection – called an Active-Active connection. TeraGo has launched such a solution that is affordable for SMEs.

$$10 + 10 = 20$$

TeraGo’s new Bonded Solution provides dual access that is configured so that companies can benefit from both connections. “Your primary and redundant connections are used at the same time,” says Stephens. “If one connection is 10Mb and the other is 10Mb, we can tie them together so that they work like a 20Mb connection.”

Bonded solutions combine bandwidth into a single, virtual connection, delivering the speed and reliability of costly redundant leased lines used by large companies, but at a lower cost. Bonded Connectivity means that companies not only have full redundancy – the insurance policy offered by a backup solution – they are also able to use the full bandwidth of the combined access connection.

BACKUP SECURITY

Ensuring connectivity is an important step for businesses, but another aspect of planning includes backing up data. “Not all business information can be classified as ‘mission critical,’” says Stephens. “But what happens if you lose it?”

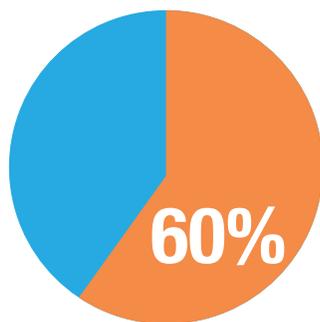
An article on Net.Workspace³ cites a variety of research outlining the impact of data loss: 60% of small businesses that lose data close down within six months of a disaster; 72% that suffer major data loss close down within two years.

It’s critical to have backup storage and servers, and it’s even smarter to have a redundant disaster recovery service. “At TeraGo, we can back up your primary server and keep a live copy in our cloud,” says Stephens. “If your primary goes down, we can swing you over to the backup.”

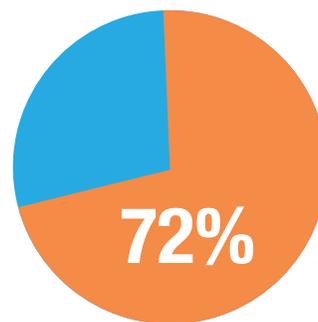
Another option is to have an active live storage backup for data, where your provider can recover your server on your behalf, with your data intact. “In the past, these kinds of services were only available for large enterprises,” says Stephens. “But now it’s cost effective for small and mid-sized companies as well.”

The combination of redundant Internet connectivity plus redundant data backup is a solid choice for business. With new affordable solutions that provide added bandwidth and power, it’s more than an insurance policy – it’s a benefit with real value.

THE IMPACT OF DATA LOSS



of small businesses that lose data close down within six months of disaster



of small businesses that lose data close down within two years

³ <http://net.workspace.co.uk/social/resources/opinion-what-is-the-true-cost-of-lost-data-to-bus/>

ABOUT TERAGO

TERAGO PUTS BUSINESS FIRST: Unlike other consumer- or home-user oriented providers, TeraGo specializes exclusively in delivering Internet, Colocation, and IT cloud services to businesses in Canada. TeraGo serves more than 6,500 customer locations across all industries within Canada, making TeraGo the natural choice for any type or size of business that requires Internet access services.

TERAGO DELIVERS SPEEDY CONNECTIVITY: Whether you transfer small or large amounts of data between offices or stores, TeraGo offers dedicated and burstable bandwidth speeds ranging from 1.5 Mbps to blistering speeds of over 100 Mbps. TeraGo offers an alternative to traditional wireline options such as fibre optic, cable, and copper. Its wireless solutions deliver similar speeds, security, and privacy as wireline – but with more value.

TERAGO DELIVERS ACTIVE REDUNDANCY: TeraGo's carrier-grade Internet access, data, and voice communication services are delivered using fixed wireless and fibre-optic methods. TeraGo owns and operates the network, so it is completely independent from all other wireline or wireless networks. It is built using state-of-the-art technology, and is engineered to 99.999% availability. It is monitored 24/7 by qualified technicians, making TeraGo a solid choice for a primary connection, or to complement existing primary connections.

As a Secondary Connection: Choosing TeraGo as a secondary connection offers uptime for business – when primary Internet connections experience a disruption, TeraGo's technology will automatically reroute traffic to a TeraGo redundant secondary connection.

As a Dual Connection: TeraGo's new Bonded solution offers backup plus better performance with primary and redundant connections that are configured into a single, virtual connection. Companies can use the full bandwidth of the combined connections.

TERAGO OFFERS SYMMETRICAL CONNECTIVITY: TeraGo's high-capacity symmetrical bandwidth speeds ranging from 1.5 Mbps to blistering speeds of more than 100 Mbps, allowing extremely fast uploads and downloads.

TERAGO OFFERS CLOUD BACK-UP AND STORAGE SERVICES:

Remote Storage: Replicate and store local data in the cloud.

Scalable: Only pay for the space you need with our scalable solutions, which can increase as your storage requirements increase.

Secure: All customer data is stored in our SSAE-16 compliant data center facility, located within Canada.

Availability: Our cloud services incorporate multiple redundancies and are backed by our robust service level agreement (SLA).

TERAGO OFFERS COLOCATION: Data Centers Canada, a division of TeraGo Networks, provides colocation services to companies who are seeking to cost effectively expand their data center capacity or outsource their existing services. With multiple data center facilities across Canada, we're able to provide your business with the service you need, at the location you need it.