WHITE PAPER

Running When Your Network Goes Down With restaurant operators increasingly dependent on

Keep Your Restaurant

With restaurant operators increasingly dependent on the Internet to run their businesses, having a way to cope with network outages is critical.

By Richard Slawsky QSRweb.com Contracts for business Internet services typically promise uptime approaching 99 percent, implying that service outages are minimal at best. Still, for a restaurant operating 24 hours a day, seven days a week, that uptime promise still translates to more than seven hours a month when the business could be without Internet service.

With QSRs increasingly moving services such as telephone and drive-thru communication to the Internet and relying on cloud-based services to track sales, manage inventory and store HR data, those few hours of downtime can bring a business to its knees.

It's critical for QSRs to have a backup plan in place to cope with unexpected Internet service outages.

Considering the options

A survey conducted by IT systems integrator CDW estimated that network outages cost U.S. businesses \$1.7 billion in lost profits in 2010. About 25 percent of businesses suffered unplanned outages of four hours or more that year.

"The survey confirms that while many businesses believe they are prepared for an unplanned network disruption, many are not," said CDW's vice president of system solutions, Norm Lillis.

Restaurant operators have three options for increasing network uptime and addressing the problems stemming from outages: deploying costly technology upgrades, adding redundancy or deploying a 3G/4G mobile broadband failover solution.

The first option involves upgrading from business DSL or cable service to a more reliable network technology such as T1 or T3. These offerings typically increase availability to 99.95 percent, reducing downtime to about two-and-



cradlepoint

SPONSORED BY:



"The survey confirms that while many businesses believe they are prepared for an unplanned network disruption, many are not," said CDW's vice president of system solutions, Norm Lillis.

Creating an efficient 3G/4G failover solution

Efficiently blending a wired and wireless Internet connection for higher availability requires a set of solutions that:

- Provides the highest degree of mobile network interoperability
- Offers simple, scalable deployment, maintenance and control over multiple distributed locations
- Fits the budgets of both small businesses and large enterprises

Source: CradlePoint

a-half hours per month. Still, that solution consists of a single wired line with no redundancy, leaving a business at risk for catastrophic outages caused by construction, bad weather or other disasters. In addition, upgrading to a T1 or T3 line can cost as much as eight times the price of business DSL. For a restaurant with multiple locations, those added costs can quickly reach \$100,000 or more per year.

The second option is to add network redundancy to ensure against interruptions of the main service, typically accomplished by purchasing wired Internet service from a separate provider. Although that helps guard against outages from the primary provider, it does not address the issues of disaster-related downtime. 90% of outages occur in the last mile and wired lines are often buried in the same trench, defeating the intention of having a backup. That option also typically translates to a doubling of the cost of Internet service to add at most a few hours of uptime, for most restaurant operators the minor increase in uptime isn't worth the added cost.

The third option is implementing automatic failover protection using a 3G/4G wireless network. With this approach, an outage in a DSL or cable line results in an automatic switch to a mobile broadband connection, allowing service to continue without interruption. This system creates true redundancy because the failover technology has a completely separate infrastructure or "pathway diversity", versus two side-by-side wired lines that would likely lose connectivity together in a catastrophe. Events that may disrupt wired connections are unlikely to also disrupt cellular service.

Choosing an effective backup solution

Although automatic failover protection using a 3G/4G network is likely the most effective option for a restaurant operator looking to guard against unplanned outages, there are still some issues to consider. While many 3G/4G mobile broadband providers offer low-cost plans designed specifically for failover scenarios, those costs can be negated if the company has to spend thousands of dollars ripping out and replacing the infrastructure needed to implement a solution. Effective failover protection needs to blend a restaurant's wired primary connection with a highly available wireless connection via cost-effective hardware.

CradlePoint, for example, offers a number of easily deployable, low-cost solutions that automatically detect access issues with wired line connections and switch to 3G/4G network connectivity to avoid service interruptions. The company's offerings include both 3G/4G add-on all-in-one wired and wireless network solutions.

About the sponsor:

Reliable Internet connectivity is critical in today's quick-service restaurant industry. With expanding options for serving customers — such as traditional drive-thru service, in-store dining or delivery — an Internet connection can be the difference between profit and loss. CradlePoint offers a range of business connectivity solutions that will increase efficiency, revenue and profitability.

Specializing in connectivity failover, machine-to-machine (M2M) and 3G/4G primary connections, Cradle-Point solutions are purpose-built for PCI compliant networks. CradlePoint is the first to pioneer and fully enable high-speed LTE in its solutions, maximizing the potential of the cloud for businesses worldwide. Cradle-Point devices are supported on more than 70 3G/4G provider networks worldwide. CradlePoint's Enterprise Cloud Manager (ECM) allows IT to deploy a large number of systems and to remotely update, upgrade, configure and manage them. In addition, a unique group management capability makes it possible for end users to work with alternative carriers in areas where the primary carrier does not have good coverage or when international carriers may be required. ECM also enables real-time data monitoring and automatic alerts to ensure maximum uptime without increasing data overage charges.



Even across different hardware platforms and implementations, all device management and control can still be maintained from a single location in real time. And because the management is cloud-based, interactivity with each node is done efficiently without a heavy burden on network utilization.

"Today's restaurants are increasingly dependent on remote and cloud-based applications to enhance the customer experience and lower operational costs in their stores and restaurants," said CradlePoint CEO George Mulhern. "The last thing a restaurant operator wants to tell a customer is 'Sorry, the system is down. We can't take your credit card right now.""