

Five Tips for Improving Your Small Business Computer Networking

Build your network with business-grade technology, plan ahead to avoid downtime, and other small business computer networking tips

By David Murphy

Your small business network is more than just the glue that connects your computers to your printers or gives you access to your information. Your network connects your small business to your community—employees, partners, suppliers, and customers—anywhere, any time.

Yet, small business computer networking is often considered an afterthought to larger business strategy. Networks are cobbled together by decision makers looking for enterprise-level solutions with consumer-level price tags. Many small businesses cannot maintain a dedicated IT staff (or employee) to maintain their network, and they may fail to consider the role of the network in future business needs. Network maintenance becomes an issue of disaster control instead of a preplanned approach for growth.

Any small business can scramble to fight fires, but successful businesses plan for network growth the same way they plan for revenue growth or headcount growth.

Here are five small business computer networking tips to get you started.

Use Business-Grade Network Technology

"People buy consumer-grade products," says [Rick Moran](#), Cisco vice president of [small business](#) marketing. "They don't think it through, and then they're surprised that they had credit card numbers stolen or that their database has disappeared."

Consumer networking products lack the comprehensive features and enhancements that support more complex, secure administration and management. At the same time, troubleshooting becomes more difficult when a flotilla of different manufacturers power a small business's networking environment.

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Not only is it harder to pinpoint the source of a network problem in this case, but the devices themselves—often constrained to just blinking lights for diagnostics—won't provide the same kind of warnings and analytics as business-grade networking devices.

Make Sure Network Bandwidth Will Meet Current and Future Demands

"When we work with a small business, we'll spend most of our time in a discovery meeting. When we have the opportunity, we think it's important to analyze our customer's entire network infrastructure for future growth," says Neal Morgan, sales engineer for [Special Order Systems](#), a [Cisco partner](#).

Proper planning that weighs estimated network use against potential equipment purchases gives a small business the ability to predict and prevent future bottlenecks before they occur. As more bandwidth-intensive applications consume a business's operations, they're going to put a strain on the network that could affect service quality for customers and employees, says Morgan. A small business needs to get in front of this wave.

"The worst thing you can do is to assume that because nothing has changed in your business, your business network hasn't changed," Cisco's Moran says. "Users are generally going to add a load on your network that you won't always know about."

Plan Ahead to Avoid Network Downtime

To avoid downtime, businesses should identify existing network issues and concerns – and, if necessary, replace aged or legacy networking equipment – before planning a network upgrade.

"If your network goes down, I think it really boils down to this: How much will it cost your company to not perform in a particular business day?" Morgan says.

Many small business decision makers are unaware of how poor network planning can manifest itself in the context of a company's typical operations. And it's not just a question of the raw dollars and cents it takes to replace a failed product.

Depending on the hardware malfunction, a network hiccup could take a small business offline for an entire day. It might be a sting to a small business to have to face the extensive fees associated with emergency IT support; however, it could be crippling if a customer—or potential customer—can't access the key components a small business delivers. That's lost revenue *and* a damaged relationship.

Keep an Eye on Network Performance

Poor [network performance](#) can be a key indicator that it's time to take a closer look at your network.

"When people start complaining that the network's slow or sluggish—'I'm trying to access my application and it takes forever for the screen to refresh,'—that's a pretty obvious warning sign that it's time to upgrade," says Rees Roberts, CEO of [IS Works](#), a Cisco Partner.

A number of business networking hardware products can analyze and assess the performance of network traffic over the course of the device's life. They'll automatically report service delays and calculate the time customers or employees spent waiting for a specific networking process.

In additions, businesses can tap trusted third parties such as Cisco partners for such services as network assessments, continuous [network monitoring](#) for reliability or on-site analysis to identify the precise location of network bottlenecks.

It's equally important to listen to employees. Third-party management can often resolve a problem before users know it has occurred.

"The first signs of distress are probably going to manifest themselves at a user's desktop," Moran says. "Users can see performance degradations—hour clocks and spinning hands will start to take longer. They can also see network outages, too."

Map Network Upgrades in Relation to Long-Term Business Goals

An upgrade shouldn't just be a stopgap for a failed networking solution. Network hardware upgrades can help a business increase its ability to interact with customers, improve access to internal information, boost efficiency and even avoid costs.

"When you perform a network upgrade, you find you're more compatible with other products and other platforms that are out there," Morgan says. "As your business grows and your company expands in size, you can easily scale and utilize features and functionality supported by the newly upgraded networking equipment."

An upgrade also can allow a business to leverage new technologies or applications without worrying if the network can handle them.

"If small businesses upgrade their network with some sort of mid-term goal in mind, it makes it a lot easier for them to add services in the future," says Roberts. "That allows them to be more productive, do more with less, and add new dimensions to the business."

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