

Manage your Internet usage to avoid high costs and unhappy users

Upgrades to many Internet Service Providers' systems in the past few years have provided home users with access to faster Internet. As a result, many users expect the same performance from their employers' systems. What many users do not realize is that there are varying levels of Internet access methods and carriers. Most business-grade Internet access circuits are costly, and require management to ensure that Internet usage does not cause productivity to lag.

Often, IT departments are faced with a question that is difficult to answer: "Why is our Internet so slow here at work when I can have fast access rather inexpensively at home?" The answer is difficult because often times users do not think about Internet access on a higher company-wide level. For example, the user may be reflecting on his own experience with one to three computers in his home, using a shared connection such as cable versus having multiple users at his place of employment.

There are some intricacies involved in better understanding home-based Internet service:

- Cable modems and other home-based broadband solutions in the \$40-\$60 per month range are based on "shared bandwidth." This means exactly what it says. You share your bandwidth at home with your neighbors and in some cases other businesses that take advantage of this inexpensive option.

- Home-based broadband does not have an uptime guarantee, which means the Internet company is not un-

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buys is theirs, and is not shared with anyone else. The reasons for requiring dedicated bandwidth can range from the necessity to host server-based applications from within the company to security.

- Some companies require an uptime guarantee along with an agreed-upon service level, meaning if there is a problem, the provider agrees to service that problem within a specific period of time, both to respond and to resolve the issue.

- Companies that provide Internet access to more than 10 devices pay considerably more money for dedicated bandwidth.

To illustrate how these points play out in different environments, here are a couple of scenarios:

Scenario A:

Company A has five computers that use Internet on its network. It uses a circuit from a cable company and has

der any agreement with you about when or for how often the service will be available.

- Home-based broadband does not typically support more than 10 devices per household

There are also a few intricacies on the corporate Internet access side that are important to be mindful of:

- Many companies need "dedicated bandwidth." Again, this is a literal term. The bandwidth that a company

12 megabits per second of bandwidth. The users mainly visit web pages when necessary, and use a few cloud-based tools. Also, they are connected to a mail server outside of their organization. This company will likely not experience many complaints from users about Internet speed. However, in the event of an outage anywhere in Company A's neighborhood, Company A could be without Internet access for hours or possibly days — and there is no priority given to Company A because it is on a "shared" system.

Scenario B:

Company B has 100 computers that use Internet on its network. It uses a dedicated circuit from a telecommunications carrier, and has 20 megabits per second of bandwidth.

The users mainly visit web pages when necessary and use a few cloud-based tools. They are also connected to mail servers outside of their organization. This company also has a very loose policy on appropriate Internet usage.

But Company A also has a service-level agreement with its bandwidth provider, and if anything is ever wrong, they have a guarantee that the provider will respond within 1 hour and resolve the issue within 24 hours. This company receives frequent complaints about Internet access speed. Upon investigation, the IT department finds that there are several users streaming music, watching TV shows in high-definition online, and other non-business-related activities.

Managing your company's Internet usage involves evaluating several fac-

tors. Although these factors are not universal, here are a few items which every company should consider evaluating, such as:

- Does your company rely so heavily on Internet access that being down for more than one day is detrimental to productivity? If so, you may want to partner with a company for dedicated bandwidth and a service level agreement. If not, then a cable-modem connection may suffice.

- Does your company have well-documented policies regarding acceptable Internet usage? If not, co-develop this policy with your HR department. It is essential that every employee understand the rules about what is and is not acceptable.

- Does your company have a system that can report back about which devices are using the most bandwidth? Many modern firewall devices provide this type of functionality. This functionality can help you determine the root of slowness issues and potentially help if the employee must be counseled.

Take the time to consider these key questions carefully, and then let answers drive your company's decision on which system to purchase. By thinking practically about your Internet Access you'll get the most out of your systems while keeping your budget in check, and your employees' expectations at a manageable level.

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