2013 Bandwidth Management Buyers Guide

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About This Guide: This guide is produced by Telecom Association ("TA"), a membership organization of 3,800 independent telecom solution partners and their technology vendors. The guide is published for business owners and managers to help them select the most cost effective network bandwidth management solutions for their multi-location businesses.

How to Use This Guide: The guide has five parts: an overview; a self-analysis survey; a directory of recommended TA members and vendors; blog post updates; and other useful resources. Completing the self-survey helps buyers clarify their needs and categorize their choices so they can find the TA partner and vendor that can provide the best solution.

Overview

In this guide, "bandwidth" is defined as the amount of connectivity a business has to the public Internet through their various broadband Internet connections and between their multiple individual business locations using a wide area network or WAN. "Management" is defined as the administration of a defined policy that controls access to a company's bandwidth and prioritizes the data network applications utilizing the bandwidth in a cost effective manner through the use of various hardware, software and/or remotely hosted "cloud" solutions.

Back when most employees for a business worked in a single location, "bandwidth management" was a non-issue because both the employees and the data they needed access to were in the same place. Today's competitive environment however has pushed employees out of corporate headquarters so they can be closer to customers and business partners. Serving the corporate data requirements of remote customer-facing locations, mobile employees and distant solution partners mandates bandwidth management that works.

While in-house IT resources for many businesses generally excel at managing corporate data within the local area network or "LAN", they often defer to telecom carriers when looking for broadband Internet and WAN expertise. Unfortunately, having one entity manage data on the LAN and another entity manage data on the WAN generally leads to conflict and "finger pointing" when smooth bandwidth flow gets bottle-necked somewhere.

Can "More Bandwidth" Substitute for "Bandwidth Management"?

As the cost of bandwidth drops, many business owners and managers believe that the easiest (and usually cheapest) way to troubleshoot data connectivity problems is to simply order more bandwidth from an existing or additional bandwidth provider or telecom carrier.

While adding more bandwidth might solve simple problems in the short-run (like employees watching weekend recap sports videos on ESPN.com every Monday morning), more often then not, adding bandwidth without adding bandwidth management tends to only disguise bandwidth problems until the problems get bigger and reappears at an even worse moment.

The "Who, What & How" of Bandwidth Management Can Pay for Itself

Just as any business can figure out how to work within a payroll budget they can also work within a "bandwidth budget" if they can establish a bandwidth management policy that

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dictates “who” can access the network, “what” data they can send over the network and “how” all the network traffic will get prioritized.

Most business owners would be horrified to learn just what kind of network traffic they’re writing “more bandwidth” checks to accommodate. By identifying what data traffic has what priority for which users, most businesses can find that the data traffic they want to accommodate is easily affordable after they throttle or eliminate the data traffic that’s superfluous to the business.

Can “the Cloud” Help Solve Bandwidth Management Problems?

Yes and no. Bandwidth is what businesses buy when they keep their data protected in “data silos” at their headquarters but the data needs to go “somewhere else” to get used by remote employees, customers or partners. The bandwidth that a company subscribes to from a telecom carrier is what gets data from “where it lives” to “where it’s used”.

Many business owners are deciding that all the costs associated with maintaining a data silo on their corporate property has two big drawbacks: first is the human and equipment cost of maintaining the data on-site; second is the cost of the bandwidth required to get the data to where it will be used by employees, customers or business partners.

“The Cloud” for all practical purposes is nothing more than a secure, air-conditioned room outside of your corporate property in a “data hotel” of sorts that holds all of your business data on equipment you own or even better equipment that you rent from someone else.

If the primary users of your data are application servers from partner companies, if everyone moves their data into data hotel “clouds”, many bandwidth management issues are reduced or eliminated because the bandwidth needed to connect businesses to one another within multi-tenant data clouds is included in their “cloud rent” or practically free.

Hardware or Software-Based Bandwidth Management Staffed In-House or Outsourced?

Even companies that go “all cloud” still need bandwidth management to police the “who, what and how” of their data flows. As with most IT issues, bandwidth management can be hardware or software based and controlled in-house or by outsourced experts. Which is the best way for any particular firm is usually revealed by the answers to the following self-analysis survey.

Self-Analysis Survey

Bandwidth management consultants and vendors need the answers to the following survey questions in order to understand your current situation and future requirements before they can discuss the most sensible options and then recommend the solution that best fits your budget.

1. What is the total number of broadband connections you have at each of your individual locations and what is the advertised upload and download speed of each?

2. If you have multiple connections at each location, are they or can they be bonded together through a hardware device?

3. Are your multiple locations connected with any sort of private virtual private network (“VPN”) or MPLS and if so are you pushing voice traffic over the data network?

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4. What hardware or software tools are being used on your LAN (local area network) or WAN (wide area network) that enable network bandwidth monitoring or management?

5. Over the past 12 months, what is the total monthly bandwidth that get's uploaded and downloaded from each location?

6. When do bandwidth usage spikes occur during the week and/or month?

7. Can you track monthly bandwidth usage and spikes to individual users and applications?

8. What percentage of your WAN traffic is "intra-office" and stays "on the WAN"?

9. What hardware or software is in place on your LAN or WAN to provide security, redundancy, survivability, QoS (quality of service), traffic prioritization or user throttling?

10. Do you have multiple broadband service providers?

11. How will your business applications and application users evolve over the next 24-months and how will that change your data bandwidth requirements?

12. What are your business critical network applications and are they housed “on premises”, in a private data center or somewhere in the public cloud?

13. Who is currently managing your business critical network applications and are they the same people who manage the infrastructure that houses the applications?

14. What do you see as your biggest current bandwidth management challenges, what solutions have you looked at so far and which are you leaning towards if any?

Recommended Bandwidth Management TA Partners & Vendors

The following TA partners and vendors are specifically recommended for their bandwidth management expertise and solutions by business end-users that have selected them and then reviewed their performance within the past year. Listing are ranked by review points.

Accel Networks (0) Specializes in helping multi-location businesses integrate and manage 3G/ 4G, LTE and fixed wireless solutions into their data networks

Bandwave Systems (0) Specializes in aggregating and managing multi-carrier data networks for multi-location businesses that include DSL, T-1, cable, fiber Ethernet and wireless connections.

Megapath (0) Specializes in bandwidth management that allows business customers to move all their voice and data applications to a managed cloud that is “secure to the core”.

Telnes Broadband (0) Specializes in designing and delivering private managed networks that are 100% customized and supported by an award-winning back office.

If you are a TA partner or vendor with bandwidth management expertise or solutions please submit your customer reviews to Dan@BusinessPhoneNews.com to get listed here.

Bandwidth Management Blog Updates

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Recent bandwidth management articles at TA's BusinessPhoneNews.com blog

How to Inexpensively Increase Internet Bandwidth by Bonding Low Cost Coax Cable and DSL Circuits 9/24/12

How to Use Cable Aggregation as an Alternative or a Replacement for Your MPLS Network 8/27/12

How many Hops is Too Many Hops? What to look for if latency is killing your global data applications... 8/20/12

How to Use Coax Cable Aggregation to Backup or Augment Your MPLS Wide Area Network 6/14/12

Solution Review: How Distributed Enterprise IT Directors Solve 3G/4G Fixed Wireless Connectivity Problems 3/12/12

What are the Benefits of Connecting Your Business to "the Cloud"? How should you choose a business cloud consultant? 1/9/12

Should You Backup Your Critical Business Data in "the Cloud"? Can you afford a cheap solution? 1/7/12

Migrating Your Multi-Location Business from a VPN on the Public Internet to a Private Ethernet or MPLS Network 12/2/11

What To Do When the Public Internet Fails? Put Your Business on a Metro Ethernet or MPLS Private Network 11/9/11

Are Aircards Enough? What Constitutes a Proper Wireless Wide Area Network (WAN) for Business Grade Use? 11/7/11

Looking for a Really "Big Cloud" to Host Your Most Important Business Applications? Here it is... 8/21/11

Other Useful Resource Links

The following bandwidth management resource links may help end users and consultants fine tune prospective bandwidth management solutions.

San Diego Center for Children Replaces SonicWALL with OpenDNS Enterprise Insights for Granular Control (5-locations)

Run Your Home Network Like a Coffee Shop for Easier Guest Access and Family-Friendly Browsing

How Can I Monitor My Bandwidth Usage?

XRoads Networks NetEqualizer PAESSLER ManageEngine

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