

Long-distance IT: Driving Efficiency in Remote Offices

IDG RESEARCH HIGHLIGHTS THE MANY WAYS WAN OPTIMIZATION SOLUTIONS WITH A BUILT-IN WINDOWS SERVER LEAD TO MORE EFFICIENT BRANCH OFFICE IT.

Supporting branch offices is a costly, time-consuming job made tougher by an all too common fact: Though it's one of the IT department's many duties, there's usually no one on-site to do it.

"The days of having expensive IT staff at each branch are long gone," says Jim Rapoza, a senior research analyst at Aberdeen Group in Boston. "If you're lucky you have one pretty capable person." Everything else must be handled remotely, he notes.

The absence of on-site expertise is not the only reason branch office IT can be such a headache. Complex remote infrastructures, sluggish application performance, and increased security risks are perennial concerns as well.

For years, businesses have used WAN optimization solutions to address such issues. "If you look at the history of WAN optimization, solving branch problems is actually where it begins," says Chalan Aras, a vice president and general manager at Citrix. As a result, he adds, most of today's leading solutions do a fairly good job of improving remote office performance and lowering network costs.

Yet these days companies with branch sites find themselves confronting new demands, from juggling cloud-based and locally hosted applications to delivering virtual desktops and applications over long distances without compromising responsiveness. Those are tasks few legacy WAN optimization solutions are equipped to perform, which is probably why 67 percent of IT managers at organizations currently using a WAN optimization solution plan to upgrade it within the next two years, according to an exclusive new survey by IDG Research.

Indeed, as more and more companies can attest to, tackling a new generation of branch office IT challenges



takes a sophisticated WAN optimization technology that has equally new and innovative features. Right now, the solution that Aras oversees—Citrix CloudBridge—is the only one on the market with all of the capabilities that businesses with branches need.

"Cloud computing is completely changing branch office IT," Aras says. "CloudBridge is the first solution of its kind specifically engineered to help enterprises embrace that new reality."

Painful Problems

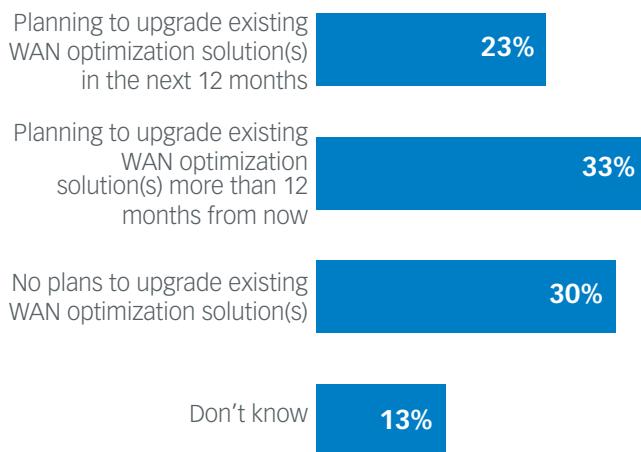
Remote site IT woes, such as the lack of readily available IT staff, painfully impact businesses in numerous ways, according to the IDG Research survey. Those include decreased end-user satisfaction (cited by 61 percent of poll respondents), lost productivity (56 percent), and increased network and management costs (52 percent).

Dane Young, a solutions architect at Concord, Calif.-based solution provider Entisys Solutions Inc., believes those last two issues are closely related, as companies often view buying more bandwidth as the only way to keep branch employees working at full speed. "The productivity and cost factors are sort of like the x- and y-axis on a graph, and a lot of companies are trying to find a balance between the two," Young says.

According to the IDG Research study, moreover, balancing spending and productivity is proving especially hard for the nearly one-fourth of organizations that don't use a private WAN to link their branches and headquarters: 93 percent of them are struggling to at least some extent, with higher network and bandwidth costs as a result.

Planning to Upgrade Existing WAN Optimization Solution Over Next 12-24 Months

(Among those with a WAN Optimization solution in place)



Source: IDG Research Services

Harder to measure but every bit as important, meanwhile, is the impact remote office problems can have on IT flexibility. "A lot of enterprises are moving applications into the cloud, but they still need to deliver certain baseline services, like printing, locally," Aras says. "The difficulties of doing both those things at once make executing a cloud strategy much more complicated."

The many issues that make branch IT difficult have companies turning to a variety of technologies for assistance. According to Network World's "2014 State

of the Network" survey, 72 percent of businesses are researching, using, or piloting desktop virtualization systems, while 60 percent and 55 percent, respectively, are doing the same with application optimization tools and infrastructure-as-a-service offerings.

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Another 60 percent of organizations, meanwhile, are researching, using, or piloting a WAN optimization solution. According to Robin Layland, president of West Hartford, Conn.-based networking advisory firm Layland Consulting, that's because streamlining traffic between branch sites and data centers produces significant benefits. "It cuts down on the amount of bandwidth being used," he notes, which both lowers connectivity spending and accelerates the performance of applications and virtual desktops alike.

Appliances That Do It All

Evidence from the IDG Research survey makes clear just how highly companies value rewards like that. An overwhelming 95 percent of IT managers surveyed in that poll call lowering network or bandwidth costs and reducing bandwidth latency critical or important goals for their server environment. In addition, 90 percent of surveyed managers call supporting new cloud architectures critical or important goals, and 74 percent say the same of eliminating branch-based servers.

Underlying all of those objectives, Rapoza notes, are two even bigger, more important ones: increasing employee satisfaction and productivity. "Everything you do from a network optimization standpoint is ultimately for the end users, to make the applications run well so they can do their job," he says.

To help businesses achieve goals like those, however, a WAN optimization solution must be capable of far more than just maximizing bandwidth. It must also support

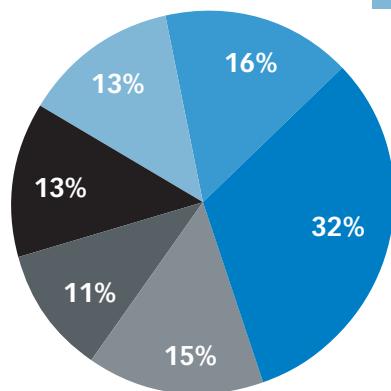
private and public cloud applications as effectively as it does on-premises systems, and help simplify branch office infrastructures. “Anything you can do to reduce the number of servers and other devices at the branch is going to make a big difference,” Aras observes.

Unfortunately, most WAN optimization solutions now available offer limited support for infrastructure consolidation and limited compatibility with cloud architectures—if they offer any at all. Worse yet, many legacy WAN optimization systems are ill equipped to handle virtual desktops and applications. “Those are critical workloads for more and more organizations, and they’re extremely performance-sensitive,” Aras observes.

No wonder so many participants in the IDG Research survey are unhappy with their current WAN optimization system. “Businesses want appliances that can do it all, that do it all right, and that make things better,” says Worth Davis, CTO of Computex Technology Solutions, a systems integrator with offices around the country and headquarters in Houston. Sadly, though, that’s not what most of them have.

Importance of an Integrated Windows Server as a Feature

- Critical
- Very important
- Somewhat important
- Not very important
- Not at all important
- Don't know



Source: IDG Research Services

Cloud Ready from the Bottom Up

Citrix CloudBridge, by contrast, offers comprehensive functionality ideally suited to today’s new era of computing, including features presently available nowhere else. For example, it’s currently the only WAN optimization appliance with an optional built-in Windows

Server. “You can use that to offer essential services such as file and print, or to host applications that must still be run in the branch,” Aras says. Either way, the end result is less remote hardware to manage: “With CloudBridge, it’s all one appliance,” Aras notes.

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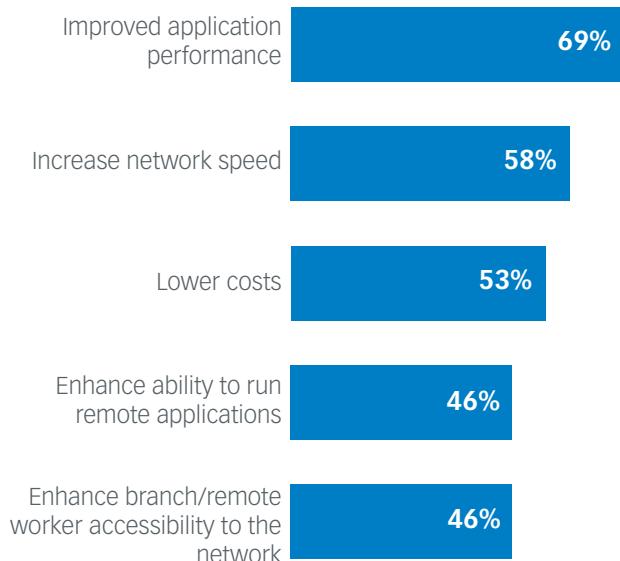
-Ricky Caldwell
 Director of Server Architecture and Infrastructure
 Cornerstone Home Lending Inc.

That kind of simplicity is exactly what most companies with branches want. In fact, 59 percent of managers surveyed by IDG Research call an integrated Windows Server a critical or important feature in a WAN optimization solution, and 64 percent say they’d be more likely to invest in a WAN optimization solution equipped with an integrated Windows Server.

Yet CloudBridge helps with much more than on-premises IT requirements. It also provides secure, optimized connectivity to cloud-based solutions, as well as complete workload portability between private cloud, public cloud, and on-site infrastructures. “We designed CloudBridge from the bottom up to support cloud applications as well as it does on-site systems,” Aras says. That empowers businesses to roll out a cloud strategy at their own pace. “You can run legacy applications on the Windows Server for as long as you wish and then move them into the cloud when you’re ready,” Aras says. “You get the same performance advantages in either environment.”

Those performance advantages are considerable too. “CloudBridge outperforms other solutions by up to two times for certain enterprise applications,” Aras states. According to Young, that’s especially true when it comes to handling virtual desktop and virtual application traffic based on the Citrix ICA and HDX protocols. “It optimizes both of those better than anyone else,” he says. Indeed, in a rigorous series of head-to-head HDX performance

Top Five Potential Benefits of Investing in and/or Upgrading WAN Optimization Solutions



Source: IDG Research Services

tests between CloudBridge and another well-known WAN optimization solution, Boca Raton, Fla.-based benchmarking services provider Tolly Enterprises LLC found that CloudBridge required less than half as much WAN bandwidth for Citrix ICA traffic for both SSL and non-SSL traffic versus a well-known competitor.

CloudBridge also provides a wide range of deployment options. "You can deploy it as a physical or virtual appliance, either in the cloud or on-site," Aras says.

Collectively, that unique set of features helps companies meet their most demanding branch office IT goals. By simplifying remote IT infrastructures, for example, CloudBridge and its integrated Windows Server save companies money on everything from administration and bandwidth to electricity and floor space. "It's a very cost-effective solution," Aras says. CloudBridge boosts branch office productivity and end-user satisfaction by improving network and application performance, and it provides an easier, more flexible path to the cloud by optimizing both on-site and off-site applications.

IT managers surveyed by IDG Research clearly appreciate the impact a solution with CloudBridge's one-of-a-kind features can have. A whopping 95

percent of them agree that a WAN optimization solution with an integrated Windows Server would help their company support new cloud architectures, another 90 percent agree it would help with end-user performance expectations, and 84 percent agree it would both reduce server sprawl and enhance support for third-party applications.

Those aren't theoretical gains, either, as far as Cornerstone Home Lending Inc. is concerned. Based in Houston, the privately funded, full-service mortgage bank maintains 84 branches in 48 states. CloudBridge has helped it both accelerate application speeds and raise employee productivity at those remote sites.

"We did a proof of concept in our West Coast offices and saw an immediate performance improvement for loan origination," says Ricky Caldwell, Cornerstone's director of server architecture and infrastructure. Based on that success, he continues, the company rolled out CloudBridge nationally, with similar results. Bandwidth utilization is down 35 percent per branch on average, and loan processors are getting their work done significantly faster, leaving them more time to spend with their families.

"Citrix has improved the work lives of our employees," Caldwell says. "At the same time, it has enabled them to deliver a much higher level of service to our customers."

Cornerstone is far from the only company to experience results like that. "Thanks to its many innovative features, CloudBridge simplifies branch office IT, reduces costs, and delivers a better end-user experience," Aras says. For companies with branch offices, benefits like those are the keys to improving productivity and strengthening the bottom line. For now, CloudBridge is the only solution that delivers them.

For more information please read [Optimizing your Microsoft application and infrastructure investments with Citrix CloudBridge](#).

Or visit www.citrix.com/cloudbridge