

Ensuring availability at your distributed sites is critical. Take advantage of **out-of-band management tools** to support remote system availability.

# Business Continuity and the Branch Office

From the bank on Main Street to the department store in the local mall to the hotel on a secluded beach, American business meets its customers at its branch locations. Consequently, those venues should be models of business efficiency, servicing customers on-demand and in the manner they choose.

To ensure that the customer experience is not jeopardized by failures of point-of-sale, ATM or other key systems, some businesses are building redundant infrastructures at their distributed sites. The imperative to ensure customer satisfaction by increasing network stability may seem to warrant this approach. But companies should consider whether they can justify these expenditures, especially across what may be hundreds, if not thousands, of sites.

Most organizations, unfortunately, lack a central strategy and clear accountability for managing branch office infrastructures. That makes it hard to get a handle on how much time and money is spent on equipping and maintaining duplicate systems at off-site locations to ensure business continuity. Furthermore, the lack of such a strategy leaves organizations open to other costs and risks related to business continuity. Consider, for example, the on-site IT service calls that still will be required to fix and reboot the primary server. Without a strategy, organizations also are not likely to

have in place the tools required to determine whether a service provider's infrastructure issues may have contributed to downtime or service disruptions at the branch. Add to that the time lost when IT staff members have to wade through the hodge-podge of management consoles that populate branch office infrastructures to try to analyze and address the incident.



There's got to be a better way. As organizations build new branch facilities, they need to put in place plans to support a simpler, cheaper and more effective method of ensuring availability at these sites, as well as managing their remote assets.

"The easiest answer is centralization to improve the availability of remote sites," says John Katsaros, a principal at Internet Research Group. Rather than building in redundancy, organizations in most industries should be removing as many servers as possible from the branch and pulling IT activity into central operations. "Putting in an out-of-band [management] solution is part of the simplification of the branch," he says.

Out-of-band management products provide centralized control and repair of local and remote IT infrastructure, even when connectivity is lost or devices are down. Avocent is the leading vendor in this space, providing businesses with a single interface to quickly

changes to operating systems, applications, hardware or other components are often behind system downtime. According to industry analysts, 20 percent of planned changes, even when properly managed, cause outages, due to the lack of visibility around system dependencies. Mother Nature chips in, too—businesses equip their remote servers with uninterruptible power supplies, yet power interruptions still sometimes cause equipment to crash, creating the need for manual reboots.

Wherever the fault lies, the fact is that "companies today are defined by their IT infrastructure," says Katsaros. "When things don't work, they're losing business." The toll that degradation and downtime at branch offices takes on both revenue and productivity can't be ignored (see chart, "Branch Office Downtime & Degradation Costs Are Significant"). Indeed, in some highly regulated industries, the imposition of fines may further exacerbate the situa-

tion—the insurance industry, for instance, is subject to penalties should system outages delay issuing checks to policy holders.

Service providers add another risk to the mix. Depending on the number of locations a business maintains, it may be dealing with as many as two dozen service providers for broadband connections, multiplying IT leaders' concerns as well as their management requirements. While service providers commit to service level agreements, it's not easy for organizations to assure that these SLAs are being met—unless, that is, businesses are using out-of-band management products

that offer serial-side logging and detailed reporting capabilities. Avocent's DSView management console pulls in data that may be used to determine whether service providers are meeting SLA requirements, offering in a single management console time-stamped event logs of activities across multiple sites and appliances.

The DSView management software helps organizations efficiently manage business continuity issues whether they are the result of service provider vulnerabilities or other causes. The last thing most IT personnel managers want to do when they're trying to restore service or analyze problems is weed through a pile of management and configuration systems specific to the various platforms in place at branch locations, in search of root causes and fixes. They can avoid that problem—not to mention the hassle of training IT employees on a bevy of systems—with DSView's centralized console, which works across multiple platforms at any number of locations.

Bad things happen to good systems, and they always will. With Avocent's out-of-band management solutions, IT leaders have powerful tools to limit the impact of downtime and service disturbances at the remote sites where they come closest to their customers. They also can limit the costs the organization incurs and the inconveniences to their staff of having to address these problems with on-site visits.

One IT leader who was recently questioned about the challenges of maintaining remote systems perhaps best sums up the advantages of out-of-band management. "The faster you can fix it," he said, "the happier everyone is." ■

### Branch Office Downtime & Degradation Costs Are Significant

Industry	Average # Branches	Downtime Hours/Year	Degradation Hours/Year	Average Revenue	Average Lost Productivity
Finance	212	719	461	\$56 M	\$165 M
Health	62	180	213	\$17 M	\$25 M
Trans.	101	172	126	\$14 M	\$18 M
Mfg.	159	393	373	\$80 M	\$74 M
Retail	174	322	196	\$18 M	\$23 M

and efficiently manage their remote infrastructures. Its products include the DSR line of KVM over IP switches, Cyclades serial console servers, and DSView 3 management software.

With out-of-band management solutions, organizations gain the critical ability to reboot remote systems that may go down for any number of reasons. Often, unexpected downtime is the result of applying a software patch. Given the continuing parade of bugs and vulnerabilities in commercial applications, and the accelerated speed at which exploits targeting known vulnerabilities appear, patching requirements aren't going away anytime soon. Yet the patching process is bedeviled by the fact that vendors often don't provide much information on what's being patched or what else might be affected when a patch is applied.

"EMA consulting and research shows that patches and configuration changes are the cause of IT service disruptions from 60 to 90 percent of the time," says Dennis Drogseth, vice president at Enterprise Management Associates, "and that there is an 80 percent probability of something going wrong, at minimum, 20 percent of the time when patches are applied."

Plenty of other events necessitate system reboots, which adds to the inconvenience and costs of trying to support distributed locations without out-of-band management tools. Software upgrades or

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