



REMOTE IT MANAGEMENT SOLUTIONS:
**MANAGE REMOTE
OFFICES WITHOUT
LEAVING YOURS**



IT Challenges **AT THE REMOTE OFFICE**

Compared to data centers, remote offices and facilities pose unique hardware and IT management challenges. Traditional IT management solutions are not designed to address these challenges.

IN-BAND VERSUS OUT-OF-BAND SOLUTIONS:

“In-band” solutions use a functioning device’s communications channels, such as TCP/IP over Ethernet. When those channels are off-line, all in-band solutions are useless. “Out-of-band” solutions attach directly to a target device via a backup communication or dial up channel. Out-of-band Keyboard-Video-Mouse (KVM) over IP, serial over IP and attached power management solutions can monitor, configure, and reboot even completely failed systems.

HARDWARE ISSUES

Remote office configurations are far from “typical.” Retail stores, banks, and manufacturing facilities may contain generations of mismatched or legacy hardware that need to work together. Servers, workstations, PCs and routers share space with location-specific devices such as point-of-sale terminals, teller terminals, kiosks, credit card readers, and mobile computers. Businesses are increasing the amount of IT equipment at remote offices, and each new component adds complexity and increases the chance of failure.

IT ISSUES

Many remote offices lack on-site IT staff, or have stretched their central IT staff thin to support rapid growth in remote locations. As a result, untrained branch employees are often asked to perform IT functions such as desktop or server maintenance. Unnecessary outages, security vulnerabilities, inadequate IT administration, and compromised productivity at the remote office are often the cost. If there is on-site IT staff, their primary responsibility is keep desktop PCs up and running. Remote workers may not have the time or perspective to ensure that their systems are secure, up-to-date, and in compliance with central IT policies.

Most remote administration tools are poorly-equipped to address this problem. “In-band” management solutions only function when the network and operating system is operational. Third party support is expensive, and risks compromising proprietary data and customer privacy. As a result, non-responsive hardware, operating system updates, security patches, and other critical faults requiring a hard restart mean costly visits between scheduled office refreshes.

The Avocent Solution **FOR BRANCH OFFICES**

Avocent provides comprehensive remote access to every networked device in the branch office—as if an administrator were physically on site. Avocent remote office solutions provide complete hardware control via an intuitive software console and a family of management appliances, helping to ensure device and network security, compliance, and administration.



CONTROL

Administrators can drag-and-drop, CTRL-ALT-DEL, and perform other tasks when using Avocent branch office solutions for remote control of servers. Avocent serial and USB support extends remote service to routers, switches, hubs, storage devices and more. Remote power management allows hard restarts and power cycling necessary to handle hung operating systems, crashed applications, or major upgrades. With Avocent virtual media-capable appliances, remote administrators can also install software on connected machines.

MANAGEMENT

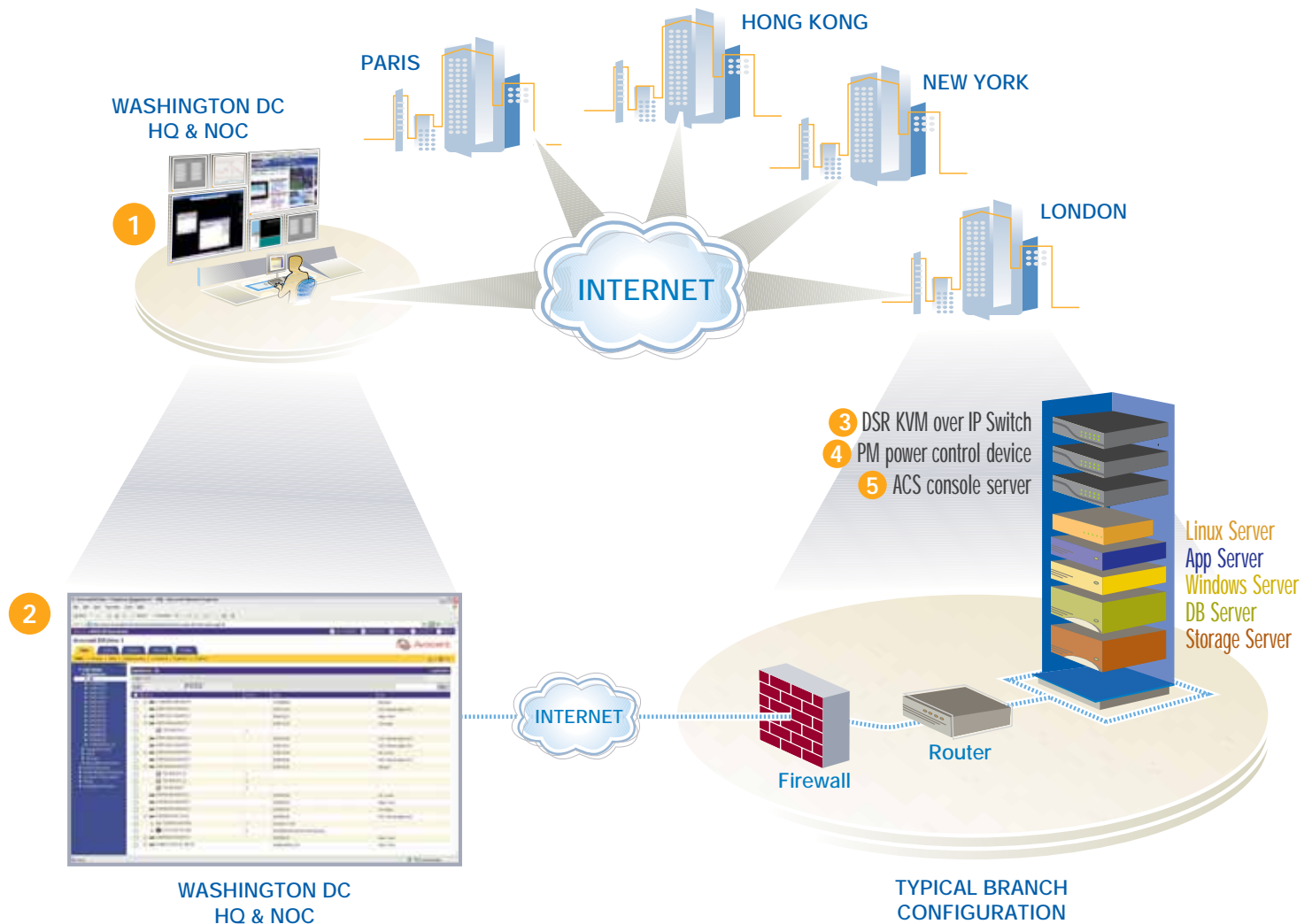
Avocent branch office solutions can control an unlimited number of devices, unifying management tasks without adding unnecessary hardware. Administrators can configure each switch using browser-based tools and manage all connected devices through Avocent DSVIEW® 3 centralized management software.

SECURITY

Rising regulatory scrutiny and high-profile data thefts have increased the importance of security and auditing. Avocent authenticates against directory servers such as LDAP, Active Directory, NT Domain, TACACS+ and RADIUS. Selectable encryption modes secure access channels without disrupting the security infrastructure. Avocent exit macros log out users to preserve session security, and detailed device access logs help administrators enforce policy compliance.

Avocent Branch Office Solutions

DELIVER RESULTS



1

Centralized IT resources and personnel remain in the **central office** to maximize productivity.

2

At the central office, **DSView 3 management software** enables administrators to manage multiple device types at the remote office from a single interface.

3

KVM-over-IP allows administrators to view and interact with servers and workstations as if they were at the remote office console.

4

Remote power management ensures even greater control and management of remote office devices.

5

Serial connectivity provides access to network devices at the remote office including routers, switches, storage and security appliances.

CENTRALIZED MANAGEMENT

DSView 3 management software

Avocent DSView 3 management software is a single, secure interface that lets you tame complexity, manage growth and keep critical systems healthy and available. You can control your entire network from a single integrated interface.

With DSView 3 software, you gain secure, centralized management of connected IT and network devices no matter how complex or geographically dispersed. When used in conjunction with DS Series or Cyclades® branded products, DSView 3 software can remotely access, monitor and control target devices on multiple platforms at numerous locations – anywhere, anytime.



SERVER MANAGEMENT

DSR® KVM over IP switches (8, 4 and 1 port)

DSR KVM over IP switches provide BIOS-level control of all connected servers and serial-based devices in your remote offices. DSR switches let you remotely manage and power cycle connected devices, and provide external modem support when the network is down. DSR switches feature an on-board Web interface compatible with Internet Explorer, Mozilla, Firefox or Netscape for access and control of your servers over IP.

Cyclades OnSite (8 and 4 port)

The Cyclades OnSite branch office appliance provides both remote sites and branch offices with a compact, cost-effective solution for managing IT assets. Unlike competitive offerings, the Cyclades OnSite appliance is specifically for co-located remote KVM and console asset management and combines the functionality of Avocent KVM over IP switches with console management features in a single appliance for effective, consolidated remote management.



POWER MANAGEMENT

Cyclades PM power control device (10 port)

Cyclades PM power devices are a family of intelligent power distribution units (IPDUs) that provide remote power management and control of servers and network gear. When used in conjunction with Cyclades ACS console servers and Avocent DSView 3 management software, the Cyclades PM devices provide a power management system with easier management capabilities. It solves problems faster by integrating system access and power control into a single interface. Available in both NEMA and IEC models.



SERIAL CONSOLE MANAGEMENT

Cyclades ACS console server (8, 4 and 1 port)

The Cyclades ACS family of advanced console servers gives IT professionals and network operations center (NOC) personnel the ability to perform secure remote branch management and out-of-band management of IT assets from anywhere in the world. The Cyclades ACS console server provides enterprise and telecom networks with a complete, secure console management solution. When combined with integrated power management and centralized administration, the Cyclades ACS console server offers a secure and consolidated out-of-band infrastructure management solution. Using a hardened Linux operating system, the Cyclades ACS appliance (or console server) provides optimal performance, security and reliability.



Avocent Remote Office Solutions **FOR INDUSTRIES**

While any business with remote branches can benefit from out-of-band technology, remote office management is particularly valuable to certain industries. Industries with significant consumer interaction, stringent government regulation, significant privacy or security concerns, and hardware-dependent productivity can realize immediate benefit from Avocent remote office management solutions.

Following are examples of how Avocent technology can benefit retail, financial services, and precision manufacturing businesses.

RETAIL SCENARIO

A large retailer suffers a nationwide POS failure during a routine upgrade. Its non-Avocent managed servers require 6 to 8 hours and extensive interaction with store personnel to restore. The retailer restarts its Avocent-managed servers within an hour without interrupting store personnel or operations, saving \$100,000 revenue per hour per store. As a result of the trial, the retailer installs Avocent remote solutions in each of its thousands of U.S. and international stores.



RETAIL

Slim margins and unpredictable business conditions mean tight IT budgets for retailers. Yet any unplanned downtime at the point of sale results in customer dissatisfaction, lost productivity and lost sales. Hence, retailers must have responsive central management of their desktop systems, servers, routers, and POS scanners and card readers at their remote offices and stores.

Avocent provides multi-device remote management beyond the capabilities of any other vendor-based solution. Avocent remote management solutions improve network management capabilities, reduce downtime and leverage existing central IT staff by eliminating the need to travel to remote offices. This results in measurable ROI for the retailer and more satisfied customers.



MANUFACTURING SCENARIO

A multinational electronics manufacturer uses a single, central server in East Asia to manage three to five manufacturing facilities in the United States. Due to the sensitivity of the equipment and the costs involved, securing server access and maximizing uptime are critical. The manufacturer uses Avocent remote office solutions to monitor, manage, and secure servers, routers and switches at all locations.

MANUFACTURING

In precision manufacturing, production uptime is critical. Unplanned downtime can ripple across the entire supply chain, disrupting shipping from sourcing to delivery and reducing employee productivity. In addition to standard office and back office devices, manufacturing companies need to administer and maintain the continuous operation of complex manufacturing systems based on PC server technology, scales, and other manufacturing and measurement devices.

FINANCIAL SERVICES

To remain competitive, financial service businesses must maintain their customers' trust. That requires 24/7 availability and the absolute security of customer data. Because of this, the financial services sector spends nearly four times as much on IT as retail or manufacturing. Avocent remote office solutions maximize that investment by providing a secure and accountable solution for remote administration, upgrades, reboots, and power cycling from a central office.

Avocent provides physical, logical and operational security for customer data. KVM over IP switches allow administrators to keep remote hardware locked away from unauthorized staff. DSView 3 software and remote power management ensure maximum uptime for security devices such as routers and firewalls. Directory-based authentication ensures that users can see only the resources for which they have authorization. By securing critical data and devices, Avocent remote office solutions help financial businesses maintain compliance with Sarbanes-Oxley and other regulations.

ABOUT AVOCENT

Avocent® is a leading global provider of IT infrastructure management solutions for enterprise data centers, small/medium businesses and remote offices. Our unique integration of hardware, software and embedded technologies provides a single interface to quickly and efficiently manage your IT infrastructure. We help you solve system problems anytime, anywhere, no matter the location or health of your servers or network devices.



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