

CIOs Call for Managed Services

In the current global economy, the business case for predictable, reliable and cost-effective managed services has never been stronger. Here's why.

Instead of building and managing a video surveillance system on its own, Washington's Kent School District is considering another option: Outsourcing the potential project to a managed service provider.

"All schools want to provide a safe and secure environment for all of their students, but not all can afford the expertise or infrastructure to support it," says Thuan Nguyen, executive director of IT for Kent School District. "Most schools can't even afford to have a dedicated server or network administrator, but they all want the service."

Therein lies the business case for managed services. Across the globe, organizations representing all vertical markets are embracing managed services to achieve predictable IT costs and enhanced IT services.

From on-premise equipment to in-the-cloud services, managed service providers bring order to corporate IT. In fact, demand for managed services extends from large central offices out to branch offices—where 63 percent of organizations are using or plan to use managed services in some of their branch locations, according to the Nemertes Research Group Inc. of Mokena, Ill.

Managed routers and firewall services were just the start. These days, progressive service providers deliver wide area application services (WAAS), unified communications, mobile 3G services and video surveillance, among other popular offerings.

"The march toward ubiquitous managed services is undeniable," says Al Safarikas, senior director of managed services marketing at Cisco Systems Inc. "Working with Cisco Systems, the world's



leading service providers are delivering next-generation managed services to their customers."

Cisco's Integrated Services Routers (ISRs) paved the way for many of today's managed services. Millions of those ISRs are running in customer sites across the globe. Now, service providers are layering managed services onto those routers—enhancing the security, reliability and productivity of customer networks.

Still skeptical? In each of the pages ahead, we focus on the power—and the payoff — of specific managed services across the globe. And we reveal where managed services are heading next.

KEY OPPORTUNITIES

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Wide Area Application Services

Consolidate Without the Performance Penalty

Chief Information Officers (CIOs) have spent more than a decade battling a technology paradox: On the one hand, they want to give branch office workers rich, responsive applications. But on the other hand, CIOs don't have the budget to equip branch offices with full IT staffs and related equipment.

The result: branch office workers often felt like second-class citizens who lacked the tools and support that their central office peers took for granted.

"Businesses always seemed to be searching for a way to centralize their systems without sacrificing a great user experience in branch offices," notes Ed Golod, president of Revenue Accelerators, a technology consulting firm in New York. "The answer to that dilemma finally presented itself when Cisco launched its Wide Area Application Services."

Those services -- also known as WAAS—have undeniable value. From ADC Telecommunications to Sprint, organizations are discovering that WAAS reduces:

- **Branch IT capital expenses** (CapEx) and operating expenses (OpEx)
- **Branch office employee downtime** through application acceleration
- **WAN bandwidth expenses**

In recent months, Cisco and Microsoft Corp. have partnered to integrate Windows Server 2008 with WAAS. The result is an appliance that offers virtualization capabilities for hosting Windows services in branch office environments.

WAAS Delivers

WAAS almost sounds too good to be true. But a range of customers are true believers in the Cisco technology. Consider the situation at ADC, which was struggling to share CAD (computer-aided design) files across its wide area network. The slow WAN performance affected global R&D collaboration and time to market for new ADC products.

Seeking a solution, ADC centralized its CAD applications and embraced Cisco WAAS to accelerate application performance. The results were startling. "We achieved a return on investment in three months," estimates Dave Brady, VP of IT at ADC. "And



"Businesses always seemed to be searching for a way to centralize their systems without sacrificing a great user experience in branch offices."

— Ed Golod, president of Revenue Accelerators

our worldwide engineering staff is so excited to have five-times the performance they previously experienced."

Sprint has had a similar experience. By leveraging WAAS, Sprint reduced server and storage sprawl across 100 branch offices, and eliminated 3.2 terabytes of WAN data between two main sites in a month, the service provider reports. Equally important, employees across those 100 branch offices gained LAN-like performance even though servers were consolidated across fewer locations.

Managed WAAS Services

Now that WAAS is widely proven, companies like TELUS offer WAAS as a managed service to a range of customers.

Eager adopters include Finning, one of the world's largest Caterpillar dealerships. Before Finning adopted WAAS, the company suffered from lost productivity because employees sometimes drove between offices instead of using sluggish WAN connections, concedes Doug Pettapiece, director of systems at Finning.

"Finning had very, very slow response times on certain applications," recalls Stephen Dixon, a senior consulting analyst at TELUS, which ranks among Canada's largest service providers. "We found a solution with WAAS. All it required was putting network modules into Finning's Cisco routers."

The result was dramatically faster network performance, managed by TELUS, says Pettapiece.

AT A GLANCE

Opportunity: Wide Area Application Services

Business Needs: Faster application performance over wide-area connections. Lower branch office IT costs.

IT Solutions: Cisco WAAS Module, Cisco Wide Area Application Engine Series Appliances

Sample Cisco Partner: TELUS

Sample Customers: ADC, Finning, TELUS

Unified Communications

Make Your Presence Known



Laurie Shook, Verizon

Laurie Shook has more than 4,000 reasons to believe in managed services. As portfolio leader for managed unified communications at Verizon Business, Shook is shaking up the world of IP communications.

Roughly 4,200 businesses depend on Verizon managed services, and a growing number of those organizations are embracing managed unified communication services. Those services leverage Cisco's Unified Communications Manager and Cisco Unified Contact Center. The suite of Cisco tools integrates voice over IP (VoIP), instant messaging, conferencing and contact center applications.

"Through managed unified communication services you gain a modern, integrated application infrastructure," notes Shook. "And IT shops also gain the ability to out-task the complexity associated with the day-to-day management of unified communications."

In a typical scenario, service providers can extend managed unified communications out to customers' branch offices—without adding branch office IT personnel or on-premise equipment. That's an important point: Businesses are expanding their branch office locations by 6.8 percent annually, and only 15 percent of those sites have on-site staffs today, reports Nemertes Research Group Inc. of Mokena, Ill.

Regardless of a customer's location, managed unified communications include:

Unified Messaging - Integrates voice mail and e-mail and delivers greater efficiency for corporate end users by enabling one-source access to voice and data messages.

Unified Mobility - Offers employees a single phone number and business voice-mail box. Employees can receive calls wherever it is convenient, and make outgoing calls that appear with the user's assigned business phone numbers.

Unified Presence - Delivers visibility into a user's availability to chat by phone or instant messaging.

Opportunity Calls

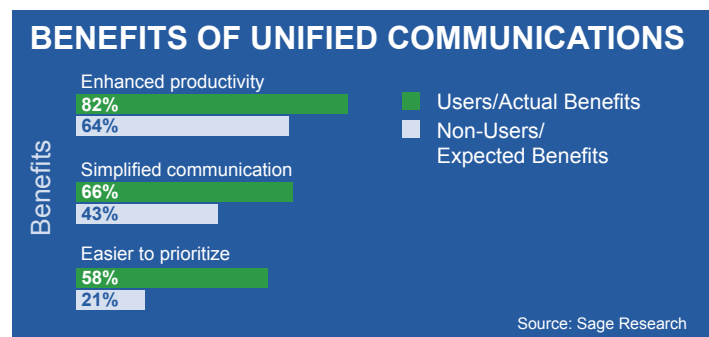
In a rare technology feat, unified communications is living up to its hype. Customers say their experience with unified communications enhances their productivity, simplifies communications and helps to prioritize business deadlines (see chart from Sage Research).

Forrester Research Inc., in a July 2008 research note, confirmed growing interest in managed unified communications services.

"Many technology decision-makers tell us that they want to rent rather than buy unified communications," wrote Forrester Analyst Henry Dewing. "This perfect storm of change and uncertainty enables UC vendors, network service providers, and even software-as-a-service vendors to win managed UC share by

offering industry-specific solutions...and ensuring that CIOs hear the message of mitigating risk with managed UC deployments."

Verizon and numerous other Cisco partners have geared up to meet rising demand for managed unified communication services. In one scenario, service providers use a cloud- or hosted-approach—known as the Cisco Powered Hosted Unified Communication Service. In another scenario, the unified communication systems are deployed on-premise at the customer site—and then managed from afar by the service provider.



Verizon, for instance, uses its own IMPACT platform to remotely monitor and manage Cisco unified communication solutions. IMPACT (short for Integrated Management Platform for Advanced Communications Technologies), cost Verizon \$150 million to develop. "We use IMPACT for everything from managing a customer's Cisco WAN routers to their IP PBXes."

Another key part of Verizon's managed services strategy is SIP (Session Initiation Protocol) trunking—a cost-saving technology that Cisco strongly advocates. SIP trunks eliminate the need for local PSTN (public switched telephone network) gateways, costly ISDN BRIs (Basic Rate Interfaces) or PRIs (Primary Rate Interfaces).

"Without SIP trunking, you'd need a gateway in every one of your office locations," says Shook. "SIP trunking allows you to centralize your gateway in the cloud. You save significantly on premise equipment costs and consolidate your access points."

AT A GLANCE

Opportunity: Managed Unified Communications

Business Needs: Empowers customers with unified messaging, unified mobility and unified presence.

IT Solutions: Cisco Unified Communications Manager, Cisco Unified Contact Center, WebEx

Sample Cisco Partner: TELUS

Sample Customers: Sprint, Verizon Business

Managed 3G Services

Mobile's Next Generation Is Here

As one of Australia's top VARs, Mathew Dickerson evangelizes managed services to his small business customers—many of whom required proactive monitoring for their remote offices.

But Dickerson doesn't just promote managed services. He also consumes them. Specifically, Dickerson leverages 3G services from Telstra Corp., Australia's largest service provider for broadband, mobile and telecom services.

"Telstra's 3G service is the best HSDPA [High-Speed Downlink Packet Access] service in Australia," says Dickerson. "And it's a great way to communicate with a lot of our customers with remote offices or with our customers who are road warriors."

Despite such praise, Telstra isn't resting on its laurels. The company is working closely with Cisco to offer a range of additional managed services, including Cisco Call Manager, Cisco IP phones and Cisco Integrated Services Routers.

Shifting Into Third Gear

Plenty of 3G service providers are making similar moves. Elisa, a leading communications service company in Finland, launched a range of 3G services in February 2008 in partnership with Cisco.

In some scenarios, Elisa services offer wireless broadband backup to wireline data connections, helping customers maintain connectivity if their primary network connection is compromised. In other scenarios, Elisa uses 3G as a primary WAN access mechanism for many of its customers, due to the unique geography and lack of certain primary wired infrastructure. In a typical customer setting, the on-premise solution includes an Elisa-managed router, a 3G card and a fixed-access card.

Eager adopters include retailers across Finland that need to process credit and debit card transactions.

"Retailers cannot afford dropped connections and customers are no longer willing to wait for slow, dial-up based credit card transactions," notes Ed Golod, president of Revenue Accelerators, a technology consulting firm in New York. "Managed 3G services eliminate those issues."

To build out the 3G service, Elisa leveraged Cisco's 3G wireless high-speed WAN interface card (HWIC), which adds 3G functionality to Cisco's Integrated Services Routers (ISRs).

On the Right Track

Similarly, Balfour Beatty Rail GmbH of Germany and its managed service provider leverage Cisco's ISR 3G wireless technology to set up IT networks at remote sites.

Balfour Beatty Rail designs and revamps railway infrastructures throughout Germany, Austria, China and Romania, among other regions. "Many of our construction projects take place in remote areas where obtaining a wired Internet connection is a lengthy and expensive process," says Ali Inci, Balfour Beatty Rail's manager



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of information and communications technology. The 3G solution provides a fast, cost-effective alternative.

More and more companies and service providers are following Balfour Beatty Rail's lead. Over the past year, Axxis Technology's Dickerson believes managed 3G services have moved into the mainstream. "No doubt, wherever I travel, I'm looking for 3G now," says Dickerson. "It's not an optional managed service. It's a must-have."

AT A GLANCE

Opportunity: Managed 3G Services

Business Needs: Reliable, high-speed mobile connections that allow businesses to rapidly set up temporary locations, or strengthen communications in their existing locations.

IT Solutions: Cisco 3G wireless high-speed WAN interface card (HWIC), Cisco Integrated Services Router

Sample Deployments: Elisa, one of Finland's largest service providers; Balfour Beatty Rail

Managed Video Surveillance

Seeing the Big Picture

Kevin Dailey has his eye on the next big networking opportunity—the video surveillance market.

“Our demand is surging,” says Dailey, vice president of the IP Physical Security Group at Consiliant Technology (www.consiliant.com), one of North America’s leading solutions providers focused on video surveillance solutions. “Say what you want about the economy but we’re looking to add headcount and we’re considering a national footprint for our video surveillance practice.”

And for good reason. Based in Irvine, Calif., Consiliant’s integration team is deploying a video surveillance system for Amtrak. The project—initially involving Amtrak facilities in Los Angeles and Oakland, Calif.—leverages a Cisco Video Surveillance System.

Once completed, the system will allow Amtrak security professionals to monitor video feeds at any time from virtually any place, enabling real-time incident response, investigation and resolution.

Another component of the system, called Cisco Video Surveillance Manager, authenticates and manages access to video feeds. In

research director at ABI in New York. “The result is numerous opportunities for vendors and service providers.”

Managed Video Surveillance Services

In fact, service providers can transform one-time video surveillance engagements into managed services contracts. The reason: More and more businesses lack the time and expertise required to manage the infrastructure and data associated with video surveillance.

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— Ed Golod, president of Revenue Accelerators

“Stored video can rapidly grow from terabytes to petabytes of information,” notes Ed Golod, president of Revenue Accelerators, a technology consulting firm in New York. “More and more customers will seek managed service providers to bring order to all that video.”

Just ask Chris Santini, managing director of TimeCapital Securities Corp., a full-service financial services firm in Smithtown, N.Y. “We’d like to increase our own corporate security by blending video security with physical security such as automated door locks,” says Santini. “But we don’t have the IT staff or facilities staff to build or maintain such a system. Ultimately, we’ll turn to a service provider for guidance and ongoing support.”

Even small businesses will be able to leverage managed video surveillance solutions. As part of a \$100 million global initiative, Cisco in December 2008 intends to ship video surveillance, data storage and wireless office communications solutions designed for small businesses.

Concludes Golod: “With managed video surveillance, we’re at the start of something big.”

PICTURE THIS

Annual IP-oriented video surveillance market

\$13.5B 2006

\$46.0B 2013

Source: ABI Research of New York

addition to providing virtual matrix switching to connect cameras, keyboards and monitors, the solution stores video files and recall them for display on either analog monitors or PCs.

Not by coincidence, Cisco Integrated Services Routers (ISRs) have fully integrated video surveillance capabilities. As a result, service providers have a compelling footprint and platform to deliver managed video surveillance services into remote offices.

“Amtrak is only one example of the video surveillance opportunities we’ve found,” says Dailey. “When you combine the need for public safety with priorities from the Department of Homeland Security, you create an environment where more and more of our clientele asks about video surveillance.”

Indeed, the worldwide market for IP-oriented video surveillance solutions will surge from \$13.5 billion in 2006 to \$46 billion in 2013, estimates ABI Research of New York. “We’re at an inflection point in the diverse video surveillance market, because we’re moving from an analog-based industry to a digital one,” says Stan Schatt,

AT A GLANCE

Opportunity: Managed Video Surveillance

Business Needs: Allow service providers and their customers to monitor video feeds at any time from virtually any place, enabling real-time incident response, investigation and resolution.

IT Solutions: Cisco Video Surveillance Stream Manager software, Cisco Video Surveillance Services Platform

Sample Customers: Amtrak, Pechanga Resort and Casino

Sample Cisco Partners: Benson Systems, Consiliant Technology

From AXP to TelePresence

What's Next In Managed Services

Service providers—and their customers—have eagerly embraced managed services. But the wheels of progress continue.

What types of managed services are emerging now? The possibilities are nearly limitless thanks to Cisco's Application Extension Platform (AXP). Simply put, AXP is an open developer platform that transforms networks and the Cisco integrated services router platform into an application platform. "This platform will open up new opportunities and spark new innovations," predicts Marie Hattar, vice president of Network Systems and Security Solutions for Cisco.

"AXP allows you to easily integrate the branch network, applications and IT infrastructure," according to Anurag Gurtu, a technical marketing engineer at Cisco.

In the 1990s, traditional developers wrote applications for operating systems. But with AXP, they write the applications for the network. As a result, AXP will pave the way for service providers to write new types of applications for their customers.

"If you really think about it, we're still in the early stages of unified applications," notes Ed Golod, president of Revenue Accelerators, a technology consulting firm in New York. "AXP empowers developers to write the next generation of unified applications."

Coming Into Focus

Meanwhile, managed TelePresence services—which deliver next-generation video conferencing capabilities—continue to emerge across the globe.

Tata Communications—part of the Indian outsourcing giant—plans to set up a network of 1080p High Definition Cisco Telepresence systems in luxury hotels around the world and network them together, notes Heise Media UK.

Similarly, service providers such as AT&T are helping universities to deploy managed TelePresence systems at the University of Missouri and at other institutes of higher education worldwide. And in April 2008, AT&T announced plans to deliver the industry's first, fully managed Cisco TelePresence solution to businesses around the globe.



"Service providers have come a long way in their managed services offerings. As the market and technologies have matured, SPs have become more sophisticated."

— Marie Hattar, VP of Network Systems and Security, Cisco

Concludes Cisco's Hattar: "Service providers have come a long way in their managed services offerings. As the market and technologies have matured, SPs have become more sophisticated. As a result, they have earned the trust of enterprises that rely on them for an innovative mix of services for competitive differentiation. And, the AXP platform will serve them well in that regard."

CISCO AND MANAGED SERVICES

Cisco Powered: More than 300 of the most successful service providers around the world offer one or more managed services that have earned the Cisco Powered designation. This means their service is delivered using Cisco networking equipment and technology and meets market based, Cisco-defined standards of support.

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