

# WAN

## bandwidth optimization

—| *Supporting* MULTIPLE RETAIL APPLICATIONS *On Your* WAN |—

AN INDEPENDENT REPORT ON

# Application Convergence

*And Its Effects On Your WAN*

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- ▶ What retail applications are run most efficiently over the network?
- ▶ What are the bandwidth implications of running multiple apps over one network?
- ▶ Is there a one-stop shop for networked apps?
- ▶ What's the advantage of a managed broadband provider?

**T**he decision to centralize applications and run them over your broadband WAN is a serious one that requires much forethought. Often, the benefits of doing so are clear and provide quick payback. Credit card processing, for instance, is a no-brainer. Electronic transaction times are cut tenfold, allowing retailers to process customers more rapidly. DVR (digital video recorder) technology run over broadband enables more efficient searching and logging of incidents. But some applications aren't as obviously suited to centralizing or can cause network problems when run and managed over a WAN. Industry veteran and respected consultant Greg Buzek, president of IHL Consulting Group, has a strong opinion on the matter. "Centralizing applications makes sense when most of your stores can have a reliable high-speed Internet connection," he says. "If you are a bigger box store, you can afford to have your own T1 line. Smaller store formats are usually held hostage by the availability of DSL or cable to their area." Buzek says that once a critical mass of stores have high-speed access, it makes sense to start running some applications centrally as soon as possible. "One recommendation is to use Internet technology, but not the Internet for your systems. You do this for the sake of security and performance," advises Buzek.

So, which apps should you centralize? Buzek says inventory, merchandising, time and attendance, labor scheduling, task management, business intelligence, analytics/reporting, and cross channel/e-commerce programs are among the good places to start. Bandwidth hog that it is, video surveillance is another. But the beauty of a VPN (virtual private network) is that the data which consumes your bandwidth can be prioritized.

## It Often Makes Sense To Centralize These Retail Apps ...

There are no hard and fast rules about which applications to centralize over your network. But Greg Buzek, president of IHL Consulting, has some general opinions on which applications make sense to centralize. Here's Buzek's take.

### Inventory And Merchandise Management

Cross-channel makes enterprise-wide inventory data imperative, and this is the best way for HQ to know what's selling, where, and when.

### Labor Scheduling/Task Management

The largest controllable expense in retail needs enterprise visibility and the ability to manage procedures, promotions, and planograms from a remote desktop.

### Business Intelligence

Share intelligence across the enterprise.

### In-Store Music

It's not mission-critical, but it's an integral part of your brand and culture.

### Video Surveillance

Maintaining visibility across stores mitigates risk and shortens LP investigation cycles.

### Cross-Channel Initiatives

Maintaining a brand across channels requires real-time visibility of inventory, promotions, and more.

### Digital Signage/Kiosk Media

Delivering sale, product, and promotion details in graphic, interactive form creates a proven sales lift.

### E-Learning

WANs have created a cost-effective means of training like no other.

### E-Mail/Intranet

Controlled encouragement of enterprise communication fosters healthy competition and team building, in addition to creating a cost-effective means of company news.

### VPN Supports Electronic Payment, Transaction Data Transmission

Payment processing often gets the glory as the primary driver of WAN adoption, and its facilitation is eased by partnering with a network services provider that has gateways in place with the major payment processors. In the C-store and petroleum arena, networked ATMs, money order services, and tank monitoring are king. Analog applications like these

should be networked, but they could require \$40 to \$50 per month phone line connections, which can add up. Here, it helps to partner with a player that can configure analog applications for WAN data transmission and one that has established gateways with companies like Western Union and Telecheck.

Quick-service restaurant chains have proven the benefit of WANs. El Pollo Loco currently operates 351 quick-service restaurants from Connecticut to California. The retailer is exempla-

## But Think Twice Before Centralizing These ...

Likewise, IHL's Buzek has some opinions on which applications retailers should be careful about running over a WAN.

### Point Of Sale

If your POS goes down, everything goes down.

### Core Systems That Can't Run Offline

Six words that make sense and don't need further explanation.

### Product Information Systems

If your associates depend on this in real time, make sure its local.

### Price Checkers

Price disparity by region and channel? Keep this local.

### Customer Loyalty Programs

Keep this data local, and upload it at reasonable intervals.

ry of one that's reaping the benefit of application centralization through partnership with a managed network service provider. Tom Giannetti, VP of IT at the chain, says MegaPath's Store Connect VPN service has proven a cost-effective solution for supporting data communications between restaurants and centralized corporate applications. Network aggregation, security, and maintenance are a full-time job in itself, and one that falls outside of El Pollo Loco's core competence. "MegaPath's fully managed secure connectivity services provide our restaurants access to the corporate resources they require, while allowing our headquarters staff to focus on providing tools that our crew members can use to build revenues and exceed our guests' expectations."

El Pollo Loco's VPN supports data network connectivity for several critical processes within its restaurants. The retailer relies on the VPN to deliver subsecond credit and gift card authorization processing. Data security concerns are handled by MegaPath, one of a handful of network service providers that have been validated compliant with PCI (payment card industry) data security standards.

The VPN also enables near real-time uploading of store-level transaction data to the restaurant's central corporate data warehouse. This ability gives El Pollo Loco executives timely reporting on key performance indicators.

MegaPath aggregates, or handles the procurement of, network services for each of the national chain's locations. This ensures that each location gets the highest performance network access available in its geographic region (i.e. T1, DSL, cable, or satellite). Procuring the best network option for

each site and tying that site in with the restaurant's headquarters enables El Pollo Loco headquarters to support in-store marketing and promotion efforts. Marketing promotions and price changes can be downloaded to the retailer's POS system at headquarters' will.

El Pollo Loco is great at quick-service grilled chicken. It's not a prolific networking hardware integrator. That's why Giannetti lets MegaPath handle router hardware installation and configuration. Outsourcing this activity reduces the internal staffing required to support a several-hundred location network that continues to expand nationally. It also enables internal El Pollo Loco IT staff to increase levels of IT support and security for its restaurants by making it possible for headquarters to remotely access and control store computer and video surveillance systems. El Pollo Loco's network also allows it to perform real-time monitoring of servers, terminals, and other critical in-store network components.

### Framing The Benefits Of Broadband

Many large retailers run frame relay WANs, which are renowned for their uptime and 56k bandwidth predictability. But at upwards of \$250 per connection, the frame relay network can't compete on price with \$100-per-connection commercial-grade DSL, which enables application proliferation by more than quadrupling the bandwidth of frame relay. Coupled with the service value provided by a managed network aggregator like MegaPath, it's a hard deal to beat. MegaPath says a single order for a commercial-grade DSL, cable, or T1 can require coordinating provisioning and support activities with dozens of different access providers. Multiplied across a retail enterprise of hundreds or thousands of stores, enterprise-wide broadband network acquisition can quickly become overwhelming. The managed network service provider also provides dedicated NOCs (network operation centers) for retail clients, from which MegaPath can monitor and report on network performance, anticipate problems or identify trends based on traffic patterns, troubleshoot and diagnose outages, repair them remotely, and dispatch service professionals when necessary. Increasingly, service providers like MegaPath are even offering various network security services, including management of firewalls, intrusion prevention systems, anti-virus and anti-spam, and Web content filtering to protect customers' systems and data, and help them attain PCI compliance.



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**About IHL  
Consulting Group**

*IHL Consulting Group is a global research and advisory firm for technologies deployed in the retail and hospitality industries. With its core research and data services, it is the world leader in tracking which retailers use what retail technology systems.*

[www.ihlservices.com](http://www.ihlservices.com)



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*More than a managed network solution, MegaPath's STOREconnect completes any network project by including a full suite of store-based integration services that connect critical C-store/petroleum applications. STOREconnect ensures that customer and corporate data is delivered securely to your key vendors and headquarters over our state-of-the-art IP network.*

*STOREconnect Service includes:*

- *Network Design – Customer-centric design ensures the right bandwidth, at the right cost, maximizing functionality while reducing monthly operating costs.*
- *24/7 Monitoring and Help Desk Support – MegaPath understands the critical nature of merchant services transactions. Connections are monitored from store location all the way to the processor, to minimize downtime and ensure rapid problem resolution.*
- *Flexible High Speed Options – MegaPath identifies the right connection type and technology to meet the customer's business needs and budget requirements for 100% of your locations. Whether it's DSL, Cable, VSAT, or T1/DS3s, you can rest assured that your network matches your application requirements now and in the future.*
- *Merchant Service Integration – MegaPath works with 25 different processors for credit/debit, ATM, checks, money orders, and pre-paid phone and fleet cards. MegaPath adds value by showing each customer the most efficient and cost-effective way to move these services from dial to a high-speed access solution.*
- *Dial-up to IP Conversion – Many merchant service applications still use dial or serial devices for authorization and settlement. MegaPath uses state-of-the-art protocol gateways, which enable all of your devices and applications to take advantage of high-speed broadband access.*
- *PCI Compliance and Security – As credit card fraud and identity theft increase, the pressure on the store operators and major brands grows exponentially. MegaPath is a National Payments Gateway and has met the stringent security requirements of MasterCard, Visa, Amex, and the other card issuers to be PCI/CISP compliant since 2004.*
- *On-Site Installation – MegaPath provides on-site installations with service professionals throughout the United States and Canada.*
- *Customer Portal – Stay in control with our suite of Web-based tools that reduce administrative burden and give you real-time visibility into the deployment status and ongoing availability of your network.*
- *SLA – STOREconnect is backed by a comprehensive set of SLAs that guarantee the end-to-end performance and availability of your IP VPN. In addition, dial failover can be added to ensure 100% uptime and performance.*

**For more information, call  
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[www.megapath.com](http://www.megapath.com).**