



## CUSTOMER SUCCESS STORY

# CISCO NETWORKING SOLUTIONS HELP DOWNSTREAM ADD DIGITAL DISTRIBUTION TO ITS FULL-SERVICE MEDIA OFFERINGS

### EXECUTIVE SUMMARY

#### CUSTOMER

Downstream

#### INDUSTRY

Video Production/Distribution

#### BUSINESS CHALLENGE

- Build a digital media network that can support bandwidth-intensive network traffic, and carry hundreds of video channels to remote client sites
- Ensure that network connections are secure, resilient, and simple to deploy and administer
- Integrate the media network seamlessly with existing equipment and business processes

#### NETWORK SOLUTION

- Cisco® 2600 Series multiservices platforms, Cisco Catalyst® 3750 and 2900 series switches, Cisco VPN 3005 Concentrator, Cisco PIX® 515E Security Appliance

#### BUSINESS VALUE

- Helps harness valuable digital assets and makes content creators more productive
- Extends the company's reach—and enhances revenue—with a scalable digital media delivery capability
- Increases network reliability, control, and security, while reducing costs

**Downstream, a media firm based in Portland, Oregon, is taking advantage of powerful Cisco Systems® Intelligent IP network capabilities to streamline in-house production and post-production workflow, and to narrowcast up-to-the-minute video content nationwide.**

#### BUSINESS CHALLENGE

Downstream is a leading media company based in Portland, Oregon, whose 40 employees create and distribute digital multimedia content for their clients' marketing, training, and corporate communications projects. Founded in 1988 as a commercial post-production company offering nonlinear editing, Downstream has added a full complement of production and post-production services, ranging from sound effects, audio recording, and graphics to Web design, interactive DVD authoring, and streaming video. Currently the firm specializes in what Tim Canfield, Downstream's managing partner, calls "experiential marketing"—designing media programs with special attention to the environments in which they will be viewed.

"We have demanding clients, such as Nike and Intel. Many of them wanted to deploy digital marketing and branding, so we had to be able to provide that service," says Canfield. "The clients want to be able to review rough cuts of videos over the Internet rather than waiting for tapes or DVDs. And to stay competitive, we had to make our workflow more efficient by capitalizing on digital technology."

Tim Larson, Downstream's managing partner for Creative and Production, stresses that Downstream's new network implementation needed to be extremely reliable. "If the engineering staff's time is taken up managing the network and fixing things instead of expanding the businesses, we're not making money," he notes.

What's more, Downstream wanted assurance that the network could be managed easily by its own staff, and that it would integrate well with Downstream's media applications and equipment as well as with partners' devices. Doug Holt, Downstream network administrator, explains. "We wanted to bring everything in house, rather than relying on a provider. That way, if we needed to do something like change a configuration or pinpoint a problem, we wouldn't have to wait for someone else to do it."

In response to client demand, Downstream also wanted to build the ability to deliver digital content into the network. "Nike's requirements motivated us to expand and grow our digital media networking," Canfield explains. In addition to being a managing partner, Canfield is also president of the Downstream Networks business unit. "We needed to be able to narrowcast to hundreds of remote locations, sending multiple

channels of content from our site to Nike retail locations throughout the United States. So the networking foundation we built had to be scalable and reliable enough to support the Nike retail infrastructure, as well as other clients in the future.”

Security was also critical to the success of the IP-based network. Downstream needed a way to extend its network protection not only to media assets and corporate information, but also to employees and partners accessing the network from remote locations. The company therefore specified an on-site firewall and virtual private network (VPN) tunneling for Internet communications.

**“We’re feeding video to over a hundred stores from Puerto Rico to Hawaii, and everything is running smoothly,” he says. “We can focus on the content and not worry about whether or not the system will be able to carry the load.”**

- Tim Canfield, Managing Partner, Downstream

## NETWORK SOLUTION

Downstream implemented a digital media network based on Cisco Systems solutions that include Cisco 2600 Series multiservice platforms, Cisco Catalyst 3750 and 2950 series switches, a Cisco VPN 3005 Concentrator, and a Cisco PIX 515E Security Appliance at the company’s office in Portland. The Nike stores are linked to the network using either DSL broadband connections provided by Qwest Communications or satellite connections provided by Spacenet. Downstream employs AdSpace Networks’ CoolSign software to manage the network.

Qwest Communications, a Cisco Powered Network service provider and an approved Cisco reseller, assisted Downstream in designing and deploying the network. According to Qwest Senior Account Executive Kevin Dung, “In working with Downstream and considering all their requirements, we decided to go with the best-in-class Cisco platforms rather than trying to mix and match hardware from different vendors.” Adds Qwest Sales Engineer Gabriel Zapodeanu: “Cisco had everything we needed—firewalls, VPN, routers, switches—and we knew it would all work together and support the multicast and other transport protocols. No other vendor had an end-to-end offering that would fit Downstream’s needs.”

Downstream and Qwest chose Cisco Intelligent IP Network solutions that are designed to maximize flexibility, functionality, operational efficiency, as well as provide a rapid return on investment (ROI) for small to medium-size organizations. For example, the Cisco VPN 3005 Concentrator helps secure network data with the most advanced VPN encryption and authentication techniques, while providing high availability, excellent performance, and scalability for future growth. The Cisco Catalyst 3750 switches give Downstream a stackable switching solution that offers Gigabit Ethernet speeds, a range of configurations to fit the company’s exact specifications, and the highest level of stackable resiliency. And the Cisco PIX 515E appliance delivers enterprise-class security in a modular, economical unit.

Furthermore, Cisco solutions help Downstream save time and money by providing interoperability and ease of deployment. “Since most of our vendor partners also have Cisco equipment, we could collaborate and share configurations to get everything working properly,” Holt points out. “The network required routing configurations that we probably wouldn’t have been able to accomplish so easily if we hadn’t used Cisco equipment.” Cisco networking architectures can easily be combined with offerings from other leading broadcast industry application vendors, systems integrators, and consultants. Multivendor integration and ease of configuration are important consideration for smaller businesses like Downstream, which typically have limited IT staffing and budgets available for network deployment.

## BUSINESS VALUE

The Cisco digital networking solutions help Downstream optimize workflow and improve productivity in several ways. Canfield says the new Cisco network has significantly improved the way Downstream staff conducts business. “We now have a quasi-newsroom environment where we’re creating, formatting, and distributing media all over the world at a moment’s notice.”

“We’re designing content, formatting it, uploading it, and distributing it very rapidly,” Canfield explains. “A designer will produce video and then move it electronically onto a server and off the server to another workstation, where someone may do 3D work. It comes back to the designer over the network. They don’t have to walk DVD-ROMs or CD-ROMs around from one workstation to another, or hand off a box full of tapes. That’s not just more efficient, it has also made our employees’ work more pleasurable.”

Quality of service (QoS) control allows Downstream to prioritize the data streams, giving precedence to business-critical and time-sensitive traffic. Gigabit-level, wire-speed performance ensures that demanding multimedia applications get all the bandwidth they need to function efficiently, minimizing slowdowns and wait time.

Canfield regards Downstream’s Cisco powered digital asset management capabilities as a major business benefit for both Downstream and its clients. “Many of our clients want to know how they can control all their media assets and get them where they need to go. They want to cut down on redundancy and reduce media management expenses. The only way to do that is to centralize asset management and have a rock-solid networking backbone in place to deliver the media wherever it’s needed. We can help them with that.”

“Almost everything we do has essentially become a network-attached appliance,” he explains. “So the network backbone is critical to our business success in the future.”

Downstream’s digital media network now gives the company a first-rate video distribution capability. With the elimination of tape transfers, packaging, and shipping, new content can arrive at distant locations in a matter of minutes. “We have the ability to make our clients’ marketing programs more compelling by creating and delivering content with a much shorter shelf life. In the past, some of our clients could only accomplish three or four media change-outs a year. Now we can do them weekly, daily, even hourly.” A recent Nike campaign is a good example of the flexibility of Downstream’s distribution network: “Nike followed [cycling champion] Lance Armstrong throughout the Tour de France last year, and we supplied video to the stores on a daily basis.

By adding to Downstream’s core competencies, the network has opened up untapped business opportunities for the firm. “Digital media networking is the tip of the arrow for our business plan,” says Canfield. “The new network has made retail media a part of our integrated marketing tool set.”

Canfield is confident that the digital media network gives Downstream enough flexibility and bandwidth control to support current and future initiatives. The network reliably handles all the traffic with plenty of room for growth. “We’re feeding video to over a hundred stores from Puerto Rico to Hawaii, and everything is running smoothly,” he says. “We can focus on the content and not worry about whether or not the system will be able to carry the load.”

The Cisco VPN implementation delivers the strong encryption that companies like Downstream need to safeguard their own communications and those of their customers and partners. The client traffic travels through safe VPN tunnels, while Downstream’s remotely located employees and partners get VPN-protected access to the resources they need within the company LAN. In addition, the Cisco PIX solution provides Downstream with the internal firewall control they desired.

According to Holt, Downstream’s technical staff now has end-to-end visibility into the network. They can tell when a video server or monitor isn’t working in a store. Plus, they are able to identify potential problems using management capabilities built into the Cisco products. “I definitely have a lot more tools at my disposal now to help me pinpoint a bandwidth crunch or network abuse,” he observes. “So we can take care of a problem before it becomes an issue for the client. With a common interface for the switches, routers, and firewalls, everything works very well together.”



## **NEXT STEPS**

Downstream plans to add capacity and extend the reach of its scalable digital media network as the company continues to grow and new clients come on board. The firm is currently linking to locations in Canada, and may provide connections to other countries if business warrants.

“Our Cisco network has allowed us to scale up and expand our capabilities and be more efficient internally. And it has allowed us to create a new business,” says Larson. “It’s growing by leaps and bounds.”

## **FOR MORE INFORMATION**

To find out more about the Cisco small to medium business networking solutions, go to:

[http://www.cisco.com/en/US/netsol/ns339/networking\\_solutions\\_small\\_medium\\_sized\\_business\\_home.html](http://www.cisco.com/en/US/netsol/ns339/networking_solutions_small_medium_sized_business_home.html)



#### **Corporate Headquarters**

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
www.cisco.com  
Tel: 408 526-4000  
800 553-NETS (6387)  
Fax: 408 526-4100

#### **European Headquarters**

Cisco Systems International BV  
Haarlerbergpark  
Haarlerbergweg 13-19  
1101 CH Amsterdam  
The Netherlands  
www-europe.cisco.com  
Tel: 31 0 20 357 1000  
Fax: 31 0 20 357 1100

#### **Americas Headquarters**

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
www.cisco.com  
Tel: 408 526-7660  
Fax: 408 527-0883

#### **Asia Pacific Headquarters**

Cisco Systems, Inc.  
168 Robinson Road  
#28-01 Capital Tower  
Singapore 068912  
www.cisco.com  
Tel: +65 6317 7777  
Fax: +65 6317 7799

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