



## IIMAK: EXTREME NETWORKS DELIVERS HIGH-PERFORMANCE INFRASTRUCTURE FOR POWERFUL SHORETEL IP TELEPHONY SOLUTION

### Challenge:

IIMAK's global network, with 550 employees and a 24/7 production schedule, was not keeping up with performance requirements. The company also had plans to deploy an IP telephony system, so a new network infrastructure was needed to keep up with these rigorous demands. The new IP communication system was needed to tie all of the sites together for a unified front to the outside world and simplify the management so that moves, adds, and changes could be administered in-house.

### Solution:

Extreme Networks®, Inc. provided a Gigabit Ethernet switching solution, including BlackDiamond® and Summit® switches, and ShoreTel provided ShoreGear Voice Switches and ShoreWare Director for ease of administration and management.

### Benefits:

The powerful and reliable Extreme Networks® Gigabit infrastructure delivers the performance and reliability required to handle demanding order entry and financial applications as well as VoIP. The ShoreTel IP phone system provides powerful call management features across all locations while maintaining a single management interface and transforms the company's global offices into a unified presence.

### COMPANY

IIMAK (International Imaging Materials, Inc.) is North America's leading manufacturer of thermal transfer ribbons. IIMAK's ribbons are used to print bar codes and other variable information on tags and labels used in the auto ID market. IIMAK compatible cartridges and ribbon refills are also used in plain paper fax machines such as Brother, Sharp, and Panasonic.

### CUSTOMER CHALLENGES

IIMAK's global network must support the company's 550 employees and a plant that runs 24 hours per day, 7 days per week producing 900,000 ribbons per month from 4,700 possible SKUs. In early 2001, IIMAK needed to upgrade its infrastructure in order to keep up with its financial, administrative, and order fulfillment applications. The previous 3Com infrastructure, built on a shared hub architecture, was no longer sufficient and performance and reliability were rapidly deteriorating.

IIMAK started an intense investigation of infrastructure vendors, focusing on Gigabit solutions that would increase bandwidth and processing efficiency. The company was able to disqualify those solutions that could not support Voice over IP (VoIP), since implementation plans for the technology were in place for the very same year. Finally, the company needed VLAN capabilities so that they could separate traffic in order to optimize performance.

After close scrutiny, evaluating their impressive customer list and learning that Extreme Networks had won important clients such as Compaq and the Pentagon, as well as supporting the entire show network at NetWorld+Interop, the choice became clear. Extreme Networks replaced IIMAK's shared-hub network with a multi-Gigabit solution, ordering two BlackDiamond® 6808 switches for the core and various Summit® switches for the edge and closets.

In October of 2001, shortly after deploying the new Extreme Networks® Gigabit Ethernet solution, IIMAK began its quest to find an IP telephony solution that would take advantage of the powerful and ultra-reliable infrastructure. IIMAK considered various telephony solutions from Avaya, Fujitsu, Mitel, Nortel and ShoreTel. The company had a very specific list of criteria. The company wanted: A system that would provide a unified front to the world and allow for 4-digit dialing between its U.S., Mexico, and Belgium locations, and enjoy the significant toll-charge savings; a simplified solution that would allow moves, adds and changes by the already busy internal IT team; and finally, to boost employee productivity with a telephony system integrated tightly with Microsoft Office on user desktops.



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After talking to customer references and observing product demonstrations, IIMAK chose ShoreTel. IIMAK cites multi-site networking capability, ShoreTel’s Call Manager, and ease of administration as the top three reasons for going with ShoreTel.

## **EXTREME NETWORKS SOLUTION**

IIMAK has deployed two BlackDiamond® 6808 switches in its core network in Amherst, and Summit48i™, Summit48si, and Summit48™ switches reside in Amherst, Belgium and Mexico. “We appreciated the fact that Extreme Networks is so focused on Ethernet,” said Sal Iannello, Technical Services Manager with IIMAK. “So many others are doing Layer 3 routing and we prefer Layer 3 switching, so we were happy to learn more about the Extreme Networks products. We also were impressed by the fact that they’d won so many important contracts. We went to NetWorld+Interop to see the equipment in production and kick the tires. We were very impressed with the backplane capacity and throughput. That’s when we decided on Extreme Networks.”

## **EXTREME NETWORKS BENEFITS**

Along with an integration partner, Extreme Networks worked with IIMAK on the design and implementation of the network. IIMAK specifically appreciates the ability to bring Gigabit to the servers and the overall increased bandwidth and processing efficiency. In addition, the ability to easily create and change VLANs on the fly is particularly useful to IIMAK, since the company separates data and voice traffic to optimize performance. “Before, we had no VLAN capability, and with Extreme Networks, we not only have the ability but it’s very easy to create them,” said Iannello.

In addition, with the new Extreme Networks solution, IIMAK was ready to get going on its VoIP deployment plans. “We have remote locations in foreign countries, and we’re able to use VoIP to do extension-to-extension dialing,” said Iannello. “We use VLANs to separate data and voice, and we’ve established a branch-to-branch VPN connection for security. Without Extreme Networks, we wouldn’t have been able to do VoIP.”

## **SHORETEL SOLUTION**

ShoreTel provided IIMAK with a ShoreGear-T1 for connection to the public switched network, and 23 ShoreGear-120/24 switches for its U.S., Belgium, and Mexico sites. IIMAK also uses ShoreTel’s ShoreWare Director for system management, troubleshooting, and planning purposes. From anywhere on the network, an IIMAK network administrator can launch a Web browser and gain access to ShoreWare Director and manage any site and feature, including the PBX, voice mail, automated attendant and desktop applications. When a new user is added, the centralized database is automatically updated and every voice switch is notified. In addition, after the user information is entered, a mailbox is created, and the automated attendant dial-by-name and number feature and online directories are all updated within seconds.



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“We appreciate that we can have the same applications and functionality across all our sites,” said Iannello. “We needed to establish a unified front to the outside world, and ShoreTel has allowed us to do that. Also, because ShoreTel’s solution is software-based and modular, it doesn’t matter if a site is 100 miles or one mile away from another building—as long as it’s connected with Ethernet, they have the same experience as employees at our headquarters. We get full and consistent functionality from any site.”

## **SHORETEL BENEFITS**

The ShoreTel system integrates with Microsoft Outlook on IIMAK’s users’ desktops, creating a multimedia communications center—IIMAK employees have control over both voice and email messages. With unified messaging, directory dialing, contact screen pop, and calendar integration, employee productivity can be enhanced and processes can be streamlined. This eliminates the need to remember or look up extension numbers or know which office a particular person is working from at the moment. ShoreTel’s Call Manager also offers employees “presence” intelligence, meaning the current status of each person is indicated on the screen. The graphical interface of Call Manager also provides access to advanced features, including on-the-fly conferencing and document sharing.

In addition to creating unified front, ShoreTel’s solution is designed to be easy to manage in-house. “The graphical user interface is just as ShoreTel promised—it’s so much easier than command line,” said Iannello. “And there’s no need to have a fleet of support trucks to support the ShoreTel gear. We used to have to call on an outside party to make changes with our old Mitel system—for anything and everything. Now we can do it ourselves, which is a big benefit, especially considering the rate at which IIMAK is growing.”

Finally, there can be noteworthy long distance savings. With the ShoreTel system, IIMAK is saving at least \$500 per month in toll charges. “When you add those savings to the savings from managing it in-house, it really adds up,” said Iannello.

## **COMBINED BENEFITS— EXTREME NETWORKS AND SHORETEL**

The partnership of Extreme Networks and ShoreTel has provided numerous benefits for IIMAK. With the high-performance and reliable infrastructure created by Extreme Networks, IIMAK is able to enjoy the robust feature set of the ShoreTel VoIP system, including extension dialing between offices and countries, crisp and clear voice quality, toll bypass, unified messaging, point-and-click dialing, drag-and-drop transferring, and optimal flexibility and mobility.

“We could not even consider a powerful IP communications solution like the ShoreTel system without having upgraded to Extreme Networks®,” said Iannello. “With Extreme Networks, we have 100 megabit to the desktop, meaning our applications run faster and our employees are more productive. ShoreTel then came in and made it possible to create a unified front, extend powerful calling features to all our users, and manage the whole thing from inside. We’re more than satisfied with both Extreme Networks and ShoreTel.”



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#### **About Extreme Networks, Inc.**

Extreme Networks is a leader in open converged networks. Its innovative network architecture provides Enterprises and Metro Service Providers with the resiliency, adaptability and simplicity required for a true converged network that supports voice, video and data, over a wired and wireless infrastructure, while delivering high-performance and advanced security features. Extreme Networks, Black Diamond, Black Diamond 6808 and Summit are registered trademarks of Extreme Networks in the United States and/or other countries. Summit48i and Summit 48 are trademarks of Extreme Networks in the United States and/or other countries. For more information, please visit [www.extremenetworks.com](http://www.extremenetworks.com).

#### **About ShoreTel, Inc.**

ShoreTel is the fastest growing IP PBX company in the United States and the leader in customer satisfaction. The company has shipped its groundbreaking solutions since 1998 and continues to outpace the rapidly expanding VoIP market with technological advances and sales that are doubling year over year. ShoreTel voice systems are designed to make businesses smarter, setting new standards for usability and manageability while reducing telecommunications costs. A uniquely distributed architecture extends enterprise-class voice services to every office and outpost, keeping employees fully connected wherever they go. A select, worldwide group of channel partners provide top-notch service and support. For more information, visit <http://www.shoretel.com> or call 1-877-80SHORE.