



## The Goodyear Tire & Rubber Company

### X-Pedition Switch Router Paves the Way for Increased Productivity

If it's got wheels, chances are The Goodyear Tire & Rubber Company builds a tire for it. In fact, with tires for everything from motorcycles to passenger cars, trucks to buses, tractors to earthmoving equipment, the Goodyear line is one of the most extensive in the world.

**Industry:**

Manufacturing

**Number of Nodes:**

3,000 at company headquarters in Akron, Ohio

**Challenge:**

Re-engineering to improve operational efficiency and control costs

**Solution:**

Enterasys X-Pedition and Matrix ensure high performance for enhanced productivity

**Benefits:**

- Powerful network infrastructure helps Goodyear achieve its goal--to increase productivity by 6% annually
- X-Pedition switch routers provide the capacity to handle Goodyear's demanding and diverse network traffic--including ERP, CAE, and SAP
- Matrix multilayer switches extend application-level Quality of Service from the core to the network edge to the end user
- Upgraded infrastructure increases available bandwidth per client 400 fold
- Secure Networks features and a switched infrastructure enable increased security
- Support for videoconferencing improves operational efficiency, controls costs, and enhances corporate communications

All this has made The Goodyear Tire & Rubber Company a worldwide leader in the tire and rubber industry. With a presence on six continents and annual sales of more than \$14 billion, Goodyear has produced nearly 150 million tires of all types. Goodyear markets its products in 185 countries, manufactures them in 90 plants in 28 countries, and employs almost 92,000 associates around the globe.

While the Goodyear name is recognized for its tires, Goodyear also produces and markets a variety of rubber and plastic products for industrial markets through its Engineered Products and Chemicals business units.

**The Challenge:****Re-engineering to Improve Operational Efficiency and Control Costs**

As Goodyear faces increasing global competition, the company has set an ambitious goal: to increase productivity by 6% annually--more than twice the normal industry rate. To meet this goal, Goodyear has looked for ways to re-engineer its processes and improve efficiency. This re-engineering has included a series of operational enhancements including faster product introductions, lower overhead costs, improved distribution and enhanced company communications.

Goodyear looked to state-of-the-art computing and networking technology to improve operational efficiency and control costs. The company planned to deploy advanced applications such as Enterprise Resource Planning (ERP), groupware and Computer Aided Engineering (CAE), in addition to applications like SAP, Lotus Notes, S & A, and Office Automation. All of these applications were strategic assets to the business, but would also require large amounts of bandwidth at the client and uplink level. The company also sought to provide enhanced monitoring capabilities and position the infrastructure for future demands that would be made on the IP network infrastructure.

Goodyear's Corporate Telecommunications staff decided that the new advanced applications would quickly outgrow the shared Token Ring network, which they had used for years. They began to evaluate several vendors to find a new network solution to meet both their current and future computing requirements. This networking vendor would become the corporate standard.

After an intensive evaluation process, Goodyear selected Enterasys as its worldwide preferred provider for switched networks. "Enterasys had already proven its commitment to Goodyear, and the company was chosen based on a number of considerations including our prior positive relationship, company profile, technology focus and leadership, worldwide

availability, compatibility with existing LAN deployments, service and support, and pricing,” said Kim Smith, I/T team leader, LAN & e-Commerce at Goodyear.

“Enterasys’ solutions gave us real flexibility to meet the varied and changing needs of the different organizations served by Goodyear’s enterprise network. Their Secure Network approach met our own unique strategic goals rather than the ‘generic’ requirements of ‘any company.’” added Smith. “It was especially important that Enterasys products offered superior routing speeds and efficiency, as well as the ability to spread management capabilities over multiple modules, eliminating central points of failure in the chassis.”

According to Smith, before a solution was identified and implementation began, Enterasys undertook an intensive evaluation period to learn Goodyear’s current requirements and future plans. “High-level representatives of Enterasys engineering and product management team met with Goodyear telecommunications engineers to establish design criteria and determine our specific needs,” Smith explained. “At the same time, Goodyear also met with Enterasys senior management to ensure a positive fit between our visions for the direction of LAN technology.”

### **The Solution:**

#### **X-Pedition and Matrix Ensure High Performance for Enhanced Productivity**

Goodyear began to implement its new corporate networking standard at company headquarters in Akron, Ohio. At the Akron facility, the more than 3,000 node network is now powered from top to bottom with Enterasys networking technology. The campus network is a star-based topology with award-winning X-Pedition switch routers, the industry’s highest performing and most reliable backbone switch routers, at the core for Fast Ethernet and Gigabit Ethernet connectivity to client areas, server farms and the WAN. These X-Peditions provide Goodyear with wire-speed performance and pinpoint application control, ideal for their new bandwidth-hungry applications.

Matrix E6s equip Goodyear’s wiring closets, providing switched Ethernet and Fast Ethernet to desktops, file servers and other networked devices. And, as bandwidth requirements change, the Matrix E6 and its modules will allow Goodyear to migrate quickly to Gigabit Ethernet. The entire infrastructure is managed with NetSight management.

An important objective of Goodyear’s network solution was to support video conferencing, deployed at the company’s Akron corporate headquarters. Associates can view executive briefings and participate in meetings at other campus buildings from their desktop, providing for cost savings and improving corporate communications. Goodyear’s training department also uses video conferencing to deliver training courses to associates. “We predict that video conferencing will catch on internally the way that the Internet has in the outside world,” said Smith.

With their upgraded Enterasys infrastructure, Goodyear has realized improved visibility and control of the network, which according to Smith, means longer uptimes and shorter times to repair. “We’ve also benefited from more available bandwidth; per client bandwidth availability has increased 400 fold with our new solution in place,” Smith said. “This has virtually eliminated bandwidth concerns for application and protocol requirements on the LAN.”

At the same time, security has been improved substantially. “Our transition from a Token Ring/shared segment design to switched Ethernet has eliminated many security concerns,” Smith commented, “and with Enterasys User Personalized Network features we are now able to manage users at the switch port level, further enhancing security.”

Enterasys Secure Networks solution provides a unique policy-based system that allows the network to allocate resources based on specific users and their roles, ensuring accessibility, bandwidth control, and security. At the same time, the network provides a management framework that allows for policy changes to be deployed quickly and easily from a centralized configuration point. “Recently a contractor connected to our network with a laptop set up to act as an IPX server,” Smith explained. “This created confusion on the network and barred users from connecting to their appropriate servers. With some quick configuration, distributed by NetSight Policy Manager, we restored service and prevented a repeat incident from occurring. NetSight Policy Manger literally enabled to us to define a policy once and push it out to multiple devices.”

The Enterasys solution will provide Goodyear with the performance, fault tolerance, capacity, and manageability to power its new advanced applications, as well as provide an easy migration path to future technologies. Designed to align with the company’s business priorities of improving operational efficiency and controlling costs, Goodyear’s network will provide them with a higher return on their network investment.

### **The Future:**

#### **Extending Technology Worldwide**

With Enterasys networking technology as its corporate standard for switched networks, Goodyear expects to implement Enterasys solutions at their facilities around the world. These advanced networks will help the company automate manufacturing, improve communications, and increase overall efficiency worldwide. “Our headquarters campus infrastructure literally serves as a model for Goodyear locations around the world,” Smith said.

“We’re looking forward to more extensive use of Secure Networks, which will help us manage applications and users, from the port level and through the WAN,” Smith added. “This deployment is vital to controlling resources and supporting applications that require Quality of Service, especially video and VoIP. Responding to the proliferation of applications and pressure on bandwidth requires greater visibility of traffic up to application layer.

“Goodyear’s network infrastructure supports our competitive leadership; it provides the foundation for all our communications--internally with associates and externally with customers.” Smith concludes. “This means we must keep it flexible, maintaining support for critical applications already in use while meeting growing demands for VoIP, streaming video, QoS requirements, and security. Our Enterasys network gives us all this and more.”

## Contact Us

For more information, call Enterasys Networks toll free at [1-877-801-7082](tel:1-877-801-7082),  
or +1-978-684-1000 and visit us on the Web at [enterasys.com](http://enterasys.com)