



**Fundamentals First:  
Network Management Essentials**

Picture yourself as park ranger on the Appalachian Trail. You oversee mountain ranges that stretch over 14 different states and pass through more than 60 national or state parks and forests. Hundreds of trails cross more than 2,000 miles. Now picture yourself as a network administrator. You oversee hundreds, maybe thousands of computers and provide support for users of each. Add to that, miles of cabling and a multitude of routers and switches. Managing all the pieces that comprise a network can be difficult at times. The internal flow of information is critical to any well-run organization. Planning, execution and management of complex networks are among the fundamental services CSI provides to our customers.

At CSI, we'll help you choose the tools, applications and devices to best monitor, maintain and administer your network. Our services can range from fundamental hardware and software support to fully integrated solutions that support infrastructure operations. Utilizing these services help detect issues and problems quicker and can help prevent future issues.

**Read more about our Network Management offerings on the reverse side of this page.**



**Other CSI Gear  
Products and Services**

- Financial Management Software
- Billing and Revenue Management Software
- Lesson Planning Software
- School Activity Accounting Software
- Automated Workflow
- Interactive Classroom
- IP Telephony
- IP Video Surveillance
- Visual Communications
- Wireless Solutions
- Network Security and Traffic Monitoring
- Infrastructure Design
- Hardware Solutions
- Engineering Services



## Management Services

- **Performance Management:** The goal of Performance Management is to measure and optimize various aspects of network performance so that inter-network performance can be maintained at an acceptable level. Examples of performance variables include network throughput, user response times, and line utilization.
- **Configuration Management:** The goal of Configuration Management is to monitor network and system configuration information so that the effects of various versions of hardware and software on network operation can be tracked and managed.
- **Accounting Management:** The goal of Accounting Management is to measure network utilization parameters so that individuals or groups on the network can be regulated appropriately.
- **Fault Management:** The goal of Fault Management is to detect, log, notify users of and (when possible) automatically fix network problems to keep the network running effectively. Because faults can cause downtime or unacceptable network degradation, fault management is perhaps the most widely implemented of the network management elements.
- **Security Management:** The goal of Security Management is to control access to network resources according to local guidelines so that the network cannot be sabotaged (intentionally or unintentionally) and sensitive information cannot be accessed by those without appropriate authorization.

## Command and control your network

- **Minimize:** Detect issues and problems more quickly, ensuring minimum disruption to users.
- **Prevent:** Highlight trends that may lead to future problems, ensuring staff members are adequately prepared to deal with them.
- **Check-up:** Monitor health and utilization for the network or individual devices.
- **Measure:** Track the performance of applications, resources, and services.
- **Outline:** Use statistics and data analysis to plan for future capacity.
- **Save:** Reduce operating expenses.
- **Extend:** Lengthen the life of hardware components.

