

# Assessment and Design for Network Performance and Security

*Helps you achieve a more high-performing and secure network infrastructure*



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## Highlights

- Enhancing network security and resiliency for high performance
  - Giving you access to the latest technology trends and research to help you secure your network from malicious attacks
  - Helping to protect your data
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As the pace of business and the world continues to accelerate, organizations are straining to keep up with the demand for business transformation. Although CIOs are aware of the opportunities networking and communications capabilities can offer, they must retain a sharp focus on:

***Performance assurance:*** Networks and communications links need to be up and available around the clock and should be scalable to address ever-increasing traffic growth.

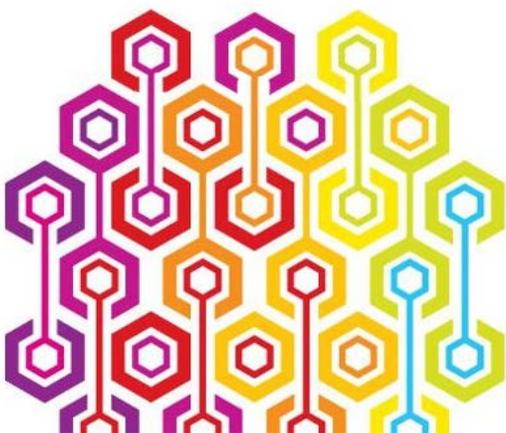
***Increasing complexity:*** Networks are becoming increasingly complex with the addition of more locations, networking devices and end user devices and technological advancements like virtualization. This also adds to the complexity of managing them.

***Security requirements:*** Knowing who and what is on your network and where potential risks lie is essential for maintaining data security and integrity.

***Technical expertise:*** Rapid technological changes make it difficult to keep up with—and exploit—the latest innovations.

## Improving the performance of your networks

As more information and data is being transmitted over Wide Area Networks, many organizations require highly reliable and optimized Wide Area Network infrastructures with high throughput and minimized delays. In school districts, network capacity planning and traffic handling require careful planning and engineering. Our analysis services focus on analyzing existing traffic bottlenecks and identifying areas of improvement utilizing the latest network assessment tools combined with extensive network experience addressing all layers of network infrastructure.



We will perform path analysis which helps to identify any possible packet loss, bandwidth limitations and excessive latency. Relying on our experience, we can recommend a solution based on your existing infrastructure and business needs. Your optimization solution will result in increased network performance, and higher throughput allowing faster network application delivery and performance.

### Enabling your business to be more resilient to changes and threats

A well designed and implemented network security infrastructure will help you better secure your critical business systems and data. Working with the products of leading technology providers, we can help you plan and deploy intrusion and anomaly detection, encryption, remediation and management so that only authorized users and devices can access your critical resources. By implementing techniques like these, we can help you prepare a more effective response to potential threats to your computing infrastructure.

Using network firewall segmentation, our architects can help you build security zones that allow you to create logical segments in the network and then assign security policy characteristics (Firewall, Virtual Private Network, Anti Virus and Access Control) to those zones. In addition to being easier to manage and operate, these secure domains offer enhanced protection to help you optimize security. We can help you meet the demands of your network usage and dependency by enabling secure, enterprise-wide connectivity and collaboration across four different environments:

- **Virtual Private Network (VPN)** services help you to provide a seamless wired, wireless or remote access strategy, secure access from “un-trusted” environments, self-service management of updates and upgrades, convergence support and a flattened network design.
- **Edge and Core Firewall** services cater to a large user population with a variety of connectivity requirements. Users may be located in multiple buildings with offices, classrooms, and labs supporting a variety of uses. Support includes protected data migration between public and private network environments as well as responsive change management processes.
- **User Access Control** services help ensure the security of your data. It assesses the security status of devices entering your network while enforcing your network access policy.
- **Secure Wireless Connectivity** services provide remote or mobile users access to necessary applications and data. It also supports role-based access and end-device security measures to protect your network from unsecured environments. Your remote or mobile users can use a variety of devices (laptop, tablet and smart phone) to access necessary applications and data.

**Typical Length of Engagement:** 1-4 weeks

### Why IBM?

IBM’s deep experience in designing and deploying a wide range of district networks gives us the expertise to help you address your infrastructure performance and security issues. Our design and deployment services help you overcome your existing network performance limits, as well as provide you with a new network architecture that is easier to manage and maintain. To support the introduction of a new network security solution, our specialists can help you develop the right network security design based on your unique security requirements. We can help you take advantage of new and cost-effective technology while also supporting your availability and performance goals.

### For more information

To learn more about IBM K-12 **Assessment and Design for Network Performance and Security**, please contact your IBM Marketing Representative. For more information on all our IBM K-12 Consulting and Professional Services, visit: [www.ibm.com/industries/education/canada-k-12-service-briefs](http://www.ibm.com/industries/education/canada-k-12-service-briefs)



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