



About Moscow, Idaho

Moscow, Idaho, is located in North Central Idaho's panhandle, and is Home to the University of Idaho. Moscow's 22,000 residents enjoy "big city" access to the cultural and recreational events provided by a university city, while experiencing the charm and safety of a small town. The area boasts a highly skilled and educated workforce employed by Moscow's many thriving businesses and the university.

Real People

Moscow, Idaho's existing Ethernet switching solution was not providing high-quality, reliable VoIP services over its municipal fiber network.

Real Networks

Moscow selected ADTRAN's NetVanta 1234, 1238, 1534 and 1544 Ethernet switches to eliminate dropped calls, packet loss, interference and network slowdown on its fiber-based, VoIP network.

Real Value

Moscow was able to eliminate network issues and cost-effectively provide reliable services over its municipal network.



Smart Solutions for a Connected World.

Real People. Real Networks. Real Value.

NetVanta 1544 Brings Quality and Reliability to City of Moscow, Idaho's VoIP Network

Moscow, Idaho is home to the University of Idaho and approximately 22,000 residents that enjoy the benefits of a small town with the technology and cultural conveniences of a college town. The city credits its founding to the arrival of the railroad in 1885 and the subsequent establishment of the university in 1889.

When Moscow installed its municipal fiber optic network in 2007 to handle all of the city's voice and data communications, the city had both the university community and the future of the town in mind as both educators and students have come to expect a ubiquitous network for their communications. Not only did Moscow need increased bandwidth for its internal communications, but it also required a network that was easier to manage and more affordable — in essence, a network the city could rely on well into the millennium with the ability to upgrade as necessary.

Fiber seemed the perfect solution to connect approximately 15 municipal locations with Gigabit Ethernet, however the initial platform the city had selected was not providing high-quality, reliable services, according to Jesse Flowers, information system director, the city of Moscow. "We were having major problems with packet loss, dropped calls, interference and slowdown," he said. "We worked with our existing vendor, but they had no estimate as to when they would have a solution for our problem."

Stand-Out Warranty and Customer Support

Frustrated with their current situation, the city began looking for alternatives. Black Box Network Services, a network solutions provider, introduced the city to ADTRAN's NetVanta product family at a Black Box Network Services Road Show. Once Moscow learned of the benefits of



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Jesse Flowers
Information System Director
The City of Moscow



NetVanta 1544

the NetVanta products, and ADTRAN's outstanding warranty and customer support programs, the city decided to switch to ADTRAN, according to Flowers. "Everyone we talked to about ADTRAN said the products are solid and reliable and the customer support and warranty were unparalleled," said Flowers. "We decided to cut our losses and go with ADTRAN."

As a result, the city worked with Black Box Network Services and selected ADTRAN's NetVanta 1234, 1238, 1534 and 1544 Ethernet and Gigabit Ethernet switches to replace its existing hardware. ADTRAN's NetVanta products eliminated Moscow's problems and provided first-class VoIP and data services to all its locations allowing the city to more efficiently manage its network.

Transitioning a Breeze

The transition from Moscow's existing platform to ADTRAN's NetVanta solutions family went so smoothly that "within 16 hours all our problems were solved," said Flowers. "We cut over to the ADTRAN solution on a Friday and Saturday and since then we have not had any problems with our phones, network slowdowns or packet loss," he said. "We had spent three to four months working with our existing hardware and ADTRAN's NetVanta family fixed our problems in hours."

Moscow's fiber network is built around a network hub at city hall where ADTRAN's NetVanta 1544 resides. The NetVanta 1544 is a managed, 28-port, Layer 3, Gigabit Ethernet switch designed as an access layer or network backbone switch for small to medium businesses. With the combination of the advanced multi-layer switching fabric, high-bandwidth capabilities, and enhanced Quality of Service features, the NetVanta 1544 is ideal as an aggregation switch.

At city hall the NetVanta 1544 manages 14 NetVanta 1534 switches. The NetVanta 1534 is a managed, 26-port, Layer 2, Gigabit Ethernet switch designed for fast, secure, cost-effective LAN switching. This scalable, full-featured business-class switch is ideal for Moscow's higher-bandwidth applications such as VoIP. It provides enhanced network security and features a Web-based Graphical User Interface simplifying management.

The NetVanta 1544s provide connectivity for the city's servers, storage area networks to the 13 NetVanta 1234s and three NetVanta 1238s which provide connectivity for desktop phones and workstations throughout the city. The NetVanta 1200 Series Fast Ethernet and Power over Ethernet switches range from 24 to 48 ports and address Moscow's highest networking priorities, including bandwidth expansion, Voice over IP (VoIP) migration, and network security.

In addition Moscow has installed 11 NetVanta 150 wireless access points (WAP) in various city buildings for network access for city staff as well as public Internet access. The WAPs are managed by the NetVanta switches. "We love that one switch manages the access points," said Flowers. "We can log onto the NetVanta 1544 and see all the access points. It makes managing and monitoring our network so much easier."

Working with ADTRAN has been equally as satisfying according to Flowers. "The NetVanta products work so well that I actually feel bad that we haven't had to call Customer Support that much," he said. "But when we do call, they are ready to help us right away and are always very supportive."

Featured Solutions

NetVanta 1544

The NetVanta 1544 is a managed, 28-port, Layer 3, Gigabit Ethernet switch designed as an access layer or network backbone switch for small to medium businesses. With the combination of the advanced multi-layer switching fabric, high-bandwidth capabilities, and enhanced Quality of Service features, the NetVanta 1544 is ideal as an aggregation switch for high-bandwidth VoIP, Gigabit-to-the-Desktop deployments, and converged voice and data networks.

NetVanta 1534

The NetVanta 1534 is a managed, 26-port, Layer 2, Gigabit Ethernet switch designed for fast, secure, cost-effective LAN switching. This scalable, full-featured business-class switch is perfect for higher-bandwidth VoIP applications, Gigabit-to-the-desktop deployments, network security, and ease of management with an easy to use Web-GUI.

NetVanta 1200

The NetVanta 1200 Series of Ethernet Switches is a family of Fast Ethernet and Power over Ethernet switches. This portfolio of business-class switching solutions is perfect for Small- and Medium-sized Businesses (SMBs) or multi-site enterprise networks. These cost-efficient solutions range in port count from 24 to 48 ports and address today's highest networking priorities, including bandwidth expansion, Voice over IP (VoIP) migration, and network security.

NetVanta 150

The NetVanta 150 is a lightweight Wireless Access Point (WAP) designed to extend a wireless reach to a NetVanta based network. Providing concurrent 802.11b/g and 802.11a radio support at speeds up to 54Mbps, this business-class access point is perfect for the corporate environment needing a secure, integrated WLAN solution.

About Black Box

Black Box is the world's largest technical services company dedicated to designing, building and maintaining today's complicated data and voice infrastructure systems. Black Box services more than 175,000 clients in 141 countries with 194 offices throughout the world. To learn more, visit the Black Box Web site at www.blackbox.com

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EN1378A August 2010