



Core



Edge



Cable



Mobile

## IntelliSpace Builds Better Breed of Broadband with Juniper Networks



**“Juniper Networks enabled our business to grow into new services without forklift upgrades and paying more capital.”**

**Jeff Allen**

President and CEO  
IntelliSpace



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**IntelliSpace** is a leader in the growing metropolitan services market. Started in 1995, the New York-based metropolitan data services provider was the first Ethernet IP broadband services company to focus on last-mile solutions for medium and large businesses. IntelliSpace provides dedicated broadband access services ranging from 64 Kbps to 10 Gbps, and premium IP services. It serves more than 75,000 business users in over 200 communities in the U.S. and Europe.

IntelliSpace differentiates services from other broadband metropolitan services players with an agnostic approach to network access. Its pragmatic strategy is to show customers how to use their existing network infrastructure for metropolitan broadband today and help customers adopt more modern infrastructure as it becomes available. IntelliSpace tapped Juniper Networks to implement its strategy with an all-IP network infrastructure, that simplifies network operations and stabilizes the company's capital costs.

### A practical approach to metro broadband

For practical reasons, the new IntelliSpace infrastructure had to accommodate a range of legacy and next generation IP network interfaces.

“Fiber is the optimum broadband transmission medium,” says Jeff Allen, president and chief executive officer of IntelliSpace. “But in the real world, it’s more common to encounter traditional links such as T1, DS-3, OC-3 and OC-12, including channelized options.”

To provide flexible support for a variety of net-working technologies and IP services, IntelliSpace specified one all-IP network infrastructure. “We required a solution that scaled routing intelligence from the core to the edge of the network,” says Carlo Lalomia, chief technology officer and co-founder of IntelliSpace. “We found that by using Juniper Networks, we can introduce multiple new IP-based services at scale without having to buy new equipment.”

### Juniper Networks provides flexible aggregation for dedicated access services

Lalomia says the company evaluated network infrastructure options based on reliability, flexibility, and then price. An important issue in Juniper Networks favor was solution density.

“Density was a huge issue for us,” says Lalomia. “Essentially, we wanted to simplify network design and put as many wide area network interfaces as possible into one box without compromising performance and stability,” says Lalomia.

Toward that end, IntelliSpace purchased 20 Juniper Networks M40 platforms. DS-3 interface aggregation provided by the M40 router is an important function for IntelliSpace, which creates clear channel DS-3s by aggregating Channelized OC-12, DS-3, and Gigabit Ethernet into M40 routers.

“The high density in Juniper Networks routers gives us better return on capital because we do not have any unused ports,” says Lalomia.

### JUNOS software enables new IntelliSpace IP services

According to Lalomia, the JUNOS Internet software that powers the M40 router also includes a crucial foundation for new IntelliSpace services, based on its support for MPLS. “MPLS is the means to creating a new class of VPN services based on predetermined service levels.”

Some of the premium IP services offered by IntelliSpace include bandwidth on demand, VPNs, transparent LAN services and storage area networking. The company is planning to use MPLS for other premium IP services, including Gigabit Ethernet for network-attached storage, defining quality of service for electronic communications network content, and regional networking applications such as medical imaging.

### Ensuring a better breed of broadband with Juniper Networks technology

IntelliSpace's hybrid approach to using fiber and traditional links with Juniper Networks technology allows the company to address 100% of the market all of the time. Marquee enterprise customers include JP Morgan, Merck, and the National Basketball Association. IntelliSpace also provides broadband over optical links to more than 1,000 large commercial buildings, including Rockefeller Center, Lincoln Center, and Chicago Board of Options Exchange.

“We have had no problems with Juniper Networks,” says Lalomia. “Juniper Networks has proven itself to be a carrier class provider.”

Together with Juniper Networks, IntelliSpace is leading the way to provide a better breed of broadband and broadband services. “Juniper Networks enabled our business to grow into new services without forklift upgrades and paying more capital,” says Allen.

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