With iconic properties from coast to coast, Equity Office Management is one of the nation’s largest owners of commercial buildings in the U.S. Owned by the Blackstone Group, Equity Office encompasses more than 45 million square feet of Class A office space. The management, development and operation of the real estate investment trust demands flawless IT systems and connectivity.

All of Equity Office’s voice and data traffic run over an MPLS WAN, but when poor peak-time performance drew complaints from its employees, it switched to a Software Defined WAN that delivers more bandwidth at half the cost. There’s a tradeoff in that the company has to deal with more service providers than before, but the performance and savings make up for that, says Chavdar Momchev, Equity Office’s Director of Voice and Data Communications. “I expect a return on investment in about 10 months [with Talari],” he says. Complaints about response times have disappeared in offices that have the new connections.

The new WAN is fashioned by blending DSL, cable, fiber and Ethernet over copper into a single logical network. When one link fails, remaining links pick up the slack under the direction of a Talari Software Defined THINKING WAN.

The new WAN costs about half the $400,000 per year he was spending on the MPLS service, Momchev says. When he factors in the capital cost of the Talari SD-WAN, he calculated a 10-month return on investment.

Momchev’s biggest fear was that it would degrade the quality of VoIP traffic running over the network, but there have been no problems even when one of the circuits feeding each office has failed. “We’ve been having outages, but there is no impact on end users,” he says.

**A More Resilient WAN**

Equity Office is headquartered in Chicago and has about 40 remote offices. Its primary data center is located at headquarters, with an active disaster-recovery center in Madison, WI. Each remote office is connected as a spoke to both headquarters and the backup data center as hubs. The data centers also act as hubs for the Cisco VoIP system.

Until the change to the Talari THINKING WAN, each office was connected to a Verizon Business MPLS service by at least one T1, with a few larger offices having two or three T1s.

The MPLS service was put in about a decade ago, and shortly afterward, the company underwent server consolidation, pulling virtually all servers out of remote offices and centralizing them in the data center.

The only way Equity Office could do that was by installing WAN optimization gear from Riverbed at all sites, effectively reducing WAN traffic enough so branch workers could get seemingly local performance from central data center servers. “They were the missing piece that made it possible,” says Momchev.

Each office has DSL connections that offered Internet backup to the MPLS network, but
where there were MPLS outages, the performance of the backup was poor, he says.

But in the mornings when employees were logging on for the day, traffic spiked so much that even with the Riverbed gear, performance dropped. Workers sometimes needed to wait a minute for a file to download. Since he was already optimizing the bandwidth, his only recourse was to buy more bandwidth, but the costs of bigger MPLS links were too high, he says.

So he looked at Elfiq, Ipanema and Talari, ruling out Elfiq because at the time it couldn’t support the particular MPLS/DSL hub-and-spoke configuration Equity Office had implemented. He trialed Ipanema and Talari gear for six or seven months each. He says Ipanema’s gear couldn’t make per-packet decisions needed to keep up VoIP quality. “I have VoIP to take care of, so that was a deal breaker,” he says.

**A Better Way to WAN**

Momchev tested Ipanema and Talari extensively, and after choosing Talari, he switched over sites from Verizon Business.

Talari brings real-time, packet-level intelligence to the network, which results in increased capacity, improved reliability, superior performance for latency-sensitive applications like VoIP, VDI, video and more, while also lowering costs. With Talari, applications—and worker productivity—are not negatively impacted by underlying network issues. By measuring latency, packet loss and jitter on each one way path across the WAN, Talari routes traffic the best way so that users experience the best possible performance. And, if a WAN link goes down or degrades, users simply don’t notice.

In setting up the new network, Momchev supplied each office with at least two diverse WAN connections from different providers that don’t share local-loop infrastructure. That reduces the chances that both connections will die at the same time. Larger branches have up to four separate connections from separate providers. That gives each office at least twice the bandwidth it had before, and in some cases triple, eliminating the bandwidth congestion suffered during the busiest times.

This arrangement increases the number of service providers from one—Verizon Business—to more than a half dozen, including Comcast, Time Warner Business Class, XO Communications and MegaPath. Providers give Equity Office an Ethernet handoff so there is no new customer-site hardware to manage.

That equipment sits on the LAN side of the WAN providers’ routers, aggregating multiple connections. It is intelligent enough to choose the best route for each traffic type and reroute traffic if one link fails, he says.

The new WAN has more than enough bandwidth to handle peak demand, and that works to boost users’ faith in it, he says. “On average, during the day, peak load time is when people build their perspective of whether it’s a fast or slow network,” he says.

**About Talari**

Talari, the leading provider of Software Defined WAN (SD-WAN) solutions is changing the way companies think about, create and manage their WAN by giving the network brainwidth. Only Talari’s THINKING WAN proactively manages capacity, reliability and performance, packet by packet—to keep critical applications running, reduce costs, and liberate IT to innovate new ways for the company to be brilliant.

To learn more about Talari, visit [www.talari.com](http://www.talari.com).