

The Granite Group: Rock-Solid Data Replication



Snap Server 18000s and Snap EDR Express Make Data Replication Easy and Affordable

Introduction

Based in the Granite State of New Hampshire, The Granite Group is the second largest plumbing and heating wholesaler in all of New England and one of the top 50 plumbing and heating wholesale distributors in the United States. With 18 locations serving all of New England and eastern New York, the company is known for its rock-solid commitment to service excellence. In addition to its state-of-the-art showrooms and delivery fleet, The Granite Group makes doing business easier with online order processing and a sophisticated inventory control system at its 105,000-square-foot central distribution facility in Londonderry, NH. Key to The Granite’s Group’s success is a keen recognition of the role of technology in delivering on its promise of customer satisfaction.

The Challenge

Cost-Effective Disaster Recovery

With thousands of products and hundreds of customers and vendors, data is at the core of The Granite Group’s business. Ensuring a continuous flow of business-critical data, under any circumstance, was a key strategic priority for The Granite Group. However, as the company began developing its disaster recovery strategy, it quickly became apparent that its

existing data backup infrastructure and processes were just not up to the challenge. The company performed nightly backups with a 26-slot tape library at its Concord data center, storing the tapes offsite. According to Granite Group Network Manager Jesse King, in the event of a fire or other catastrophe at the data center, it could take many hours or even days to restore the data.

Executive Summary

Challenge

Need reliable, cost-effective disaster recovery storage solution

Solution

2 Snap Server 18000s and Snap EDR Express

Results

Significant cost savings, compared to traditional mass storage alternatives

Easy, automatic data replication across a WAN

Flexible control of bandwidth utilization

“The great thing about the Snap Server is that once you have it configured and running, it’s hands off”

Jesse King
Network Manager
Granite Group

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“To meet our disaster recovery objectives, we decided to designate one of our other locations a disaster recovery site, replicating the data from the data center to the DR site each day,” King says, noting that migrating to a disk-based backup system was key to the plan. “Disk-based storage would accelerate our backup and restore times, enabling us to restore remotely over the network, while enabling us to scale capacity as we needed.” To put the plan into action, King says he and his colleagues reviewed a wide range of storage alternatives.

“We looked at everything from low-end NAS devices to full-blown iSCSI SANs. After investigating iSCSI, we decided we definitely wanted something with iSCSI capabilities,” King says.

Solution

iSCSI-enabled Snap Server 18000 and Snap Enterprise Data Replicator (Snap EDR) Express

After evaluating the alternatives, The Granite Group chose the Adaptec Snap Server 18000 iSCSI-enabled IP SAN RAID for deployment at both locations. “The Snap Server offered what we wanted at a very affordable price, which was great,” King says.

To synchronize and replicate data between the Snap Servers, The Granite Group selected Adaptec Snap Enterprise Data Replicator (Snap EDR) Express. This flexible solution makes enterprise-class, network-based data replication surprisingly easy and affordable. A key factor in the decision was the seamless integration between the Snap Servers and Snap EDR Express.

“We wanted something that would work almost natively with the hardware. While the Snap EDR Express is an add-on, it’s almost built into the system,” King says. “With a lot of other hardware devices, you have to look at other vendors’ software to push out the replication process.”

Another key factor was the upgrade path for Snap EDR Express. King notes that if in the future he needs to replicate additional systems offsite, including Windows- or UNIX-based servers, he can easily upgrade to the advanced Snap Enterprise Data Replicator, allowing the solution to grow with their business.

“One of the other things I like about the Snap Server is how it makes tying together systems easier,” King notes. “You can do a Windows share. You can do NFS share. You can FTP information to the Snap. You’ve got Active Directory integration for security, which is great.” King adds that he also likes the notification feature, providing automatic email updates on replication status.

Last but not least, the Snap Server/Snap EDR solution offered a significant cost advantage. “The price point was right for us,” King says. “With some of the other solutions out there, the cost involved is just unbelievable.”

The Result

Replication Mission Accomplished

King says implementation of the Snap Server/Snap EDR Express solution was “plug and play,” simple and straightforward. He notes that Snap EDR Express provides flexible control over how replication is achieved and how much bandwidth is consumed. The solution’s “bandwidth throttling” capability enables him to control how much bandwidth is allocated.

“If you have multiple replication jobs running simultaneously, Snap EDR Express lets you throttle the bandwidth for optimum WAN utilization,” King explains. “Say you want to reserve 25% of the bandwidth for branch operations. Snap EDR Express lets you do that, so you can perform your replication without interrupting business operations.” Snap EDR Express also enables byte-level replication. “This is key, because you don’t

want to be replicating the same file over and over if it hasn’t changed,” King says. “SNap EDR Express looks at that and sends only those bytes that have changed, accelerating replication.”

King notes that backup times are dramatically shorter than with the old tape library—just 2 hours versus 8 hours with tape. But he adds that offsite replication, not faster backup, was the goal of the project. King says this mission has been accomplished.

“With the Snap Servers and Snap EDR Express, we’re now able to archive our data faster and more easily and protect our business by having an offsite, disk-based copy ready for rapid restoration over the WAN,” he says. “We no longer have to worry about where the tapes are going and whether they are safe.”

Another thing he no longer has to worry about is how to restore data when your tape drive has been destroyed—a common oversight in disaster planning, King says.

“We planned for the worst-case disaster, where our building and equipment are terminated,” he says. “By having our backup data on disk and having our spare servers offsite, we don’t have to worry about finding a compatible tape drive at another location. With a tape-based system, it can take a lot of time to locate the proper equipment to restore data on the tapes.”

To make sure the Snap Servers are ready for anything, King says the data center staff restores data from the production Enterprise Resource Planning (ERP) environment to a test environment weekly.

“It’s been working great, very smoothly,” he says, noting that a restore of ERP data takes just an hour or so. “If I was doing that from tape, it would take 3 hours to restore from tape to disk, then another hour to restore from your disk image to the database. With

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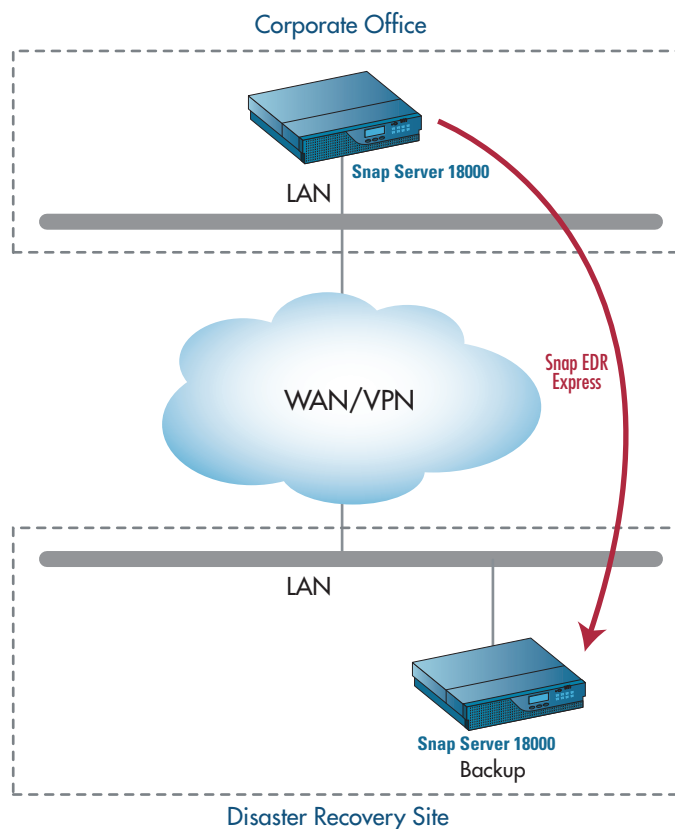
the Snap Server, we are eliminating a very time-consuming step.”

For any disaster recovery infrastructure, reliability is crucial. “The Snap Servers have been very reliable—no issues, no failures,” he says. “The great thing about the Snap Server is that once you have it configured and running, it’s hands off.”

Should anything happen, however, King says he is confident support will be there for him.

“Adaptec support has been awesome,” he says. “Whenever I’ve called them with a question or an issue, they’ve been fantastic. You’re not constantly escalated to the next person. They just walk you through it and it works great.”

The bottom line: “We’re happy with the Snap Servers and Snap EDR Express,” King says. “They helped us meet our disaster recovery goals, while meeting our budget targets.”



Solution Features

Exceptional Price/Performance

The Snap Server offers excellent price/performance, with on-the-fly scalability and provisioning.

Rapid Data Access

The Snap Server delivers data at Gigabit speeds, enabling fast data restore to keep the business up and running.

Automatic Data Replication

Snap EDR Express provides intelligent, enterprise-class management of distributed data storage resources, all from a centralized, easy-to-use Web interface.

For more information on The Granite Group, visit www.granitegroup.com

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