

# Binghamton University Designs Better Backup and DR Strategy with ExaGrid – Cuts Restore Times by 90%

CUSTOMER SUCCESS STORY

**BINGHAMTON**  
UNIVERSITY  
STATE UNIVERSITY OF NEW YORK

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**Debbie Cavallucci**  
Systems Support Analyst

## Key Benefits:

- Restore times cut by 90%
- Intuitive GUI simplifies management
- Data deduplication provides confidence that storage is being maximized
- ‘Exceptional’ customer support
- IT time saved on backup reallocated to other work

## Customer Overview

Binghamton University opened its doors as Triple Cities College in 1946 to serve the needs of local veterans returning from service in World War II. Now a premier public university, Binghamton University is dedicated to enriching the lives of people in the region, state, nation, and world through discovery and education, and to being enriched by partnerships with those communities.

## Data Growth Necessitates Move Away from Tape

Binghamton University had been backing up its data to an IBM TSM (Spectrum Protect) solution, but when backups became unmanageable, the University’s IT staff weighed ongoing costs and future backup requirements and decided to look for a new solution.

“The backup window continued to grow. Our old backup process was to have everything backed up to a disk pool. Then from the disk pool, backups would get copied over to tape. The actual backup to the TSM server was almost comparable, except for some anomalies when we would have some big chunks of data. The process of getting data from disk to tape would take seven to ten hours, conservatively, so getting everything in its final location was a major process,” said Debbie Cavallucci, Systems Support Analyst at Binghamton University.

After looking at several different solutions, the University purchased a two-site ExaGrid system that supports IBM TSM backups. One system was installed in its main datacenter and the second one offsite for disaster recovery. Binghamton liked the fact that ExaGrid was a clean solution that was easy to manage.

## Speed Is Pivotal to Backup Success

“Restores are incredible! It’s hard for me to think about how a task that used to take me ten minutes can now be done in a less than a minute. We have over 90% of our servers virtualized, and using ExaGrid, restores with TSM take about 10% of the time that they used to. When I need it, it’s quick. I don’t have to wait for a tape to mount and find the exact data location. I run the command and a few

seconds later, it’s done; the file’s restored. ExaGrid is a vast improvement over our prior system,” said Cavallucci.

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## ‘Exceptional’ Technical Support

Cavallucci has found her ExaGrid customer support engineer to be extremely responsive. “Our assigned engineer is exceptional. If we have a problem, he’s there for us. We just send him an email and within minutes, he’s on it, and we get an email back when the problem is fixed. We have always received superior support,” said Cavallucci.

The ExaGrid system was designed to be easy to set up and maintain, and ExaGrid’s industry-leading customer support team is staffed by trained, in-house engineers who are assigned to individual accounts. The system is fully supported, and was designed and manufactured for maximum uptime with redundant, hot-swappable components.

## Easy to Install and Manage

“Typically, I don’t have to do anything around backup with ExaGrid,” said Cavallucci. “I perform a formal review at the end of the month, but day-to-day, it just works. With TSM, we do one full backup the first time and then incrementals, which we keep forever. We save five versions of all data and keep the extra versions for 30 days.”

According to Cavallucci, installing the ExaGrid systems was very simple. “Once it was installed, I did a couple of configurations and

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mounted it to the TSM server – done! Within a few hours, we had everything set up and running. Before, I'd have to go order tapes. We had to feed tapes into the box, one by one – it was a big waste of time," she said.

The ExaGrid system has made Cavallucci's life easier, and spending less time on backup has freed up much of her workday for more important projects. "I have more confidence in my job because I know that the storage space is there. I check on things every now and then to make sure I'm not running out of storage space, but it's made my life much easier. I don't have to constantly worry about bad tapes, running out of tapes, or whether one is stuck in a tape drive. I can get some real work done now," said Cavallucci.

## Intuitive Interface Simplifies Management

The ExaGrid dashboard is the main interface that Cavallucci uses. The GUI is tight and easy to figure out, and she can find what she needs easily and quickly. "I never have to look anything up because it's so intuitive," she said.

Binghamton University's backup environment is very straightforward, "nothing unique, but it works effectively and efficiently – which is exactly what we need," said Cavallucci. "We keep it simple. Not a lot of skills are needed to manage it, so now we can focus our energies on other more important things."

## ExaGrid and IBM TSM (Spectrum Protect)

When IBM TSM customers install an ExaGrid in an IBM TSM environment, their management challenge becomes dramatically simpler. Not only can these customers significantly reduce their dependence on tape, they also no longer need to manage a separate primary disk pool as a staging area from which to copy daily TSM backups, as the ExaGrid effectively acts as both the primary disk pool and the primary storage pool. This allows TSM customers to free up the expensive disk they were using as their primary disk pool and reclaim that for their primary storage needs.

In addition, with ExaGrid's GRID-based architecture, TSM customers not only get the best possible backup performance, they also get the ability to easily maintain that performance as their data grows over time.

## GRID Architecture Provides Superior Scalability

ExaGrid uses a GRID-based configuration, where each appliance contains not just disk but also processing power, memory, and bandwidth. When the system needs to expand, additional appliances are simply attached to the GRID. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows, and you only pay for what you need when you need it. In addition, as new ExaGrid appliances are added to the GRID, the system automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the GRID.

## Intelligent Data Protection

ExaGrid's turnkey disk-based backup system combines enterprise SATA/SAS drives with zone-level data deduplication, delivering a disk-based solution that is far more cost effective than simply backing up to straight disk. ExaGrid's patented zone-level deduplication reduces the disk space needed by a range of 10:1 to 50:1 by storing only the unique bytes across backups instead of redundant data. Adaptive deduplication performs deduplication and replication in parallel with backups while providing full system resources to the backups for the fastest backups and, therefore, the shortest backup window.

As data grows, only ExaGrid avoids expanding backup windows by adding full appliances in a GRID. ExaGrid's unique landing zone keeps a full copy of the most recent backup on disk, delivering the fastest restores, VM boots in seconds to minutes, "Instant DR," and fast tape copy. Over time, ExaGrid saves up to 50% in total system costs compared to competitive solutions by avoiding costly "forklift" upgrades.

## About ExaGrid

ExaGrid provides backup storage with a unique landing zone and scale-out architecture. The landing zone provides for the fastest backups, restores and instant VM recoveries. The scale-out architecture includes full appliances in a scalable GRID and provides for a fixed-length backup window as data grows, eliminating expensive forklift upgrades. Learn more at [www.exagrid.com](http://www.exagrid.com).

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