

CASE STUDY

Backup Repository with Longer Data Retention, Higher Performance and Lower Cost with Ultrastar® Data60 Storage Platform and ArcServe UDP Software



Challenge

Customers' backup storage solution did not provide the data retention and bandwidth needed for backing up its business operations data

Solution

A storage solution based on Western Digital Ultrastar Data60 storage platform and ArcServe UDP software

Key Results

- Data retention improved from 30 days to 180 days
- Higher capacity helping keep more data in two sites
- Lower overall cost of backup solution
- Easy path to a higher capacity solution through simple upgrade of HDD capacity

Customer Profile

The H.Y. Group is one of Israel's leading distribution groups in the import and marketing of electrical appliances, electronics, LED lighting and communication products to the B2C and B2B sectors. The Group operates through several companies and markets many brands in the fields of electronics and electricity such as LG, Western Digital®, ARISTON, Bellers, Hisense, Gorenje, ASKO, SanDisk®, and more. The company has more than 400 employees, with offices in Kfar Saba, and its logistics center in Airport City.

Backup Repository Replacement Needs

Through its business operations, the company handles thousands of transactions every day that need to be stored for backup purposes. Its existing storage solution (a leading storage OEM's unified storage array offering) was running out of capacity and bandwidth (1Gb/s iSCSI connection), resulting in insufficient performance and bottlenecked HDDs that could only hold of up to 30 days of backed up data.

The IT department was searching for a low cost, small footprint solution that provided them with a much larger capacity for their backup repository. The write bandwidth needed to be sufficient to support the backup of their daily data dump using Arcserve UDP software, and retention needed to be as long as possible. Furthermore, data had to be fully replicated between 2 different sites (20km apart) whilst being compressed and deduped.

The IT team looked at multiple backup solutions, but these either lacked the global dedupe capability (requiring the need to attach an additional system for this purpose) or were only offered as an appliance. These solutions ended up being much costlier than the chosen Western Digital/Arcserve solution.

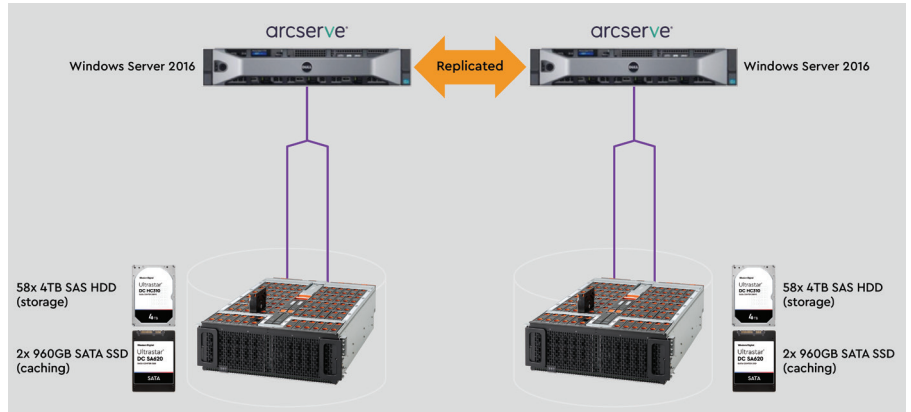
High Performance, High Capacity Backup Repository

The customer eventually chose a backup solution based on Western Digital's Ultrastar Data60 storage platform, managed by Arcserve UDP (Unified Data Protection) 6.5 Premium Plus software, replicated in each site to ensure business continuity.

The Arcserve UDP (Unified Data Protection) 6.5 Premium Plus software was installed on a Dell™ R740 server, running Windows® Server 2016 Storage Spaces. The Ultrastar Data60 had a 2-wire connection (SAS Cable 1 Meter SFF-8644 Mini SAS HD to SFF-8644 Mini 12Gb/s) to the server through an LSI 9300-8e RAID controller, each one connected to an IO Module (IOM). The Ultrastar Data60 storage platform was deployed with 58x SAS 4TB HDD (512e), and 2x 960GB Ultrastar DC SA620 (formerly branded as SanDisk CloudSpeed™) SATA SSDs. The SSDs were used for caching, mainly needed for the dedupe functionality of the Arcserve UDP software. This provided the company with business continuity replication, resulting in the right resiliency and needed performance.

"Having partnered with Western Digital for our own customers in the past, we knew the reliability of their components and storage solutions, and it was an easy choice to put together a tailored solution at a very reasonable price."

Shmulik Saadi
CTO of H.Y. Group.



The software integration was simple and straightforward, and delivered the right performance for the customer. The IT team preferred Arcserve's enhanced software features because of their simplicity and stated that any additional software features and connectivity would slow the solution down.

Western Digital the Trusted Business Partner

H.Y. Group is a distributor of Western Digital storage solutions in Israel, and as such is very familiar with the company and its products. Based on projects for their own customers that used Western Digital Ultrastar Data60 storage platforms and the positive feedback they received from their system integrator network, choosing a backup solution based on the same technology was an easy decision.

The existing relationship with the local sales and support team was one of trust and provided ease-of-mind in case of technical difficulties or other business hurdles. The lead time of the delivered Ultrastar Data60 storage platform was extremely short, and the IT team knew that it would not be a problem to get spare parts if there would be a future need. The compatibility matrix for the Ultrastar Data60 also allowed them to see that there was a growth path to higher capacity drives when their business operations required it.

"We see Western Digital as a partner for all our business in Israel, as they have proven again and again to be trustworthy, as well as decent priced", said Shmulik Saadi, CTO of H.Y. Group. "Having partnered with Western Digital for our own customers in the past, we knew the reliability of their components and storage solutions, and it was an easy choice to put together a tailored solution at a very reasonable price."

Lower TCO With 150 More Days of Backed Up Data

Prior to implementing the new solution, the customer was challenged by the available capacity and performance of their backup storage, allowing them to only back up 30 days' worth of business transactions. The new solution provided more capacity, enabling the IT team to increase its data retention to 180 data days of backed up data, a 6x improvement.

The customer was pleased with the ease of implementation and the total overall cost of the backup solution. The solution satisfied capacity, throughput, data retention and high-availability requirements.

¹One MB is equal to one million bytes, one GB is equal to one billion bytes and one TB equals 1,000GB (one trillion bytes) when referring to storage capacity. Actual user capacity may be less due to operating environment.

Configuration per site (replicated)

1x Dell® R740 Server with Arcserve UDP 6.5 Premium Plus and Windows Storage Spaces

- 2x Intel® 6148 CPU
- 384GiB RAM DDR4
- 2x 240GB SATA SSD (OS)
- 1x LSI SAS 9300-8e (non-RAID)
- SAS Cable 1 Meter SFF-8644 Mini SAS HD to SFF-8644 Mini 12Gb/s

Backup Environment

- 1x Ultrastar Data60 (58x 4TB¹ SAS HDD + 2x 960GB Ultrastar DC SA620 SATA SSD)

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