



# CASE STUDY

## Solution at-a-glance

**Company name**  
SD WORX

**Industry**  
Financial services

**Environment size**  
Enterprise

**Employees**  
1,300

**Customer application**  
-- Protecting data  
-- Managing data

**StorageTek® solutions**  
-- FlexLine™ V2X Shared Virtual Array® (SVA™) disk system  
-- 9500 SVA disk system (a predecessor to the current FlexLine V-Series products)  
-- V960 SVA disk system (a predecessor to the current FlexLine V-Series products)  
-- Brocade® SilkWorm® 12000 director  
-- FlexLine FLX280 enterprise storage system  
-- SnapShot Copy software  
-- MirrorStore™ appliance server

**Business results**  
-- Acute problems in capacity and performance resolved  
-- Faster backups; gains in time and efficiency  
-- Modular scalability possible in future  
-- Need for further investment in storage eliminated  
-- New acceptance environment for software development

## SD WORX

### SD WORX solves capacity and performance issues with StorageTek® solution.

With 1,300 employees, sales of more than 100 million euros and 25,000 clients, SD WORX is the largest payroll-processing firm in Belgium. Since the company also offers a wide range of human resources services, its activities are centered on data manipulation. An information technology (IT) department of 300 people is responsible for supporting the company's entire infrastructure from its head office in Antwerp.

#### Business issues

In the mid-1960s, the company worked in a mainframe environment. In 1991, all applications except for payroll calculation activities moved to a distributed environment. During the past few years, an extensive Internet portal has been added to the environment. The infrastructure now comprises approximately 200 servers in Antwerp, with another 20 servers installed in 16 branch offices throughout the country. SD WORX also has approximately 50 terminal servers and at least 2,000 personal computers.

SD WORX merged its server base with five StorageTek® machines in a storage area network (SAN) type of environment, but it still experienced an acute shortage of storage capacity. The infrastructure seemed inadequate to support a flexible disaster recovery scenario. Backups were performed in a second building, with data being transferred unidirectionally. Furthermore, the load balancing was not properly configured. Should a disaster actually occur, it would be complex to get the company back up and running again from the second building.

Because there was no interconnectivity between the SAN switches, the environment resembled a series of islands, making the

task of overall management laborious and time-consuming. Poor performance in the storage environment translated into delays in the back office. These, in turn, had an impact on response times in the front office.

#### The solution

It soon became apparent that StorageTek offered the best solution. The solution enabled SD WORX to keep its existing machines, albeit in a new role. With this new solution, SD WORX uses two StorageTek V2X machines with the mainframe. These originally formed part of the old SAN. The StorageTek 9500 from the old SAN was purged completely of data in the new SAN and assigned a new role. The task of the 9500 is now to store logfiles and other non-critical data. Data originally stored on the 9500 was transferred to a StorageTek V960. The individual islands that used to make up the SAN no longer exist. Thanks to two Brocade SilkWorm 12000 directors, the company's data now is properly mirrored. To configure this, the MirrorStore™ appliance server was connected to the 12000 director, thus acting as a block mover.

SD WORX replaced the V2X in the SAN with a StorageTek FlexLine™ FLX280 enterprise storage system. Capacity rose from two to eight terabytes. If necessary, the FLX280 can be scaled up to 12 terabytes in a modular configuration. StorageTek was the only supplier able to transfer data from the V2X to the FLX280 without having to carry out a backup and restore operation. The next stage involved moving data from the V960 to the FLX280, after which the data from the 9500 was transferred to the V960. The entire project was completed within two months.

## Business benefits

"The project resolved the capacity problem straight away," says Mario Van den Bergh, system engineer at SD WORX. "During the next two years, we do not expect to invest further in the field of storage. We now have the option of expanding the solution in a simple, modular way, without having to change the design of the expanded infrastructure. What's more, the problems in performance also have disappeared, thanks to the increased capacity and proper load balancing in the two systems. And we now have bidirectional mirroring, whereas before data could be transferred only unidirectionally. Delays in the back office and front office now are a thing of the past. And we no longer have any worries about disaster recovery. You can't translate the speed and efficiency immediately into figures, but it goes without saying that the project saves the company a considerable amount of time."

## Technology benefits

It has become very clear to SD WORX that the new infrastructure also presents a number of interesting opportunities. The company is working on developing an acceptance environment for new applications on the V960. And using SnapShot software, specific backup volumes can be replicated directly. The new infrastructure also supports solutions that were previously inconceivable. "We managed to meet our key objective just like that," sums up Van den Bergh. "The problems in capacity and performance have been resolved for the next few years. The speed of the FLX280 (40 megabytes per second) has far exceeded our expectations. Combining the FLX280, MirrorStore and SilkWorm is a really powerful concept."

## About SD WORX

SD WORX was founded in 1945 as a payroll-processing company. The company offers payroll calculation and human resources consultancy for the public plus private-sector recruitment and training.

Case study company: **SD WORX**  
[www.sd.be](http://www.sd.be)

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Mario Van den Bergh, System Engineer, SD WORX



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## WORLD HEADQUARTERS

Storage Technology Corporation  
One StorageTek Drive  
Louisville, Colorado 80028 USA  
1.800.877.9220 or 01.303.673.5151

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