CASE STUDY

> " With the HDS active-active cluster, failover is automated, and it now takes considerably less time to put our virtualized systems into production again. This means that we can recover from unexpected system downtime extremely quickly, and simply continue running as normal, minimizing impact on TASE activities. "
>
> *Eldad Herstig*
> *Senior Vice President, CIO and Head of Operations*
> *IT and Operations Department*
> *Tel Aviv Stock Exchange*

Tel Aviv Stock Exchange Guarantees Nonstop Operation With Hitachi Enterprise Storage Technologies

Challenge: Ensure that virtualized environments are always accessible, even in the event of unexpected system downtime.

Solution: Implement a data protection, business continuity and continuous data mobility solution to keep virtualized environments highly available.

Outcome: Tel Aviv Stock Exchange has complete confidence that business systems can run uninterrupted, around the clock.

TEL-AVIV STOCK EXCHANGE

Tel Aviv Stock Exchange

INDUSTRY
Finance

SOLUTIONS
Data Protection, Business Continuity and Continuous Data Mobility

HARDWARE
Hitachi Virtual Storage Platform G1000

SOFTWARE
Hitachi Storage Virtualization Operating System, global-active device

Outcomes
- Cuts disaster recovery time by over 95%.
- Enables round-the-clock operation with automated failover.
- Ensures complete data consistency and protection.

The Challenge

As the only stock exchange in Israel, the Tel Aviv Stock Exchange (TASE) plays a major role in the national economy. TASE lists more than 470 companies, around 50 of which are also listed on international stock exchanges, and provides continuous access to capital, bonds trading and shares derivatives. Handling over 10 million transactions for stocks and bonds a day, TASE manages assets worth US$5.2 billion.

"Offering such a wide range of services, TASE is the one-stop shop for securities in Israel," Senior Vice President, CIO and Head of Operations in Tel Aviv Stock Exchange's IT and Operations Department Eldad Herstig explains. "As

TASE is so critical to the national economy, avoiding downtime is key. Our mission statement is to maintain nonstop operation."

To ensure nonstop operation, TASE has a comprehensive business continuity procedure in place. Central to this is the ability to work anywhere, anytime.

"We use VMware View Horizon to virtualize servers and a virtual desktop infrastructure [VDI] serving over 400 employee workstations," says Herstig. "In the event of disaster, we simply move the VMware vSphere and VDI environments to our disaster recovery site and continue working as normal. During routine testing, however, we recognized an

issue with the portability of the VDI stations. Most of the stations needed manual work to make them live, which was not only risky but also time-consuming. This meant that it could take more than 13 hours to transfer these environments completely, severely interrupting business activities."

The Solution

In search of a more-efficient disaster recovery system, TASE launched a strategic review of active-active high availability cluster solutions. After evaluating offerings from several leading storage vendors, TASE selected a comprehensive data protection, business continuity and continuous data mobility solution from HDS.

Herstig comments, "We have an excellent relationship with HDS, reaching back for over a decade. As our main storage provider, HDS has in-depth knowledge of TASE systems and we knew that we could trust them with this critical project. After completing a demanding proof of concept, the HDS team worked very closely with us to implement the solution and even flew in a performance specialist to support us on-site."

Running as an active-active cluster between the main and disaster recovery sites, two Hitachi Virtual Storage Platform G1000 systems with Hitachi Storage Virtualization Operating System (SVOS) global-active device feature provide fully automated business continuity. In the event of unexpected system downtime at one location, the HDS solution continues running uninterrupted, offering complete disaster avoidance, data consistency and protection. Impressed, TASE decided to also move operational software, website data, and Microsoft® Exchange and Microsoft SQL Server® environments to the HDS data protection and data mobility solution.

The Outcome

Thanks to the data protection, business continuity and continuous data mobility solution from HDS, TASE has significantly reduced failover time between its two sites. "Previously, it took some 13 hours before all VDI workstations were up and running," recalls Herstig. "With the HDS active-active cluster, failover is automated and decreased by over 95%, now taking just several minutes to put our virtualized systems into production again. This means that we can recover from unexpected system downtime extremely quickly and simply continue running as normal, minimizing impact on TASE operations."

He continues," Continuous availability, even in the event of a disaster, means that we can operate 24 hours a day, 365 days a year. Thanks to the active-active setup, we can guarantee around-the-clock services, safe in the knowledge that the virtualized environments and corresponding business data will be available, even in the event of catastrophe."

According to Herstig, failover of the VMware and VDI environments to the disaster recovery site is now a seamless process. End-users (both persistent and nonpersistent) don't have to wait for IT to manually make some workstations go live anymore, but can continue work uninterrupted. "By automating the failover process, the HDS solution has dramatically reduced demand and pressure on the storage team, and feedback has been extremely positive," he explains.

"We are highly satisfied with the HDS data protection and data mobility solution," Herstig concludes. 'We achieved all that we set out to do: protect our virtualized environments, accelerate recovery times and reduce manual intervention in disaster recovery tasks. We are now looking into expanding the active-active solution to cover our mission-critical systems to ensure that we are able to keep trading, no matter what."

About HDS

Hitachi Data Systems innovates technology for business and social prosperity. Our IT solutions and services drive strategic management and analysis of the world's data. Ask us how we can help you get started. **HDS.com**

For more information about Hitachi Virtual Platform G series, scan this QR code.