

GARANTI TECHNOLOGY

Garanti Technology provides banking and financial services with its active-active data center



ESSENTIALS

Industry

Technology

Company Size

1,200 employees

Business Challenges

- Random read and write performance was inefficient
- Storage arrays became single points of failure in case of any problem
- Multiple replication systems presented consistency and management issues

Solutions

- EMC VPLEX Metro
- EMC VMAX 40K
- EMC FAST VP
- EMC XtremSW Cache
- EMC RecoverPoint

OVERVIEW

Garanti Technology (GT) is a subsidiary of Garanti Bank with more than 1,200 employees, one of the largest private banks in Turkey. GT provides banking and financial services, technology infrastructure, information strategies, and software development to Garanti Bank and its subsidiary operations. GT is a leading technology provider in Turkey.

BUSINESS CHALLENGES

Garanti Technology had managed its growing data and application needs with a disparate environment, which included individual Microsoft SQL and Oracle RAC servers with variety of systems such as VMware®, Power VIO, Windows, Linux, Solarix, and AIX.

The company required higher levels of performance and data availability. Slow performance currently affected mission-critical applications including Microsoft SQL and Oracle RAC servers and a variety of financial applications developed in-house.

Single storage arrays became single points of failure in case of any corruption. Data migration between storage systems was extremely slow, and GT needed to take downtime to migrate from one storage system to another, which took approximately a year.

Since application or db-based replications could not provide point-in-time recovery and due to the decentralized replication management, data was at risk.

An EMC customer since 2002, GT decided to consolidate its environment with EMC® VPLEX® Metro, EMC VMAX® 40K enterprise storage, EMC FAST™ VP, EMC RecoverPoint®, and EMC XtremSW™ Cache technology.

SOLUTIONS

Garanti Technology consolidated its environment by deploying VMAX 40K enterprise storage at its production data center behind VPLEX.

FAST VP adds to VMAX 40K performance by automatically moving hot, in-demand data from SAS drives to SSD drives then back again when demand cools. FAST VP also increases management efficiency by eliminating the need for manual storage tiering. In addition, VMAX 40K eliminates latency to ensure a seamless online experience for users.

Mission-critical application data is mirrored on two different VMAX 40K storage systems located at two different system rooms. Infrastructure resources are federated across data centers for active-active performance in the same building.

Results

- Provided active-active performance
- Enabled 100 percent uptime for mission-critical applications
- Increased environment performance with stretched Oracle RAC and SQL servers with more than 110,000 IOPS traffic
- Completed migrations 80 percent faster without downtime
- Centralized disaster recovery and enabled a less than two-second RPO

RecoverPoint is integrated with VPLEX at the production site and with an EMC VNX[®] unified storage system located 400 km away. RecoverPoint provides continuous, reliable replication of data with point-in-time recovery between the production and DR sites.

RESULTS

To consolidate its infrastructure, GT migrated all data and many applications from its disparate storage solutions to VMAX 40K storage as mirrored behind VPLEX Metro

Due to VPLEX Metro, GT maximizes infrastructure utilization for active-active performance. In the event of a major disaster, the company can quickly fail over to its secondary system room for always-on application and data availability.

Scalable and future-proofed, VMAX 40K delivers enterprise-level performance, automation, and availability for Oracle RAC and Microsoft SQL server with more than 110,000 IOPS traffic. In addition to VMAX 40K, XtremSW Cache technology also helps VPLEX to reduce the latency for random read IOPS of specific SQL servers.

With these technologies and IOPS traffic, GT is currently managing 2.5 petabytes of data behind VPLEX with less than two millisecond read and one millisecond write disk response time.

A typical migration of this size would have normally taken one year, but with the help of VPLEX, it was done in two months with no downtime.

With the centralized DR environment, RecoverPoint handled data availability with point-in-time recovery and less than two second RPO values on average.

CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, [contact](#) your local representative or authorized reseller—or visit us at www.EMC.com.

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