

DenizBank cuts OPEX by 50% and increases agility with Commvault

Top ten Turkish bank backs up and restores data eight times faster and supports exponential growth in mobile transactions



Challenge

- Even using three different backup target solutions, expected backup and restore speeds could not support 1.3 million financial transactions daily
- Time-consuming and costly to replicate virtual machines (VMs) and facilitate storage migration between on-premises and Microsoft Azure cloud
- Evolving data privacy and regulatory requirements for sensitive customer data needed more accountability

Solution

- Extended Commvault Complete™ Backup & Recovery to Commvault HyperScale™ Software to achieve greater scalability in backup and restore performance and support faster VMs and storage migration
- Employed Commvault email archiving solution with Commvault Activate™ to help with compliance search and minimize risk of data breach

Result

- 8X backup and restore speed improvement
- 50% OPEX savings by using a single Commvault platform to support all VMs and storage migration, cross-restore operations, and archiving emails
- 4 TB restore takes less than an hour, instead of eight hours with previous solutions
- 15 virtual servers moved to disaster recovery (DR) sites in under 30 minutes—50% less time than converting just one Microsoft Hyper-V VM to VMware
- Enhanced data governance compliance by making it easier to search and uncover sensitive email content and respond rapidly to regulatory requests



“We’re doing all the migration, cross-restore and archiving operations in a single platform. Commvault is time-saving, operational-saving, and resource-saving.”

Yasin Senol Team Leader, Backup Operations |
Intertech, IT division of DenizBank

Industry

Banking, financial services

Location

Istanbul, Turkey

URL

www.denizbank.com/en/

In numbers

- One of the top ten banks in Turkey, offering full banking services to 54 financial institutions (including 35 banks) across 11 countries
- Operates 2,170 branches with 40 million online banking users
- Intertech, the IT arm of DenizBank, oversees all the aspects of the bank's cloud and data center operations and provides infrastructure as a service to external customers

Key assets protected

- 5 PB of total backup data size including 4 PB of data for Microsoft SQL server and 1 PB of data for virtual server
- Microsoft Windows, Microsoft Exchange, and Oracle Real Application Clusters (RAC)
- 642 VMware VMs
- 1,925 Microsoft Hyper-V VMs to be migrated to VMware
- 600 TB of data in Hitachi Vantara G1500 storage device

The backup environment

- Commvault Complete Backup & Recovery
- Commvault HyperScale Software with validated HPE reference design
- Commvault Activate
- Microsoft Azure Stack
- NDMP backup agents
- 4 HPE StoreOnce
- Hitachi Vantara Virtual Storage Platform G1500

50% OPEX savings and 8X improvement in backup and restore speed

DenizBank is one of the top ten banks in Turkey, providing a wide range of innovative financial products to 40 million customers. With up to 70% of customers using mobile applications and generating almost 1.3 million transactions per day, the bank's legacy backup solutions could no longer support five petabytes of data growth over three years.

The bank's 100-person strong IT unit, called Intertech, saw the need to consolidate and modernize multiple backup target solutions, including EMC Data Domain and HPE StoreOnce, to improve backup performance, reduce costs, and gain operational efficiency.

“With Commvault HyperScale Software, we can use each node as a media agent. So, we saved data center OPEX by 50%.”

Yasin Senol Team Leader, Backup Operations | Intertech, IT division of DenizBank

By moving the core banking backup policy to Commvault HyperScale Software, DenizBank accelerated overall backup and restore speed by eight times. Using HyperScale reference architecture, a four-terabyte restore that previously took eight hours can now restore in less than an hour. The bank also cut operating expense (OPEX).

“If you buy Data Domain, you have separate cabinets and each cabinet needs a server,” said Yasin Senol, Intertech team leader for backup operations. “With Commvault HyperScale Software, we can use each node as a media agent. So, we saved data center OPEX by 50%.”

Supporting faster and easier VMs and storage migration

DenizBank was running its production systems on Hyper-V virtual machines (VMs), but replicating the VMs was slow, and the team needed to shut down the machines at times. Migrating VMs to VMware and adding Commvault HyperScale Software enabled the bank to rapidly back up and replicate over 2,500 VMs to disaster recovery sites and ensure availability of critical customer information.

“Previously, it took almost a full hour to convert one Hyper-V VM to VMware. With Commvault software, we can easily move 15 virtual servers to disaster recovery sites in under 30 minutes,” Senol said.

Leveraging Commvault HyperScale Software with an HPE validated reference design made the storage migration of 600TB data—from EMC VPLEX to Hitachi Vantara Virtual Storage Platform G1500—fast and easy. DenizBank also gained the capability to seamlessly move data between on-premises and Microsoft Azure.

“By adding Commvault Activate to Commvault Complete Backup & Recovery, we know what data we curate, where it's located and how it's protected. Commvault Activate is cost-effective and helps us reinforce data governance policies.”

Kemal Ozcan Assistant General Manager | Intertech, IT division of DenizBank

“With the Commvault platform, we easily migrate VM data from an external hypervisor to Azure Stack, plus have backup and recovery of Azure Stack VMs, and Azure Stack blob storage,” said Kemal Ozcan, Intertech assistant general manager. “The ease of migration has given us an advantage in moving large volumes of data in the hybrid cloud environment.”

Enhancing data security and meeting compliance requirements

The Commvault email archiving solution empowers DenizBank to intelligently store and manage 1.7 petabyte of email content for 15,000 customers. The solution allows the bank to apply automated archiving policies based on the data retention requirements from Turkey's banking regulation and supervision agency. Adding Commvault Activate also enables the IT team to easily execute compliance searches across 1,200 mailboxes every week via a simple, Google-like interface.

"Our customer data is very sensitive because they are all related to real money and banking operations. We must ensure the data is safe and retained for 10 years," Ozcan said. "By adding Commvault Activate to Commvault Complete Backup & Recovery, we know what data we curate, where it's located and how it's protected. Commvault Activate is cost-effective and helps us reinforce data governance policies."

The automated, built-in workflow enabled by Commvault has further improved the efficiency of operational jobs as well.

"We're doing all the migration, cross-restore and archiving operations in a single platform. Commvault is time-saving, operational-saving, and resource-saving," said Senol.

DenizBank relies on Commvault Support to maintain the flow of business integrity.

"Commvault Support is always fast and responsive to our requests. No other vendors can achieve this," said Senol.

"I've used IBM TSM, Veritas NetBackup and HP Data Protector before, but Commvault is the most user-friendly tool in the world," said Senol.

Meet your data protection needs now and in the future with enterprise backup software. [Learn >](#)