

DG CEMENT

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KEY HIGHLIGHTS

Industry

Cement production

The Challenge

Support business growth and align IT with business needs.

The Solution

Deploy NetApp® solutions for superior scalability, efficiency, and disaster recovery.

Benefits

- Accelerated database performance with flash technology
- Saved 40% of disk capacity with storage efficiency
- Simplified data management
- Meets business needs easily
- Optimized support for fast business and production applications
- Prepared for growth with seamless storage scalability

Success Story

DG Khan Cement Co. Ltd. Supports Business Growth with NetApp Hybrid Storage for Oracle and Microsoft Applications



Customer Profile

With a production capacity of about 4.2 million tons per year, DG Khan Cement Company Limited (DGKCC, www.dgcement.com) belongs to one of the largest cement producers in Pakistan. Its plants are in Dera Ghazi Khan and Khairpur and apply the latest dry-process technology to provide high-quality cement for local and international construction projects. DGKCC has about 1,200 employees.

Production processes comply with the Pakistan Environmental Standards. DGKCC is committed to environmental sustainability and has the necessary equipment in place to use alternative fuels, including rice husks, used tires, poultry waste, organic wastes, and others. Headquartered in Lahore, Pakistan, the company operates through a countrywide distribution network managed by regional sales offices. DGKCC is part of Nishat, a leading multi-industrial group in Southeast Asia.

The Challenge

Support business growth

The cement industry is a major driver of Pakistan's economy. Large governmental projects fuel the demand for construction materials and are a growth factor for producers

such as DGKCC. The company's two cement plants have operated near full capacity for the past two years. A third plant near Hub, west of Karachi that will have an annual production rate of up to 2.5 million tons of cement, is under way.

"It's a fairly simple equation: More production capacity leads to more data," says Muhammad Aslam, CIO at DGKCC. He says, "Because we have to keep pace with the business needs, we have to deliver an infrastructure that can cope with data growth easily and support mission-critical applications." DGKCC had already seen storage needs grow by up to 20% each year. With a third plant and more IT users on the horizon. the team had to rethink its storage requirements and defined seamless scalability, efficient operations, and lower costs as the guiding principles.

The Solution

Deploy NetApp hybrid storage

The team evaluated the market for enterprise storage and eventually selected NetApp. "NetApp offered the best scalability and economics. It is very easy to address data growth by seamlessly upgrading the storage system instead of buying additional systems," says Aslam.

"Furthermore, we found the NetApp unified architecture very appealing," he states. "We can consolidate all application data and virtual machines on a single system. This helps to simplify data management and saves power and rack space."

NetApp partner Synergy Computers provided DGKCC with all the necessary details about NetApp storage technology. As a valuable service provider for Aslam's team, Synergy Computers managed the storage implementation and data migration smoothly.

Today, DGKCC deploys two NetApp FAS2552 systems under the NetApp Data ONTAP® 8 operating system. The infrastructure spans the main data center at the head office and a second one at the disaster recovery site (DR site) over a distance of 75 kilometers. NetApp SnapMirror® software replicates data from the production system to the secondary system at the DR site. Replication is incremental so that only changed data blocks are transferred. Compression accelerates the process by reducing the amount of data. The whole storage environment is managed through NetApp OnCommand® System Manager.

DGKCC uses Microsoft business applications for collaboration and file services. All processes related to production, resource planning, finance, human resources, and business intelligence are based on the Oracle E-Business Suite (EBS) and Oracle BI applications running on Linux. Servers to control and manage the IT environment are set up as virtual machines. Their virtual disks are located on data stores and mount directly from the NetApp storage.

To optimize the performance, DGKCC leverages NetApp flash technology. With the Data ONTAP functionality of NetApp Flash Pool™ intelligent

caching, it is possible to handle solid-state drives (SSDs) and hard disk drives as one aggregate. For top read and write performance, hot data is automatically cached on SSDwithout setting policies or moving a single bit of data.

Business Benefits

Efficient operations

DGKCC benefits from enhanced performance and less storage hardware: The storage footprint was reduced by 40%. Though the amount of data and storage consumption keeps growing, the team is able to slow down the process. They simply apply NetApp storage efficiency features such as deduplication and thin provisioning, which save about 40% of storage capacity.

"The great thing is that NetApp has built-in efficiency due to its system architecture," says Aslam. "Software functions such as replication are already on board and make additional tools obsolete. Compact hardware size adds to a smaller footprint. I think we will see significant cost savings in the future; for example, through simplified data management."

Meet business needs easily

The NetApp storage infrastructure helps to support a demanding application environment. With more than 20 modules of Oracle EBS in place, DGKCC uses Oracle applications extensively, from financial to cement production reports and from production planning to timely deliveries of customer orders. DGKCC staff members have realtime data at their fingertips at any location—on site at the cement plants and at the sales offices throughout the country.

NetApp has a long-standing partnership with Oracle and has deeply integrated its software, such as data protection software, with Oracle applications. If any

need comes up related to Oracle applications in the future, DGKCC can easily benefit from a variety of NetApp data management features. "NetApp supports our demanding Oracle applications very well. Flash Pool especially speeds up database performance and contributes to the user experience," says Aslam.

The IT team at DGKCC currently supports more than 480 users in technical or management functions. With the opening of the third plant, another 200 will join the company. "We have set the directions and can support our growing business any time," says Aslam. "It was the right decision to build our storage infrastructure on NetApp. They help us reduce data sprawl, decrease complexity, and provide high and consistent application performance and availability."

SOLUTION COMPONENTS

NetApp Products

2 NetApp FAS2552HA systems NetApp Data ONTAP 8 in 7-Mode Flash Pool

OnCommand System Manager SnapMirror

Protocols

CIFS, NFS, FC, iSCSI

Third-Party Products

Dell PowerEdge servers

Microsoft Exchange Server 2010 Microsoft Windows Server

Oracle Database 11gr2

Oracle E-Business Suite R12.1.3

Oracle Enterprise Linux 5.5

Red Hat Enterprise Linux 5.5

VMware vSphere

Partner

Synergy Computers Ltd. www.synergy.net.pk



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