

EMC²

EMC: Redefining ERP and ROI with a Virtualized SAP HANA® Deployment

Businesses around the world rely on hardware and software solutions from EMC Corporation to help transform operations and deliver IT as a service. This has led to steady and significant growth – both for the company and its data. To provide real-time insight into growing data volumes, EMC deployed the SAP HANA® platform without investing in incremental hardware.

Executive overview

Company

EMC Corporation

Headquarters

Hopkinton, Massachusetts

Industry

High tech

Products and Services

Information storage, storage and content management, enterprise content management, security and compliance solutions, cloud computing services, and data computing

Employees

49,600

Revenue

US\$23.2 billion

Web Site

www.emc.com

Partners

VMware Inc.
VCE Company



BUSINESS TRANSFORMATION

The company's top objectives

- Keep pace with exponential growth in diversified and expanding business lines
- Reduce the complexity of the legacy enterprise resource planning (ERP) infrastructure
- Improve multivariate business forecasting by providing same-day insights

The resolution

- Deployed the latest version of the SAP® Business Planning and Consolidation application powered by SAP HANA®
- Replicated data out of the SAP ERP application using the same tools that deliver data into the SAP Business Warehouse application
- Ran the SAP HANA platform on an existing infrastructure in a virtualized environment

The key benefits

- Significantly faster data load times and improved forecasting performance
- Substantial savings on capital expenditures and operational expenditures
- Cost-effective support for multiple SAP HANA environments

Read more ►

“Virtualizing the SAP HANA platform has allowed us to smash our preexisting performance service-level agreements while still maintaining a hybrid cloud strategy and reducing infrastructure demand.”

Michael Harding, Lead SAP Technical Architect, EMC IT, EMC Corporation

TOP BENEFITS ACHIEVED

40%

Increase in ROI

75%

faster data loading and translation on SAP HANA versus the legacy virtualized relational database management system (RDBMS)

4x

Performance improvement in monthly forecasting runs

See more metrics ►

Executive overview

Company objectives

Resolution

Business transformation

Future plans

Removing the roadblocks to real-time forecasting

Organizations of every size turn to EMC Corporation to help them store, manage, protect, and analyze their data in a more agile, trusted, and cost-efficient way. This has helped transform EMC into a global enterprise that manufactures and distributes hundreds of hardware and software solutions for a wide range of professional services.

As EMC has grown, so too have its data stores, which have increased from 960 TB to 22 PB. To keep pace with expanding business lines, EMC was forced to continuously customize its enterprise resource planning (ERP) infrastructure, which was becoming overly complex and difficult to maintain. To address this formidable challenge, the company opted to restructure core business functions across its vast global operations.

Key to coping with ever-increasing data volumes and complexity was deploying the SAP® Business Planning and Consolidation application, which allowed EMC to successfully run business forecasts at the beginning of the month and prior to the close of financial reporting periods. Operating in its legacy ERP environment, forecasts often took as long as 12 hours to complete, severely limiting the ability to run multiple forecasts based on different assumptions and to gather key data at each quarter's close. To run multiple scenarios in a single day, EMC needed a solution that would strengthen its forecasting capabilities.



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Making the move to a virtualized SAP HANA® platform environment

As an initial step in its migration strategy, EMC moved to the most current version of SAP Business Planning and Consolidation to take advantage of recently enhanced automation features. The application had been operating on the same technology stack as the SAP Business Warehouse (SAP BW) application, but it was now certified to operate on the SAP HANA® platform. EMC knew, therefore, that this combination held the potential to deliver the improved performance levels it needed.

After reviewing its options, EMC decided to run SAP HANA on existing hardware in a virtualized environment. This was possible because the SAP Business Planning and Consolidation implementation was operating on a relatively small database of approximately 400 GB, which would compress to 100 GB or less on SAP HANA, allowing it to be virtualized on a single server.

At this point, EMC IT had been working closely with the SAP Active Global Support organization and using SAP MaxAttention™ services to help ensure that its SAP HANA infrastructure was meeting tailored data center integration certification standards set by SAP.

By using the existing infrastructure, the company increased its maintenance and automation agility and also boosted performance levels. In addition, EMC was able to run on only the required memory footprint, eliminating the overallocation of resources typical of an appliance-based model. Furthermore, it gained increased infrastructure scalability since the physical limitations of an appliance were eliminated.

The entire project was executed in approximately two and a half months – all while leveraging the same convergent technology and virtualization infrastructure as the existing ERP landscape.



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Improving performance, cost containment, and management

Running SAP Business Planning and Consolidation on the SAP HANA platform, EMC has strengthened its forecasting performance by reducing data load times from 12 hours to just 3 hours and by cutting the time it takes to generate key reports from 30 minutes to just 30 seconds.

Using its existing infrastructure has also benefited the company's bottom line, with a 70% reduction in capital expenditures and a 56% decrease in operational expenditures. And operating SAP Business Planning and Consolidation on the SAP

HANA platform in a virtualized environment has provided numerous management advantages as well. By enabling live migration of virtual SAP HANA instances in minutes, planned hardware maintenance can be completed easily, with no application production downtime. In addition, ample availability of all nonproduction systems is made possible. Harnessing the transformative power of SAP HANA puts EMC in a better position to capitalize on business opportunities across the entire enterprise.

KEY BENEFITS

4x

Faster data retrieval

75%

Faster data loading and translation on SAP HANA versus the legacy virtualized RDBMS

70%

Decrease in capital expenditures by deploying SAP HANA virtually on an existing infrastructure versus a new SAP HANA appliance



80%

Faster implementation of SAP HANA using a virtualized deployment model on existing hardware

4x

Performance improvement in monthly forecast runs

56%

Decrease in operational expenditures

Executive overview

Company objectives

Resolution

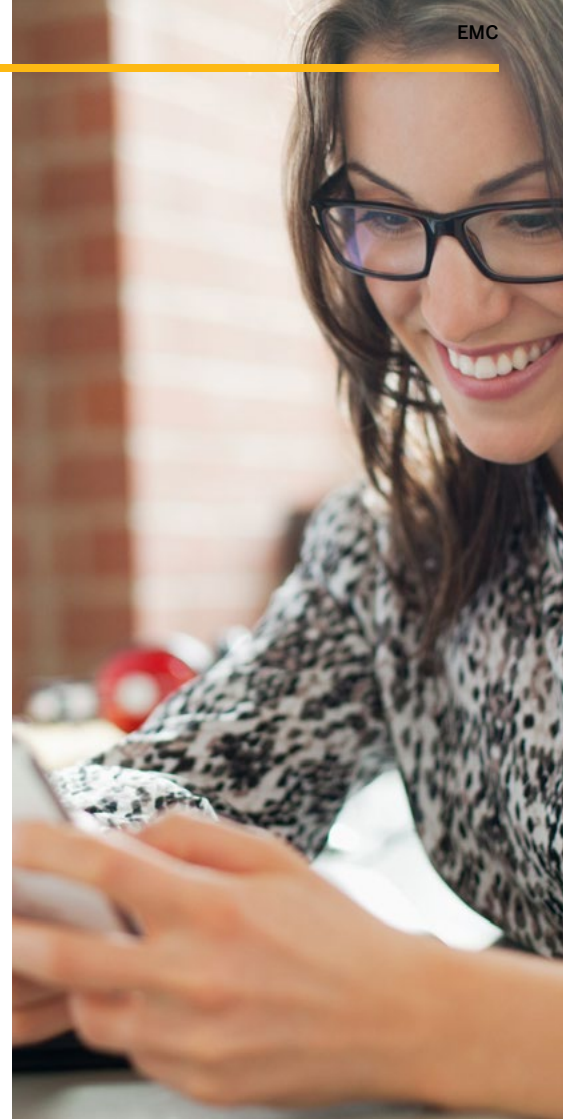
Business transformation

Future plans

Deepening the commitment to SAP HANA

EMC plans to keep building SAP HANA into its core ERP systems over the coming years. As part of this road map, it will be migrating SAP BW to SAP HANA. This implementation will use information lifecycle management, which moves “cold” data from SAP HANA using near-line storage and SAP IQ database software, minimizing the SAP HANA footprint and associated storage costs. This move will take advantage of EMC’s success with SAP IQ in a fully virtualized environment, including 3 billion records already offloaded within the first six months of the SAP IQ deployment.

In addition, EMC is laying the foundation for the deployment of SAP Business Suite powered by SAP HANA. A complete platform enablement is in the works as the company accelerates its move from their legacy database management system to support the SAP ERP and the SAP Customer Relationship Management applications. EMC looks forward to reaping the ongoing benefits of its SAP partnership as it continues the journey toward a software-defined enterprise data center.



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