

Solution Brief

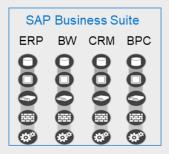
DELL EMC SOLUTION: DESIGNED FOR SAP LANDSCAPE CONSOLIDATION

Invigorate legacy SAP applications, streamline SAP landscapes, and prepare for SAP S/4HANA

ESSENTIALS

Lower TCO for SAP Landscapes

- Consolidate complex SAP landscapes running on "siloed" infrastructure
- Reduce cost for protecting "large" SAP data footprints
- Maximize utilization of IT assets running SAP



Run "Mixed" Workloads on Same IT Platform

- Deliver performance at scale for highly virtualized SAP landscapes
- Production and non-production systems
- OLTP / OLAP / Analytics / Big Data

Simplify SAP Landscape Management

- Increase productivity by automating SAP system clone, copy and refresh operations
- Deliver full copies with the performance of SAP production instances
- Reduce storage costs for SAP copies via highly efficient data-reduction intelligence

Meet SLAs for Mission Critical SAP

- Enable "always on" mission-critical SAP in the digital era
- Revision data protection for operational backups, archiving and long-term retention

Today's Situation

SAP customers find themselves in a disruptive atmosphere.

CIOs and IT managers buck headwinds and downdrafts as they attempt to optimize legacy SAP landscapes while at the same time embarking on a journey to SAP S/4HANA.

Cost of maintaining sprawling SAP landscapes

It is common to have four, six, or even ten or more SAP applications running – each with its own landscape comprised of development, test and quality assurance.

If you're like most organizations, 80% of IT budget is trapped in operations and maintenance work. Challenges can include:

- Difficulty scaling highly virtualized SAP environments
- Higher TCO from running on "siloed" IT with large data footprints
- Long maintenance and upgrade cycles for SAP

Preparing for SAP HANA

In addition to maintaining SAP landscapes, IT needs to consider the implications of managing traditional SAP ERP and SAP BW systems running on storage-based databases, while transitioning to an SAP HANA in-memory database – and ultimately to SAP S/4HANA.



Invest in a modern infrastructure – designed to invigorate legacy SAP with reduced cost, ready to power the Intelligent Enterprise with SAP S/4HANA

That means your SAP landscapes most likely will include mixed SAP workloads based on one or more of the following SAP deployment scenarios.

Dell EMC Solution: Designed for SAP Landscape Consolidation

Common SAP Deployment Scenarios



Deliver predictable performance at scale for mixed workloads

Eliminate "siloed" IT, by consolidating "mixed" SAP workloads (production and non-production) on a modern infrastructure designed to deliver predictable, consistent performance at scale for highly virtualized SAP landscapes:

- Mixed OLTP and OLAP systems concurrently handling high random reads and writes found in classic SAP NW ERP and SAP BW on storage databases such as Oracle and Microsoft SQL
- Deliver full copies with the performance of SAP production instances for Dev, Test, QA systems
- Ready to run emerging SAP data analytics, big data, machine learning and IoT uses cases powered by SAP HANA in-memory database and SAP S/4HANA



Simplify and Accelerate SAP Maintenance and Upgrade Lifecycles

Automate management of SAP system copies using SAP Landscape Management, together with trusted storage-based cloning technologies:

- Increase productivity by enabling SAP Basis Admins to focus on higher-value work versus time-consuming, error-prone manual tasks
- Enable faster delivery of high-performance copies with minimal-to-no impact on production
- Lower costs by reducing size of storage footprints for SAP copies via highly efficient data-reduction intelligence



Facilitate Self-service Application-driven Data Protection and Retention

Data protection for SAP addresses traditional pressures like backup windows, lack of visibility for SAP Admins, and cost associated with large multi-terabyte production systems, each with its own landscape (Dev, Test and QA), plus these emerging scenarios:

- SAP Admin and DBA control of daily operational backup/restore
- Faster backup with smaller data footprints for large SAP landscapes
- A path for longer term retention (LTR) on cloud-ready data protection storage locally or in a public cloud



Strive for "Always on" SAP

Increasingly, in the digital era, business critical SAP systems need to be "always-on". By eliminating single points of failure (SPOF) IT can enable continuous availability for SAP operations

- Deploy an active-active data center environment to share resources across metro-locations
- Re-purpose assets on demand, non-disruptively add SAP resources to ensure expensive resources are not sitting idle as infrastructure at both sites is fully utilized
- Perform non-disruptive maintenance for tech refreshes



Cloud-enabled Infrastructure

Simplifying IT services for SAP is critical to business

- Running SAP in a cloud operating model begins with cloud-enabled virtual infrastructure
- Dell EMC server, storage and data protection are integrated with VMware for unified SAP applications and infrastructure management and operations

Dell EMC Solution: Designed for SAP Landscape Consolidation

Component	Key Capabilities
PowerEdge	High performance servers are building blocks to start or scale SAP workloads • Get performance for SAP workloads with a rich mix of components that deliver performance, density and power efficiency for both transactional processing and analytics
	SAP HANA-certified for SAP TDI model
Servers	 Be ready for growth with modular scalability for SAP HANA deployments and high availability Scale in increments with no interruption and with no requirement to change architectures or remove existing system components – improve TCO as application use evolves over life of system
	Deliver predictable performance for highly virtualized scale-up and scale-out system landscapes • Effortlessly handle mixed OLTP and OLAP systems high random reads and writes SAP NW ERP and SAP BW on storage databases such as Oracle and Microsoft SQL
	SAP HANA TDI Storage certified for input/output of all data and low-latency requirements for logs at the persistency layer
PowerMax	Minimize disruption to business operations, accelerate SAP system copy and refresh operations • Enable active-active data center environment to share resources across metro-locations
DILLING	Application-consistent recovery to any point in time or any app event in time w/consistency groups
	Protect business against data loss by "going back in time" to moment just before disruption
	SAP LaMa integration with PowerMax accelerates automation of repetitive, time-consuming tasks locally using the advanced snapshot capabilities of SnapVX, or remotely with SRDF/S
	Faster delivery of high-performance copies with minimal-to-no impact on production
	Reduce SAP copy storage footprint size via highly efficient data-reduction intelligence
Data Domain	Deploying data protection models for near and long-term retention strategies SAP Admins and DBs get visibility and control with SAP-certified DD Boost for enterprise applications integration with SAP BRTOOLS for Oracle and SAP HANA Studio
DD Boost Software	Leverage industry-leading Data Domain deduplication to decrease the size of the SAP landscape backup footprint allowing for more backups with less storage
	 Perform faster SAP backups breaking through backup bottlenecks and gain worry-free protection with Dell EMC integrated solutions that can reduce virtualized SAP backup times
Storage	Be ready to further lower cost, minimizing physical footprint and management overhead for long- term SAP backups and archives with Data Domain Cloud Tier



Learn More about Dell EMC SAP solutions

