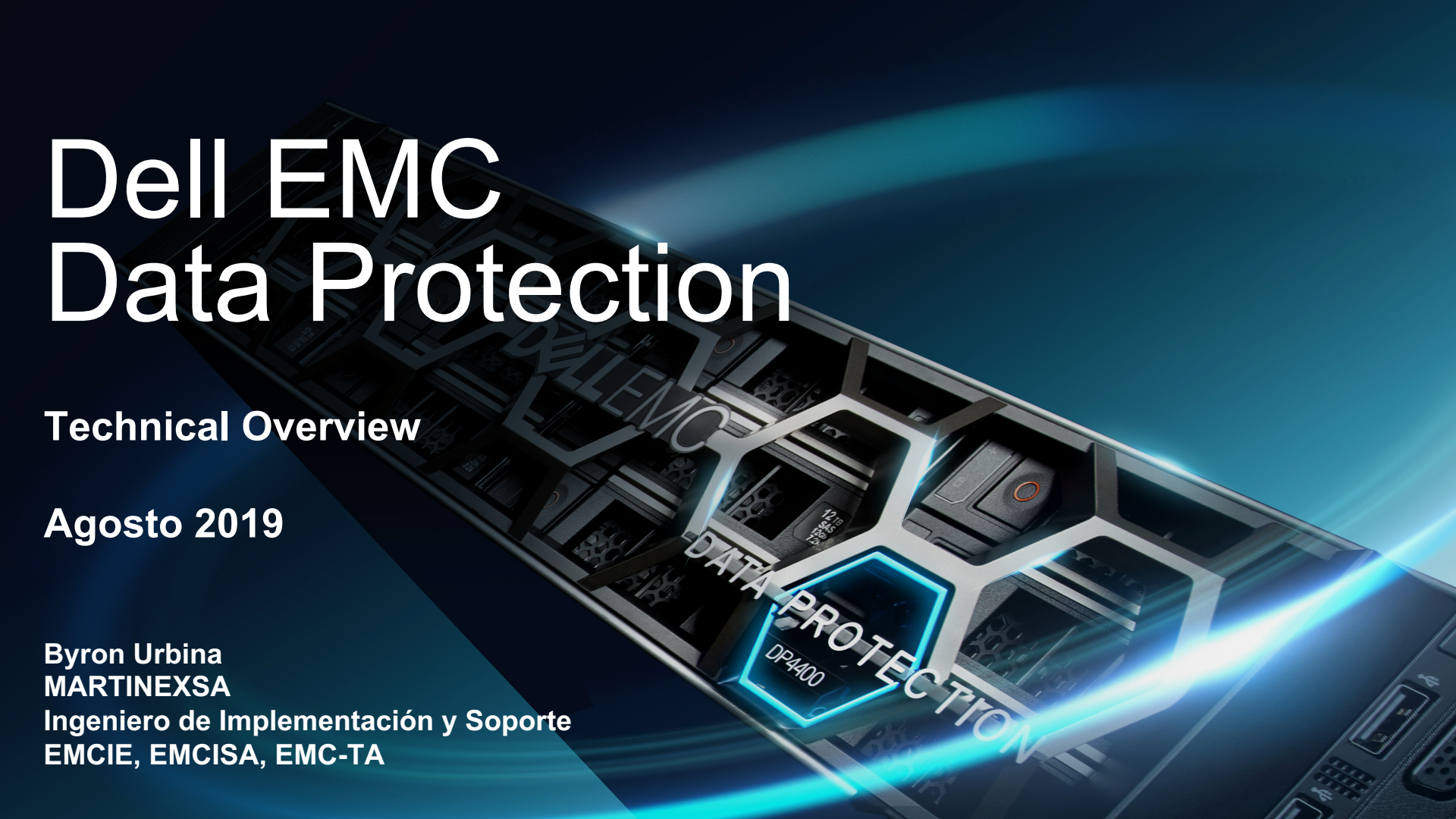
Dell EMC Data Protection

Technical Overview

Agosto 2019



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MARTINEXSA
Ingeniero de Implementación y Soporte
EMCIE, EMCISA, EMC-TA

MEGA TRENDS

1 Changing customer expectations requires Digital Transformation

Always on | Connected | Protected | Fast

Modern data protection has been shown to be a part of many IT Transformation initiatives.**
Transformed organizations adhering to a modern, comprehensive data protection strategy excel.

**ESG IT Transformation Maturity Curve July 2018

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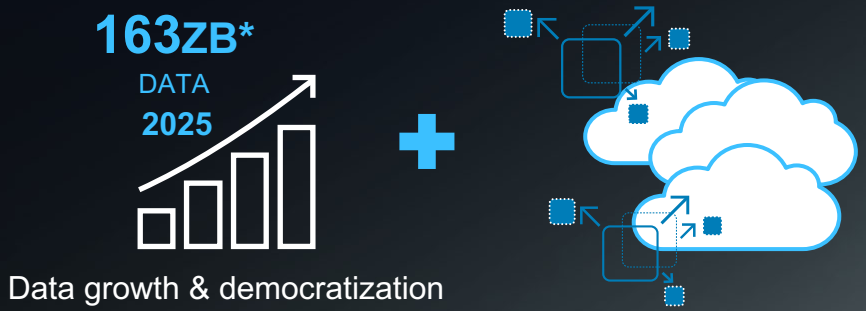
MEGA TRENDS

2 Massive data growth and data distribution require IT Transformation



Data growth & democratization

Modern data protection has been shown to be a part of many IT Transformation initiatives.**
Transformed organizations adhering to a modern, comprehensive data protection strategy excel.

* IDC Global Datasphere Forecast
**ESG IT Transformation Maturity Curve July 2018

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Data Protection for Small and Mid-size Organizations

CHALLENGES

Increase in data volumes, users, apps

Cloud extensibility

Do more with less

REQUIREMENTS

Simplicity for quick time-to-value

Efficient cloud enablement

Low cost-to-protect

High performance

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Today's Solutions

Simplicity ✓

Coverage ✗

Performance ✗

Efficiencies ✗

HIGHER COST-TO-PROTECT

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in Data Protection Appliance
& Software Market*

PROVEN AND TRUSTED

Dell EMC Data Protection

Most Comprehensive Portfolio

High performance & Ease of growth

High efficiency & Low cost-to-protect

Solution-level Simplicity | Single Vendor Worldwide Support

*Based on combined revenue from the IDC 4Q18 Purpose Build Backup Appliance (PBBA) Tracker, with select Storage Software market segments from the 4Q18 Storage Software and Cloud Service Qview.

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INTRODUCING

Integrated Data Protection Appliance DP4400

Simply Powerful.

@ Lowest cost-to-protect.[1]
Guaranteed.

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[1]Dell EMC internal analysis using publically available competitive pricing, May 2018. Lowest cost-to-protect is based on $ per logical GB. Actual cost will vary.

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DELL EMC DATA PROTECTION

Simplicity is a Converged Solution

Backup & Restore

Replication

Disaster Recovery

Search & Analytics

Days → 2U and 10x[1] faster → Hours

Easy to deploy & upgrade

12TB–96TB → + 192TB with

without additional HW*

Densest 2U appliance—up to 20% more capacity[2]

Deduplication

Cloud DR + LTR

Instant Access + Restore

VMware Integration

[1]Dell EMC internal analysis using publically available competitive pricing, May 2018. Lowest cost-to-protect is based on $ per logical GB. Actual cost will vary.
[2] Based on Dell EMC internal analysis, May 2018, using Rubrik's and Cohesity's published data. Actual results will vary.
* If starting at less than 24TB, simple non-disruptive field upgrade, expected to be available in the second half of 2019, required to bridge from 24TB to larger capacities.

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Simplicity is Easy Management

Modern UI

PLAY VIDEO

- Dashboards
- Exception resolutions
- Policy management
- Reporting

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DELL EMC DATA PROTECTION

Power is Protection Everywhere

Largest application ecosystem[1]
Any application, multi-hypervisor and cloud
Integration with VMware, SQL, Oracle native management tools

Physical

Microsoft Exchange · Microsoft SQL Server · SAP · IBM DB2 · MySQL · mongoDB. · ORACLE · IBM Lotus.

Home grown & custom apps

VM VM VM · vmware · VM VM VM · Microsoft Hyper-V

Virtual

DELL EMC Elastic Cloud Storage · Microsoft Azure · IBM Cloud Object Storage · Cloud · ceph · virtustream · aws

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[1]Based on internal analysis, June 2018.

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Power is Built For VMware

Comprehensive Data Protection Integration with vmware

vSphere Web Client

vSphere vCenter

vCloud Director

vRealize Log Insight

vRealize Operations Manager

vRealize Automation

Protect up to 5x more VMs in 2U[1] ● Simple, cost effective to scale to more VMs ● Faster backups and recoveries

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[1]Based on Dell internal testing and comparing against Rubrik's published performance data in 2U, February 2018

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Power is Performance & Efficiency

Powered by

14G PowerEdge Server

Source-side deduplication

NVMe flash for instant access & restore

Boosted application-direct protection

Up to **2X** faster backups[1]

Up to **98%** less bandwidth required[1]

7X more backup streams[1]

55:1 Avg dedupe[2]

[1]ESG Lab Review commissioned by Dell EMC, February 2018, versus a competitive Vendor A. Additional information on the testing environment.
[2]Based on Dell EMC internal analysis of customer data as of May 2018.

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DELL EMC DATA PROTECTION

Power is Cloud

Long-term retention

Disaster recovery

- Automated and efficient data movement
- Eliminates the need for cloud gateway
- API extensible for simplified management
- Free estimator tool for capacity management

UP TO **2X usable capacity** in the cloud with Cloud Tier

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Power is Cloud Disaster Recovery

Efficient with End-to-End Orchestration

PLAY VIDEO

Integrated Cloud DR

3 clicks to failover

Protect in AWS

2 clicks to failback

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DELL EMC DATA PROTECTION

Built for ROBO

Local data protection that's cost-effective and efficient

Simple deployment & management

Local restores for speed & efficiency

Easy cloud & data center replication

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DELL EMC DATA PROTECTION

@ Lowest Cost-to-Protect

Included Offers

CLOUD DR

5TB of licenses[1]

Grow in 1TB increments

CLOUD TIER

RP4VMs

5VMs, 1-yr subscription

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[1]Up to 5TB of Cloud Tier and Cloud DR licensing, if selected during initial purchase.

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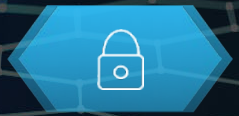
Power is Cloud Disaster Recovery

Efficient with End-to-End Orchestration



Integrated Cloud DR

- DR testing & failover to AWS
- Protect directly from on-prem into S3
- Failback on-premises
- Recover in minutes, reducing RTO

3 clicks to failover

Protect in AWS or Azure

- Minimal cost & footprint
- Seamless integration with on-premises DP
- Best-in-class deduplication
- Leverage what you know and own

2 clicks to failback

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INTRODUCING

PLAY VIDEO

Integrated Data Protection Appliance

DP4400. Simply Powerful.

@ Lowest cost-to-protect.[1]
Guaranteed.

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[1]Dell EMC internal analysis using publically available competitive pricing, May 2018. Lowest cost-to-protect is based on $ per logical GB. Actual cost will vary.

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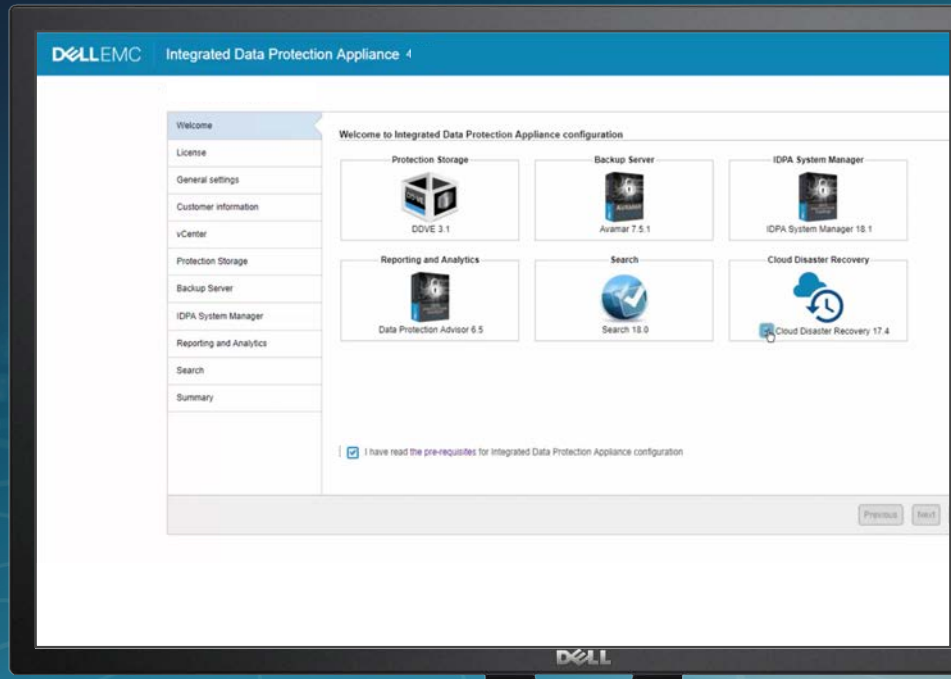
DELL EMC DATA PROTECTION

Simplicity is easy deployment (IDPA DP4400)

PLAY VIDEO

Install in 3 easy steps

- Configurable
- Easy Upgrades
- Wizard Interface
- System status and configuration



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DELL EMC DATA PROTECTION

Comprehensive IDPA Portfolio

	SMALL, MIDSIZE & ROBO	MIDSIZE ENTERPRISE	LARGE ENTERPRISE	
	DP4400	DP5800	DP8300	DP8800
BACKUP INGEST	Up to 9 TB/hr	Up to 32 TB/hr	Up to 41 TB/hr	Up to 68 TB/hr
LOGICAL CAPACITY[3]	80 TB to 4.8 PB[1] 240 TB to 14.4 PB[2]	960 TB to 14.4 PB[1] 2.8 to 43.2 PB[2]	1.9 to 36 PB[1] 5.7 to 108 PB[2]	6.2 to 50 PB[1] 18.6 to 150 PB[2]
USABLE CAPACITY	8 to 96 TBu[1] Up to 288 TBu[2]	96 to 288 TBu[1] Up to 864 TBu[2]	192 to 720 TBu[1] Up to 2.16 PBu[2]	624 TBu to 1 PBu[1] Up to 3 PBu[2]

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1 Total capacity on active tier only. 2 Total capacity with cloud tier for long-term retention. 3 Logical capacity based on 10x to 50x deduplication

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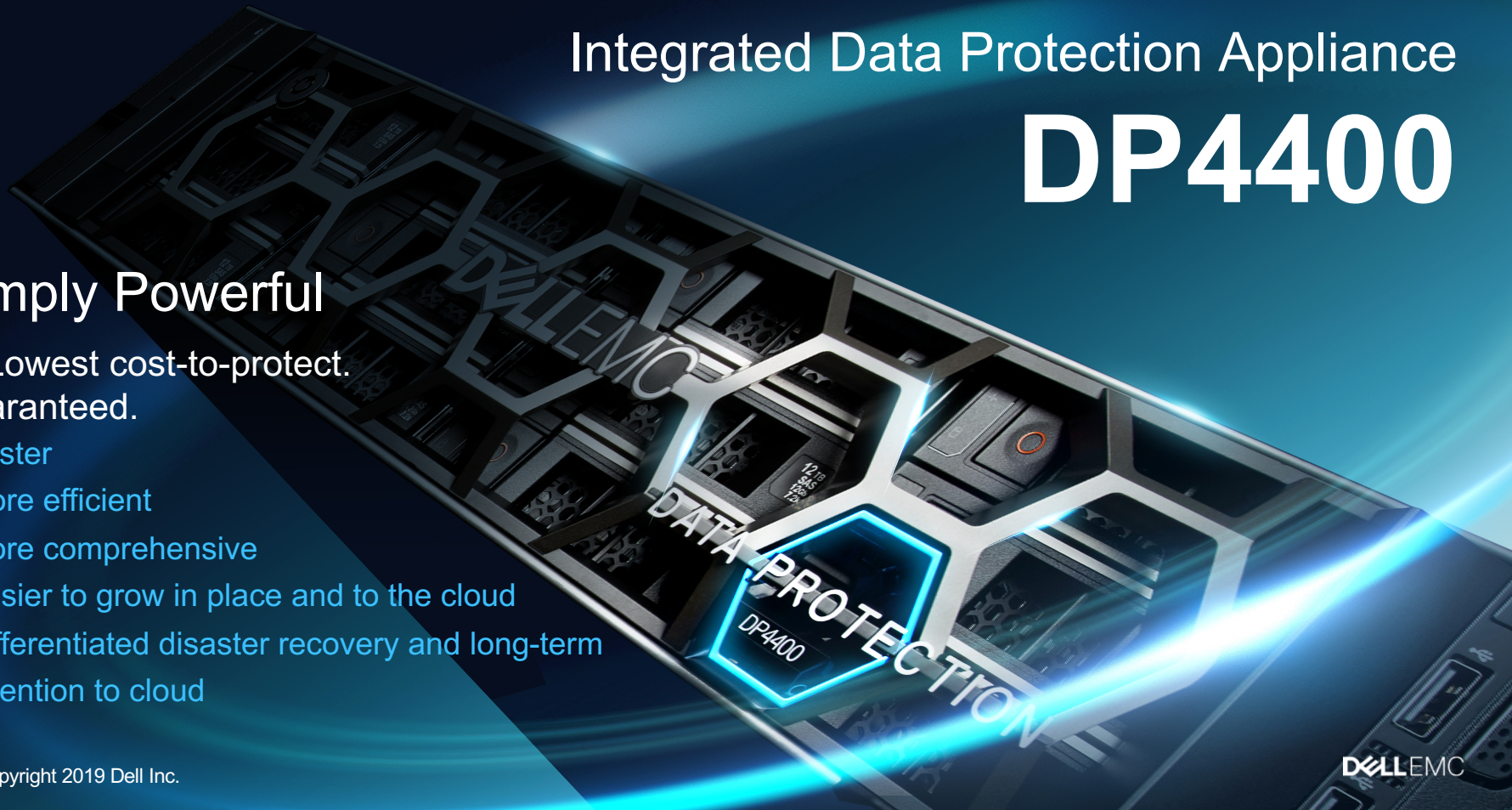
Integrated Data Protection Appliance

DP4400

Simply Powerful

@ Lowest cost-to-protect.
Guaranteed.

- Faster
- More efficient
- More comprehensive
- Easier to grow in place and to the cloud
- Differentiated disaster recovery and long-term retention to cloud



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Integrated Data Protection Appliance

DP4400

Simply Powerful

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Integrated Data Protection Appliance DP4400

Simply Powerful.

SIMPLE

Management
Deployment & upgrade
Grow-in-place & to the cloud

POWERFUL

Comprehensive coverage
High performance
Efficient cloud

@ Lowest cost-to-protect.[1]
Guaranteed.

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DELL EMC DATA PROTECTION

Simplicity is a Converged Solution

Days → 2U and 10x[1] faster → Hours

Easy to deploy & upgrade

Backup servers & storage

Backup software

Search & analytics[1]

System management

Cloud DR + LTR

8TB–96TB → + 192TB with

without additional HW*

NVMe flash

Densest 2U appliance—up to 20% more capacity[2]

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[1]Based on Dell EMC internal testing, May 2018, compared to traditional deployments. Actual results will vary.
[2]Based on Dell EMC internal analysis, May 2018, using Rubrik's and Cohesity's published data. Actual results will vary.
* If starting at less than 24TB, simple non-disruptive field upgrade, expected to be available in the second half of 2019, required to bridge from 24TB to larger capacities.

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DELL EMC INTEGRATED DATA PROTECTION APPLIANCE DP4400

Complete Backup, Deduplication, Replication, Recovery + Cloud DR & LTR

SIMPLY POWERFUL

@ Lowest cost-to-protect.[1]
Guaranteed.

Backup servers & storage

Backup software

Search & analytics[2]

System management

Cloud DR + LTR

8TB–96TB → + 192TB with cloud

without additional HW*

NVMe flash

Densest 2U appliance—up to 20% more capacity[3]

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[1]Dell EMC internal analysis using publically available competitive pricing, May 2018. Lowest cost-to-protect is based on $ per logical GB. Actual cost will vary.
[2]Search feature only for file system backup data, not VMs or databases.
[3]Based on Dell EMC internal analysis, May 2018, using Rubrik's and Cohesity's published data. Actual results will vary.
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