



# DELL EMC Midrange Solutions

**Connecting your business**

**DELL EMC**

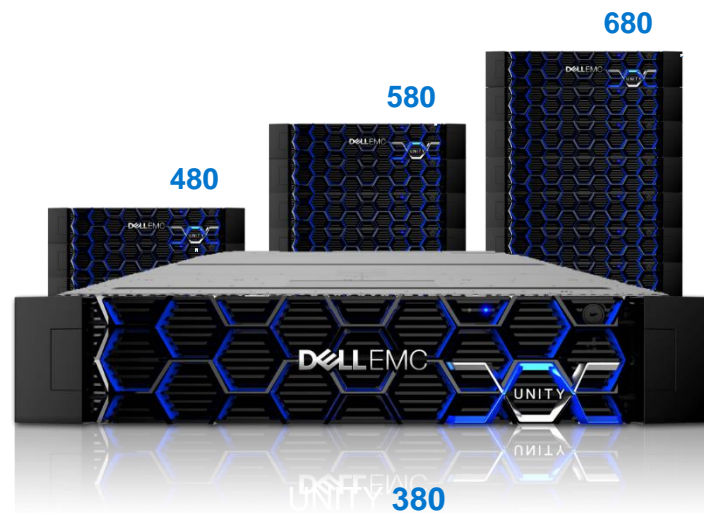
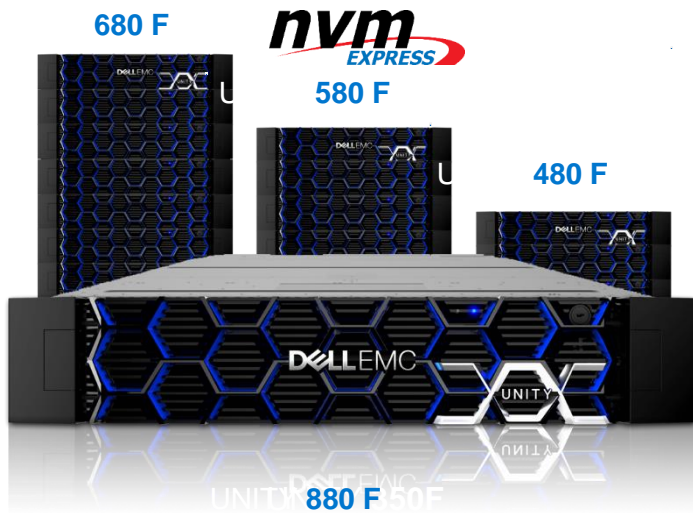


# UNITY

Dell EMC Unity  
Transform and Automate

**DELLEMC**

# Famille Dell EMC Unity™ XT



ALL-FLASH



HYBRID



# Gamme Dell EMC Unity XT

## Stockage milieu de gamme sans compromis



Optimisé pour plus d'  
**EFFICACITÉ**

31 % d'efficacité en plus par rapport à la concurrence

Performances

Moderne  
Architecture

Rapidité  
Déploiement

Simplicité  
du cycle de vie

Multi  
protocole

le multi-Cloud  
Enabled

Efficacité

Conception  
évolutive

Optimisé pour plus d'  
**FORMES**

Optimisé pour plus d'  
**MU**

Virtualisation

Sécurité  
Certifications

2 x plus

Optimisé pour plus d'accès au  
Multi-Cloud

# La NOUVELLE gamme Dell EMC Unity XT

**FUTURE-PROOF**  
LOYALTY PROGRAM

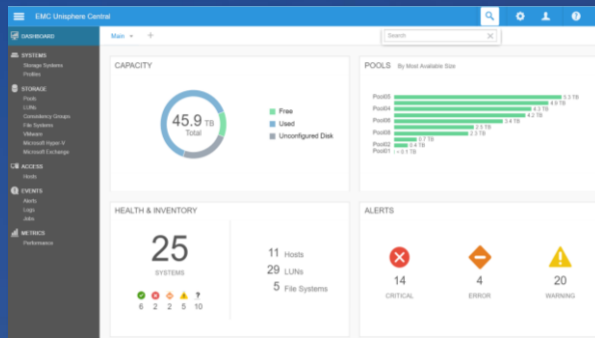


Modèles 100 % Flash : Modèles hybrides :	Unity 380F Unity 380	Unity 480F Unity 480	Unity 680F Unity 680	Unity 880F Unity 880
Nombre de CPU par système	12 cœurs 2S = Socket simple 1,7 GHz	32 cœurs 2S = Double socket 1,8 GHz	48 cœurs 2S = Double socket 2,1 GHz	64 cœurs 2S = Double socket 2,1 GHz
Mémoire (par système)	128 Go	192 Go	384 Go	768 Go
Capacité brute max.	2,4 Po	4,0 Po	8 Po	16 Po
Nbre max. de disques	500	750	1 000	1 500
Logiciel complet	Réduction des données à la volée, réplication synchrone/asynchrone, snapshots, optimisation multicœur, qualité de service, multitenancy des IP, gestion basée sur le Web, mise en cache sur SSD, hiérarchisation automatique, allocation dynamique, CloudIQ, hiérarchisation sur le Cloud, licences RP4VM et AppSync Basic			

Exécutez une déduplication avancée sur les modèles 380 et 380F

# Gestion native simple...

## Unisphere/Unisphere Central



- Interface utilisateur HTML 5 pratique, workflows intuitifs
- Gérer 1 à 1 000 baies Unity
- Réplication « définie et oubliée »

et prise en charge  
d'un vaste écosystème



- Intégration avec des produits tiers
- Accès API à partir de la CLI, du navigateur et de l'écriture de scripts

# Unisphere Dashboard

The image displays the Dell EMC Unisphere Dashboard interface. A navigation menu is highlighted with a red border, listing the following categories and sub-items:

- DASHBOARD
- SYSTEM
  - System View
  - Performance
  - Service
- STORAGE
  - Pools
  - Block
  - File
  - VMware
- ACCESS
  - Hosts
  - VMware
  - Initiators
- PROTECTION & MOBILITY
  - Snapshot Schedule
  - Replication
  - Interfaces
  - Import
- EVENTS
  - Alerts
  - Jobs
  - Logs
- SUPPORT

The main dashboard area shows the following sections:

- SYSTEM HEALTH**: Includes a monitor icon and a '0 REPLICATION' indicator.
- SYSTEM CAPACITY**: Includes a bar chart area.
- SYSTEM PERFORMANCE**: Includes a bar chart area labeled 'Last 4 hours'.
- STORAGE HEALTH**: A summary card with four metrics:
  - 0 LUNS
  - 0 CONSISTENCY GROUPS
  - 0 VMWARE
  - 0 FILE SYSTEMS
- POOLS**: A bar chart titled 'By Most Available Size' showing two pools:
  - DynamicPool-01: 15.5 TB
  - DynamicPool-02: 15.1 TB

# System – System View

The screenshot displays the Dell EMC Unisphere interface for a system named 'Unisphere Hopkinton'. The left sidebar contains navigation options: DASHBOARD, SYSTEM (with 'System View' selected), PERFORMANCE, SERVICE, STORAGE (Pools, Block, File, VMware), ACCESS (Hosts, VMware, Initiators), PROTECTION & MOBILITY (Snapshot Schedule, Replication, Interfaces, Import), EVENTS (Alerts, Jobs, Logs), and SUPPORT.

The main content area shows the 'Enclosures' tab. An 'Enclosure:' dropdown menu is set to 'DPE'. View controls for 'Front', 'Rear', and 'Top' views are all active (indicated by green checkmarks), along with a refresh icon.

Below the enclosure image, the status for 'DPE Drive 8' is shown as 'OK' with a green checkmark icon. The message states: 'The component is operating normally. No action is required.'

Technical specifications for DPE Drive 8 are listed below:

Slot Number:	8	Type:	SAS Flash 2
Firmware Version:	C342	Current Speed:	12Gbps
Max Speed:	12Gbps	Capacity:	733.5 GB (733.5 GB usable)
Product ID / SN:	0RY76W9A	Part Number:	005051587
WWN:	06:00:00:05:00:00:04:01:00:00:00:00:03	Drive Group:	dg_4
Pool:	DynamicPool-01		



# System - Performance

• Performance

• System

• Performance

• Storage

• Pools

• Block

• File

• VMware

• Access

• Hosts

• VMware

• Initiators

• Protection & Mobility

• Snapshot Schedule

• Replication

• Interfaces

• Import

• Events

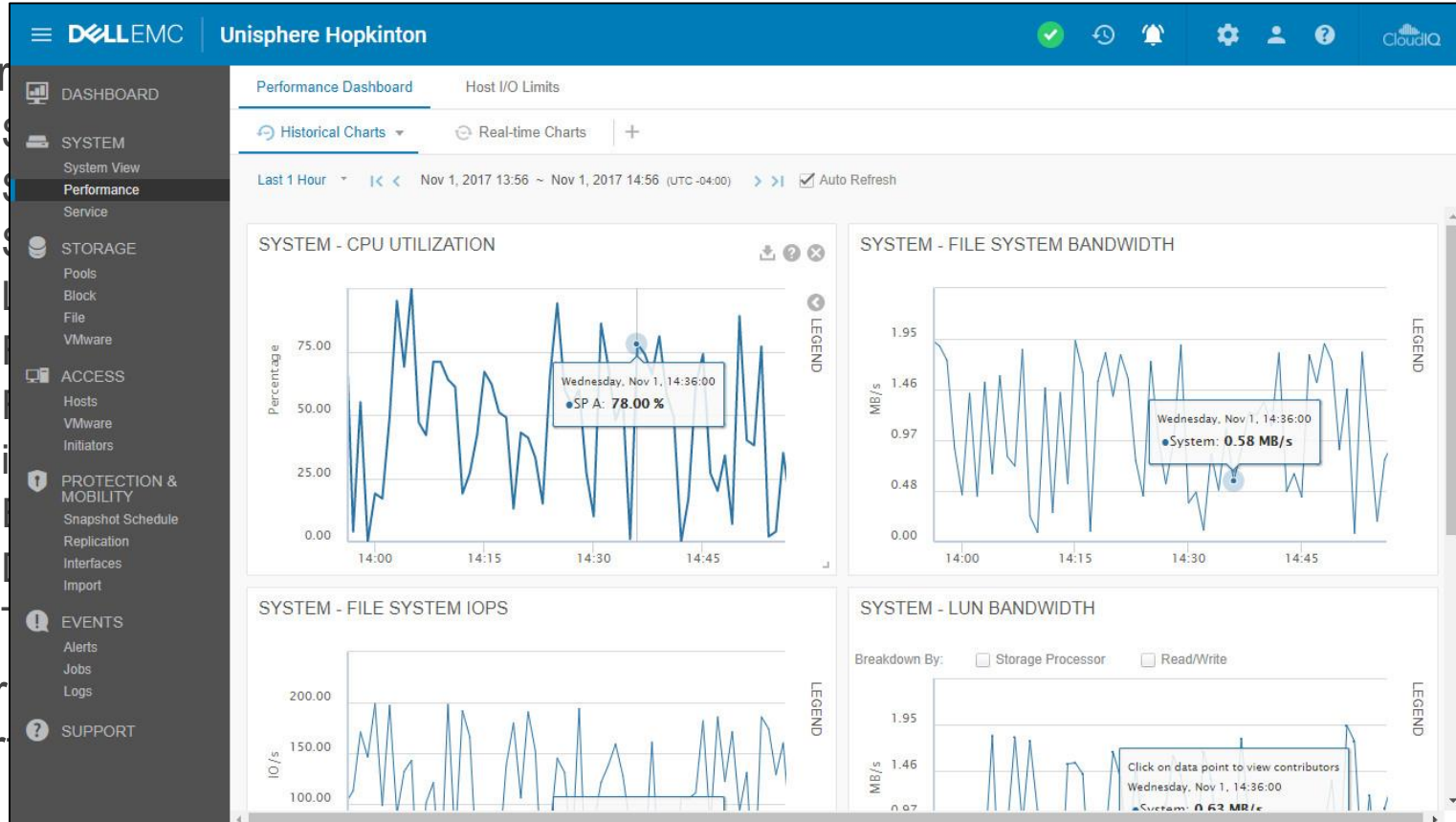
• Alerts

• Jobs

• Logs

• Support

• Variable Performance



# CloudIQ

Le problème informatique le plus facile à résoudre est celui l'on a évité

# Cloud Renseignements sur les données

Application mobile pour iPhone et Android

## Nouveautés

- Prise en charge élargie
  - VMware
  - Connectrix
  - Intégration API
- Résolution accélérée
  - Anomalies des performances
  - Charges concurrentes
  - Interface utilisateur simplifiée
- Modélisation prédictive
  - Prévion des capacités
  - Analyse de l'impact des performances

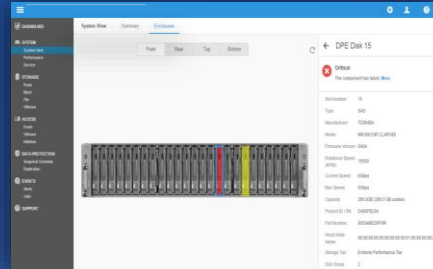
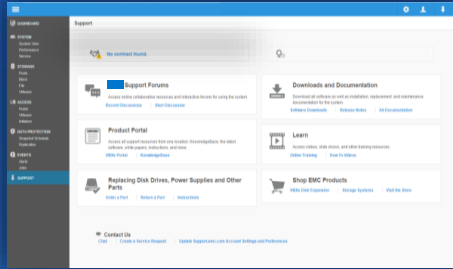


Nouvelle interface utilisateur simplifiée

Couverture de l'infrastructure élargie

# Simplicité intuitive intégrée

## Service d'assistance en ligne



- Portail en ligne en libre-service
- Intégré à la GUI de Unisphere
- Sans installation préalable

Vaste  
support en ligne

Accès à :

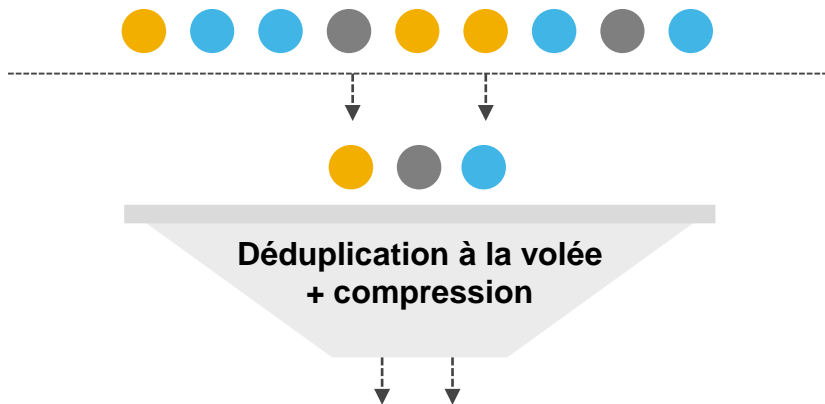
- Documentation
- Vidéos
- Chat
- Support correctif
- Guide de commande

« C'est sa **simplicité**. C'est la **facilité** de gestion, la fonction CallHome, la fonctionnalité CloudIQ. Tout cela est **intégré**. »

AOS

A ConvergeOne COMPANY

# Meilleure efficacité des ressources...



Faible temps système

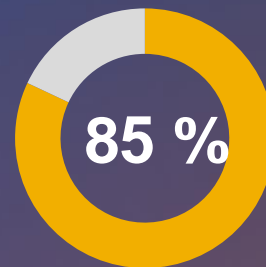


Réduction de l'encombrement du stockage pour un faible coût TCO

## Optimisation de l'efficacité

Réduction des données jusqu'à un ratio de

**5 pour 1**



Capacité utile du système

L'efficacité système de 85 % de Dell EMC est calculée en fonction de l'allocation des disques de secours, de l'environnement d'exploitation, de la taille de la configuration et du type RAID.

# Migrations des données tierces en mode bloc

- Tirez le meilleur parti de SANCopy : aucune installation préalable sur les hôtes
- Gestion avec la CLI ou l'API REST
- Prise en charge des fonctionnalités de migration, telles que la mise en pause/reprise, la création, la suppression, le retour arrière, la régulation
- Possibilité de tester la destination avant basculement
- Migration de plusieurs volumes simultanément
- Création de rapports de metrics de migration en temps réel.

Pris en charge pour :



HP EVA



HPE 3PAR



HITACHI HDS



NETAPP FAS

**Plus : Dell EMC VMAX,  
séries SC et PS**

# Mises à niveau en ligne du contrôleur Dell EMC Unity

Modèles Dell EMC Unity actuels, modèles XT pris en charge par 2HFY20

- Mises à niveau au sein de la gamme sans déplacement des données

- 100 % Flash/100 % Flash
- Hybride/hybride

- En ligne

- Aucun temps d'arrêt du système

- Logiciel complet intact

## 100 % Flash



MISES À NIVEAU SANS DÉPLACEMENT DES DONNÉES **EN LIGNE**,  
SUR LES MODÈLES 100 % FLASH ET HYBRIDE DE LA GAMME

## Hybride



# Data Protection Portfolio Overview

Key Ingredient In Modernization & Transformation



# Addressing Data Protection Challenges

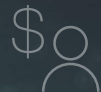
## CHALLENGES



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



# Dell EMC Data Protection Portfolio

## Protection and Recovery for Multi-cloud

Long Term  
Retention

Disaster  
Recovery

Backup to  
Cloud

In Cloud  
Backup

Widest multi-cloud data protection use cases and ecosystem coverage



**DATA PROTECTION  
STORAGE**



**DATA PROTECTION  
SOFTWARE**



**DATA PROTECTION  
INTEGRATED APPLIANCE**

**Architecture Matters**

**Comprehensive  
Coverage**

**Choice &  
Flexibility**

**Trusted Provider**

The image shows a close-up of a Dell EMC Data Domain storage unit. The unit is dark grey with a prominent blue horizontal stripe. The top and bottom surfaces feature a perforated metal mesh. The Dell EMC logo is printed in white on the upper part of the front panel, and the words 'DATA DOMAIN' are printed in white on the lower part. A bright blue light strip is visible on the left side of the unit.

**DELLEMC**

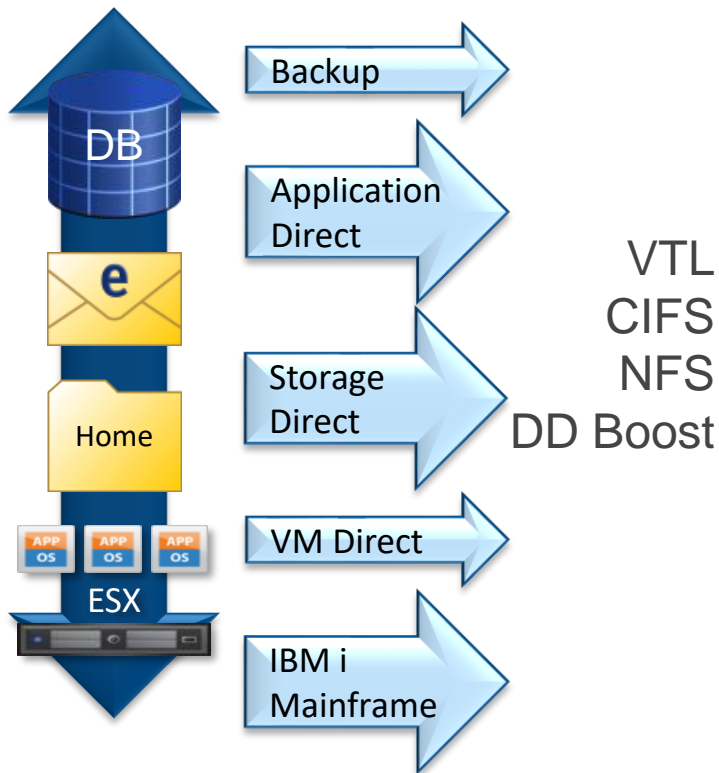
**DATA DOMAIN**

**CAPACITY  
OPTIMIZED  
PROTECTION  
STORAGE**

**DELLEMC**

# Dell EMC Data Domain Protection Storage

Reduces storage and network requirements



Consolidate up to 540 sites



Encryption at Rest  
Encryption in Flight  
Retention Lock (WORM)  
Cloud Enabled

# Power of Deduplication: Cost Savings

Real Life Customer Example

**24:1** Daily's stored 30 days on disk

Deduplication

769TB

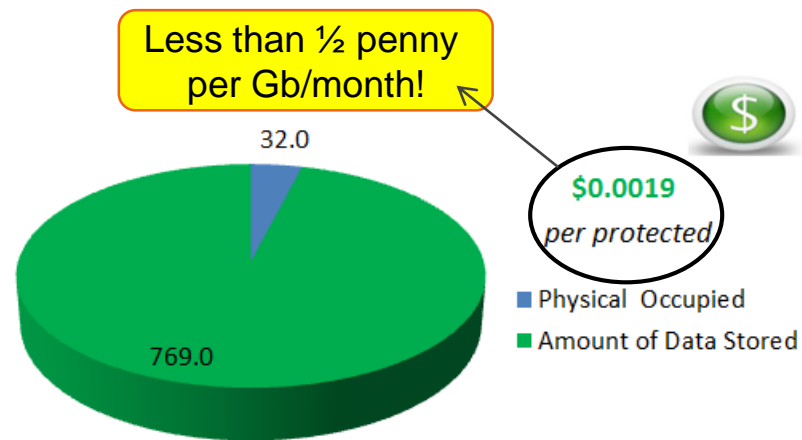


32TB



96% Data Reduction- 24 to 1

Speed: All backups completed under 3 hrs



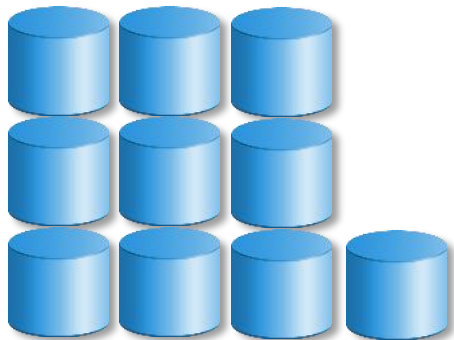
**24Deduplication Ratio**

# Savings of Deduplication

Real Life Customer Example

**66:1**  
Deduplication

21 PB



322 TB



- 98.5% Data Reduction- 66 to 1
- 58% utilized in Data Center #1
- 66% utilized in Data Center #2
- Cost: 3.5 cents per Logical GB
- Cost to Serve:\$0.0009868

Location	Pre-Comp TB	Post-Comp TB	Dedup
Data Center #1	10,715.05	161.85	66:1
Data Center #2	10,461.07	160.34	65:1
<b>Total</b>	<b>21,176.12</b>	<b>322.19</b>	<b>65.7:1</b>

# Modernized Data Domain portfolio



## Small Enterprise/ROBO – Midsize Enterprise

Data Domain  
Virtual Edition

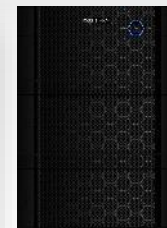
Speed (DD Boost): 5.6 TB/hr (16TB), 11.2 TB/hr (96 TB)

Usable capacity: 0.5 TB – 96 TB, Logical capacity: Up to 4.8 PB

## Large Enterprise

### Midsize Enterprise

### Small Enterprise / ROBO



	DD3300	DD6300	DD6800	DD9300	DD9800
Speed (DD Boost)	7 TB/hr	24 TB/hr	32 TB/hr	41 TB/hr	68 TB/hr
Speed (other)	4.2 TB/hr	8.5 TB/hr	14 TB/hr	20 TB/hr	31 TB/hr
Logical capacity	200 TB–1.6 PB <sup>1</sup> 600 TB–4.8 PB <sup>2</sup>	1.8–8.9 PB	2.8–14.4 PB <sup>1</sup> 8.4–43.2 PB <sup>2</sup>	7.2–36 PB <sup>1</sup> 21.6–108 PB <sup>2</sup>	10–50 PB <sup>1</sup> 30–150 PB <sup>2</sup>
Usable capacity	4 TB–32 TB <sup>1</sup> 12 TB–96 TB <sup>2</sup>	Up to 178TB	Up to 288 TB <sup>1</sup> Up to 864 TB <sup>2</sup>	Up to 720 TB <sup>1</sup> Up to 2.16 PB <sup>2</sup>	Up to 1 PB <sup>1</sup> Up to 3 PB <sup>2</sup>

<sup>1</sup> Total capacity on Active Tier only

<sup>2</sup> Total capacity with DD Cloud Tier software for long-term retention

The image shows a close-up of a server rack. The central focus is a horizontal panel with the Dell EMC logo and the text 'DATA PROTECTION'. The panel is illuminated with a blue glow. Above and below the panel are perforated metal grilles, also with a blue glow. The overall aesthetic is modern and technical.

**DELLEMC**

**DATA PROTECTION**

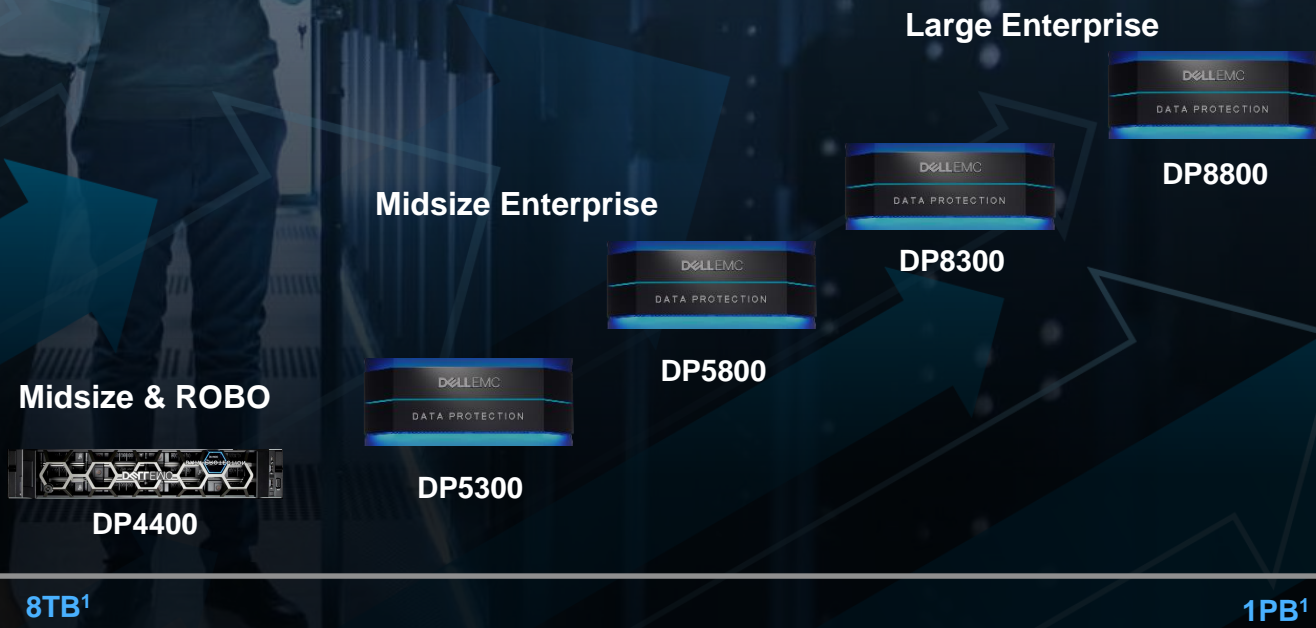
**INTEGRATED  
HARDWARE &  
SOFTWARE**

**DELLEMC**

DELL EMC DATA PROTECTION

# Comprehensive IDPA Portfolio

Maximum choice and flexibility



Usable Capacity

8TB¹

1PB¹



DELL EMC DATA PROTECTION

# Simplicity in a Converged Solution



<sup>1</sup>Based on Dell EMC internal testing, May 2018, compared to traditional deployments. Actual results will vary.

<sup>2</sup>Based on Dell EMC internal analysis, May 2018, using Rubrik's and Cohesity's published data. Actual results will vary.

DELL EMC DATA PROTECTION

# Power is Cloud



Automated and efficient data movement  
Eliminates the need for cloud gateway  
API extensible for simplified management

UP TO **192 TB** in the cloud  
with Cloud Tier

DELL EMC DATA PROTECTION

# @ Lowest Cost-to-Protect

Protect up to

**4x**

MORE DATA  
IN A 2U<sup>1</sup>

**55:1**

AVG  
DEDUPE<sup>2</sup>

Up to

**98%**

LESS  
BANDWIDTH  
REQUIRED<sup>1</sup>

Costs up to

**80%**

LESS TO  
PROTECT<sup>3</sup>

<sup>1</sup>[TSG Lab Review](#) commissioned by Dell EMC, February 2018, versus a competitive vendor A. [Additional information](#) on the testing environment.

<sup>2</sup>Based on Dell EMC internal analysis of customer data as of May 2018.

<sup>3</sup>Dell EMC internal analysis using publically available competitive pricing from Rubrik and Cohesity, May 2018. Based on \$ per logical GB. Actual cost will vary.

#

1

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 1Q18 Purpose Build Backup Appliance (PBBA) Tracker, with select Storage Software market segments from the 4Q17 Storage Software and Cloud Service Overview.

# DELL Technologies



DELLEMC

Pivotal

RSA

Secureworks

virtustream

vmware