

DELL EMC Data Domain

Обзор новой платформы защиты
данных для малого и среднего бизнеса

DELL EMC

А вы уверены в ваших средствах защиты?

\$914K

Average Cost of
Data Loss

2.36T

Data Loss

90%

Laggards or
Evaluators



Global Data Protection Index

73%

Unable to keep
pace with Flash

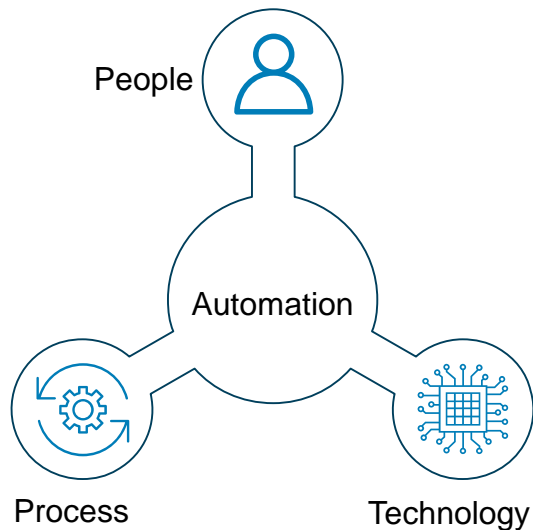
82%

Unprepared for
future business
challenges

50%

Unprotected in the
Cloud

Dell EMC Data Protection Strategy



Data Domain is #1

- Protection storage market leader



- **Over 60%** share of purpose-built backup appliance market
- Install base of over **66,000** systems
- Used by **90%** of the Fortune 100
- DD9800 is **7x** more scalable, **1.5x** faster, and **5x** more streams than competition

Efficient, Comprehensive, Cloud-Enabled Protection



EFFICIENT

- Reduce storage requirements by 10 – 55x with variable-length deduplication
- Gain industry leading speed, scalability, and reliability



COMPREHENSIVE

- Back directly from a wide range of enterprise apps or primary storage
- Deploy protection storage however you want it



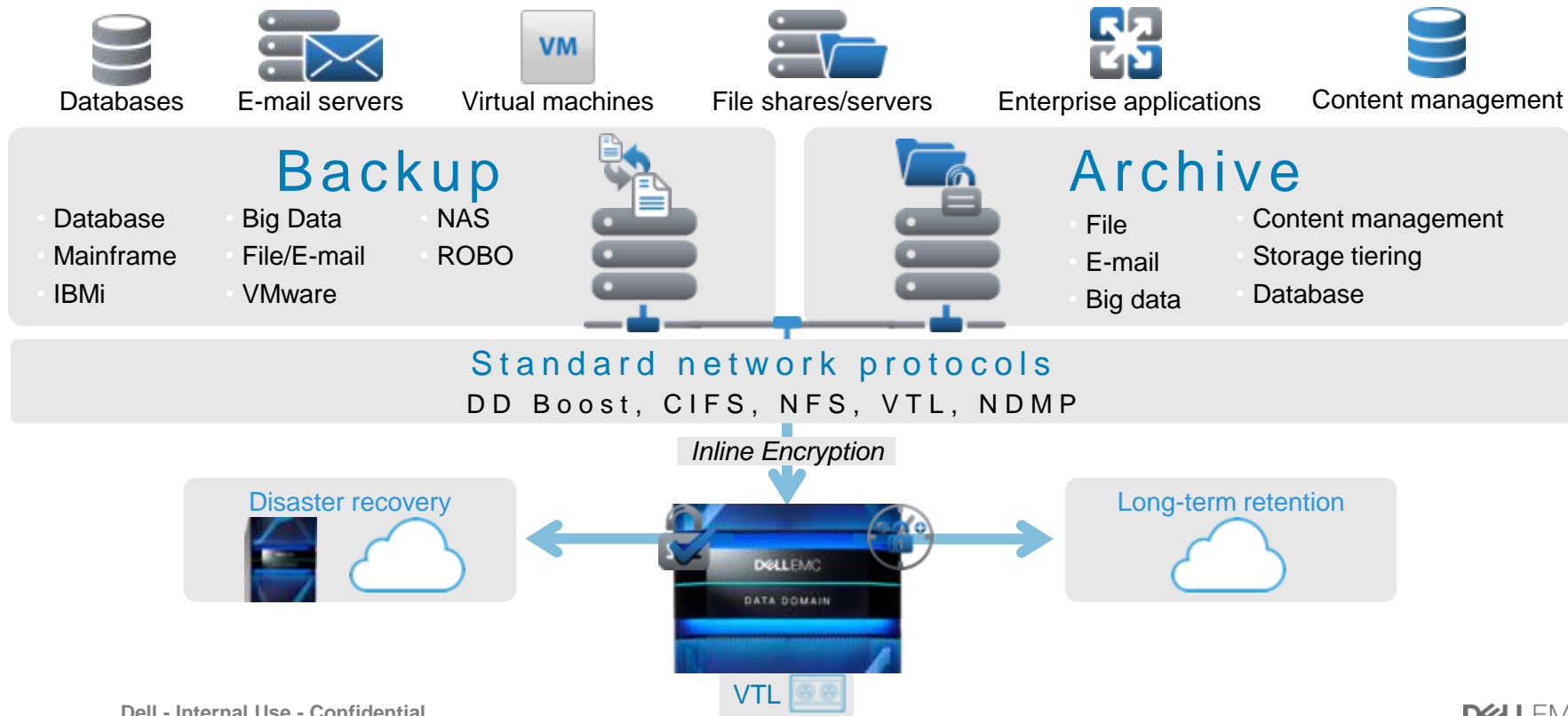
CLOUD-ENABLED

- Natively tier deduplicated data to the cloud for modern long-term retention
- Copy backed-up VMs to the public cloud (AWS) for disaster recovery

... Powered by Data Domain software

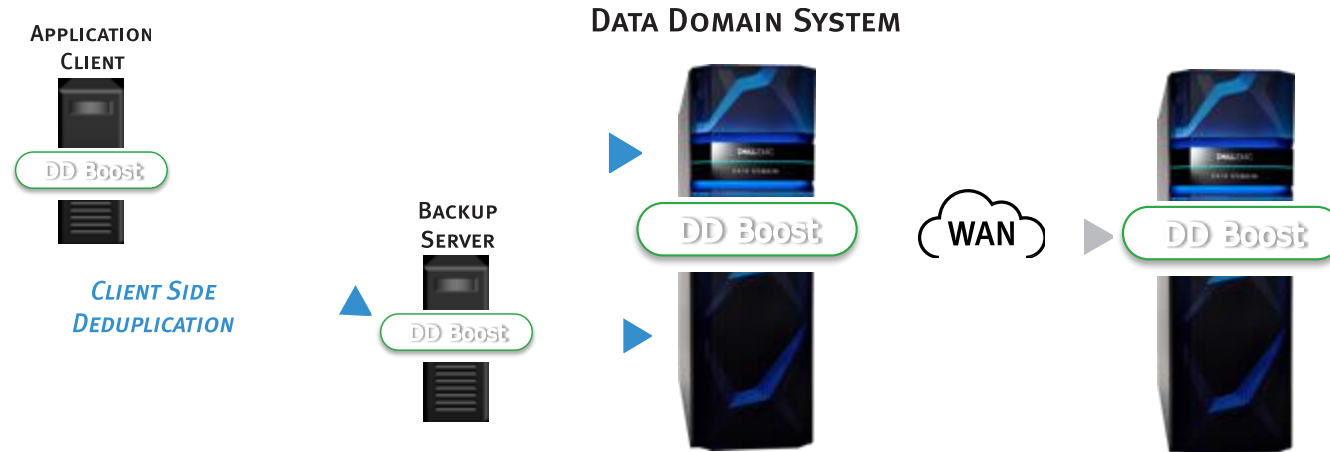
The Ultimate Protection Storage

- Protect everything on a single platform

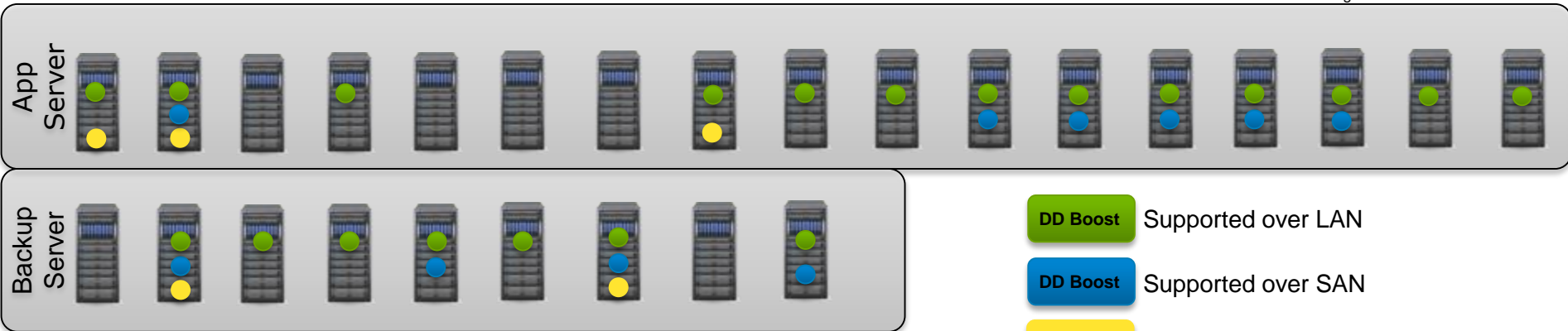


Faster, More Efficient Backup

- Data Domain Boost
- Advanced integration with leading backup and enterprise applications
- Speeds backups by up to 50%
- Reduce network utilization by up to 99%



Data Domain Boost Ecosystem



- DD Boost Supported over LAN
- DD Boost Supported over SAN
- DD Boost Supported over WAN

For everything else, use the DD Boost file system plug-in



Empowering Application Owners

- DD Boost for Enterprise Applications







- **Native** app integration
- **Efficient** backup & replication
- **Controlled** by app team

Flash-enabled performance and instant access

- Improved Random IO thanks to the inclusion of flash SDD for metadata
- Backup applications such as Dell EMC Avamar can instantly access **20x faster**
- Boot VMs directly from Data Domain using a protection copy



DD6300 Small & Midmarket Enterprise	DD6800 Midmarket Enterprise	DD9300 Large Enterprise	DD9800 High-End Large Enterprise
			
1.8X Faster	1.3X Faster	1.4X Faster	1.2x Faster

High Availability

ACTIVE Controller



STANDBY Controller



- High availability of backup, archive, and recovery data on Data Domain ensures operational continuity to minimize downtime for users and processes.
- HA configurations are supported on DD9800, DD9300 & DD6800 and the legacy DD9500
 - Delivering business continuity for both Large and Midsized Enterprises

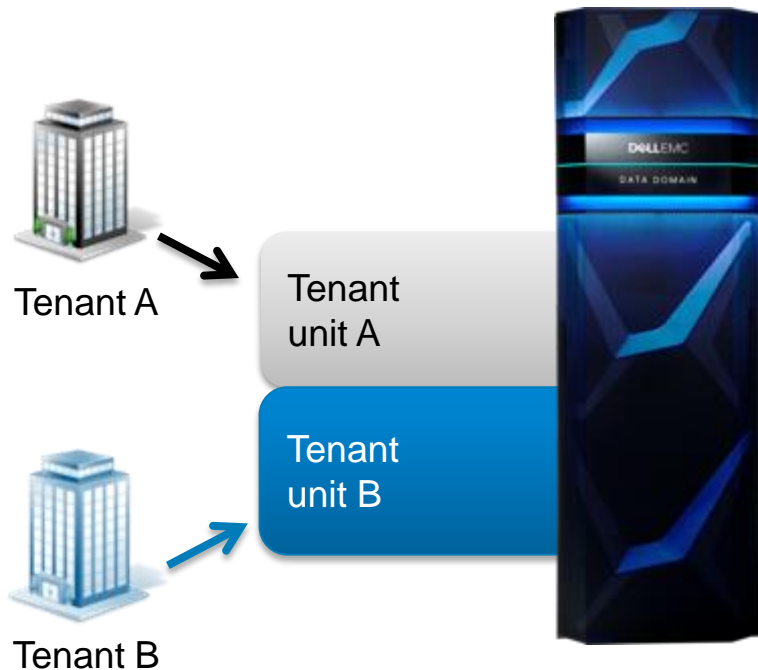
Most Reliable Protection Storage

- Data Domain Data Invulnerability Architecture



Secure Multi-Tenancy

- Delivering data protection as a service



- Deliver data domain in a private/hybrid cloud
- Logically isolate user data for secure self-service
- Tenant-level management and reporting

Data Domain and Data Protection Suite Family

- Comprehensive, industry-leading data protection



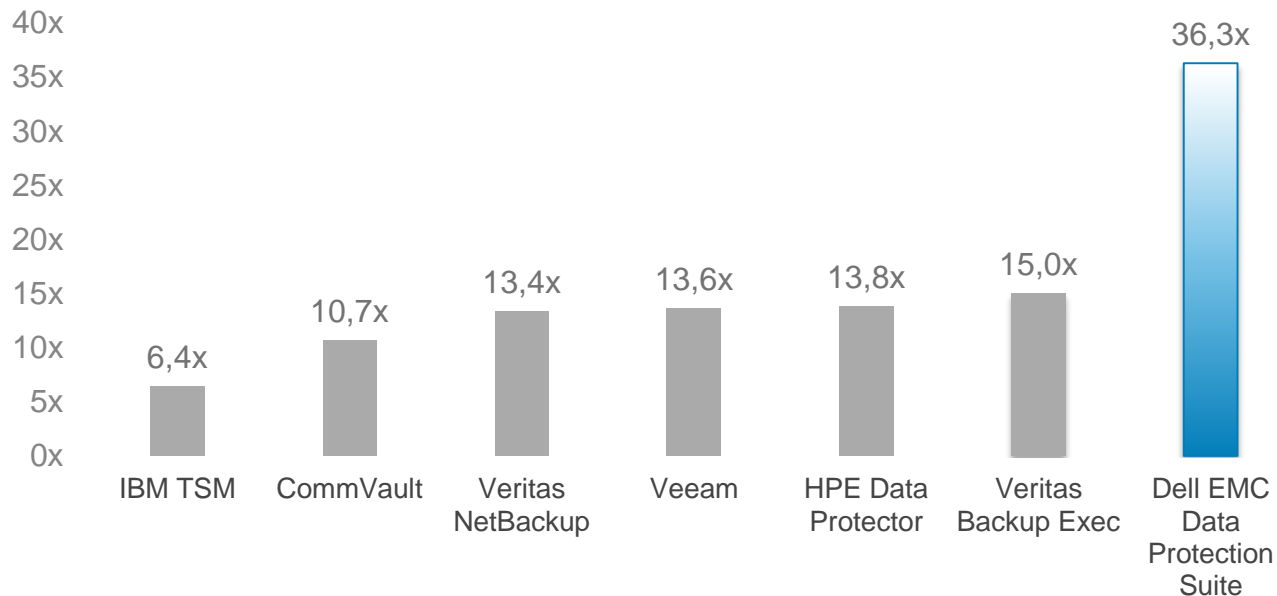
- **Data Domain Flexible Integration**
 - Offers flexible integration with protection and management software through the Data Protection Suite Family.
- **The Data Protection Suite Family Includes:**
 - Data Protection Suite for Backup
 - Data Protection Suite for VMware
 - Data Projection Suite for Archive
 - Data Protection Suite Enterprise Edition

Data Domain + Data Protection Suite for Backup

Better Together



Average dedupe rate by backup software



Data Domain Replicator

- Efficient replication for backup and archive data
- Reduces bandwidth requirements up to 98%
- Protects sensitive data when replicating over untrusted networks
- Consolidates backup and archive data from hundreds of remote sites



Data Domain Cloud Tier (Available Add-On)

- Unparalleled efficiency for tiering protection storage to the cloud



- **Simple:** automated, native tiering to public, private or hybrid cloud
- **Cost-effective:** send and retrieve only unique data for lower TCO
- **Open:** broad ecosystem and flexible deployment options

Data Domain Virtual Edition

- Software defined protection storage



- Download and deploy in minutes
- Flexible capacity scales up to 96 TB
- Leverage existing infrastructure
- Includes
 - DD Boost, DD Replicator, DD Encryption
- DD Cloud Tier supported on prem

INTRODUCING

Data Domain DD3300

The innovative power of small

Designed for entry-level, branch and departmental data protection



Simple and
comprehensive

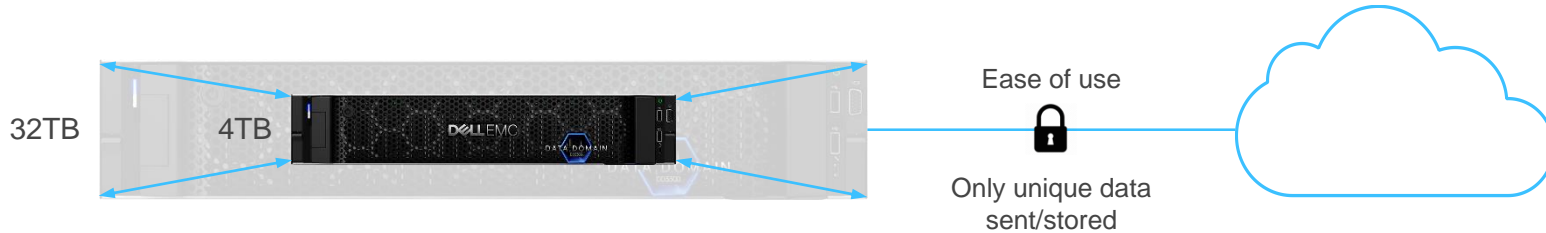
Cloud-ready

Multi-site scalability

DELL EMC DATA DOMAIN DD3300

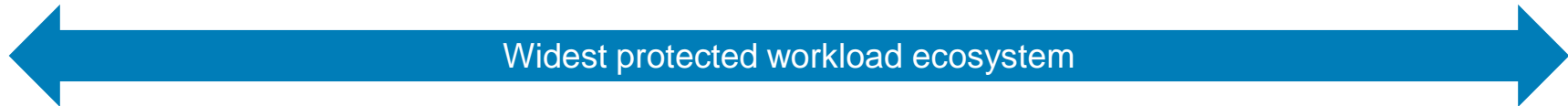
Simple and Comprehensive

Enterprise-level capabilities for entry-level



Small and robust (2U)

10-55x avg dedupe rate



Physical



Home grown & custom apps



Virtual

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)	7.0 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 ¹ 600 TB–4.8 PB ²	1.8–8.9 PB	2.8–14.4 PB ¹ 8.4–43.2 PB ²	7.2–36 PB ¹ 21.6–108 PB ²	10–50 PB ¹ 30–150 PB ²
Usable capacity	4 TB–32 TB ¹ 12 TB–96 TB ²	Up to 178TB	Up to 288 TB ¹ Up to 864 TB ²	Up to 720 TB ¹ Up to 2.16 PB ²	Up to 1 PB ¹ Up to 3 PB ²

¹ Total capacity on Active Tier only

² Total capacity with DD Cloud Tier software for long-term retention

DELL EMC DATA DOMAIN DD3300

Cloud Ready

Extend Dell EMC DD Cloud Tier to entry-level, branch and departmental environments



Automated and efficient
data copy

Up to **4.8 PB**

Eliminates the need for

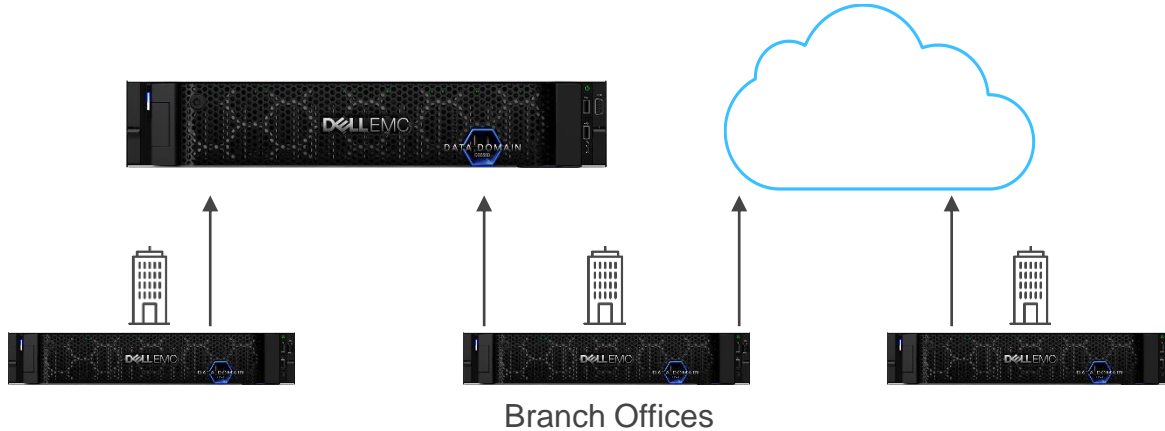
logical capacity managed by a single DD3300 including long-term retention

API extensible for
simplified management

DELL EMC DATA DOMAIN DD3300

Multi-Site Scalability

Any application, multi-hypervisor and cloud



Small and robust platform

Simple and elegant scalability

Extensible via API's for efficient management

DELL EMC DATA DOMAIN DD3300

Multi-Site Scalability

Any application, multi-hypervisor and cloud



Single point of management
across branch offices



Branch Offices

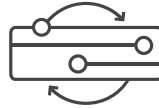
Multi-Site Scalability with Flexibility

Options to grow with your customers needs



Purchase

Affordable pricing



**Physical
Ease of upgrades**

*Available as 4TB,
16TB & 32TB*



**Cloud Tier
Pay as you grow**

Grow in 1TB increments

Data Domain Management Center

- Virtual appliance for multi-system management



- Dashboards show the aggregate status of all data domain systems: at-a-glance monitoring
- Manages and monitors up to 100 data domain systems through a single interface
- Role-based access control restricts access to authorized users

Data Domain DD3300 – Innovative Power of Small

Modern Data Domain system designed for Entry Level, Branch and Departmental Data Protection



- Comes with **4 TB**, **16 TB**, or **32 TB** of usable capacity
- Up to **4.8 PB** logical capacity with Dell EMC's leading deduplication
- Cloud-ready with **DD Cloud Tier** support for long-term cloud retention
 - Expand cloud capacity in **1 TB** increments
- Backup **56 TB** in **8 hours** with a throughput of **7.0 TB/hr** with **DD Boost**
 - **4.2 TB/hr** without DD Boost

1.5x
Faster

5.6x
More
scalable

Compared with
DD2200

Data Domain DD3300 vs Legacy DD2200



Use Case/ Aspect	Dell EMC Data Domain DD3300	EMC Data Domain DD2200
• Throughput	● 2.3 TB/hr, 5.5 TB/hr, 7.0 TB/hr	◐ 4.7 TB/hr
• Capacity	● 4 TB, 16 TB, 32 TB ¹ 12 TB, 48 TB, 96 TB ²	◐ 4 TB, 7.5 TB, 17.1 TB
• Long-term cloud retention	● AWS, Azure, Virtustream, Dell EMC Elastic Cloud Storage	◐ N/A
• Virtual Tape Library	◐	●
• Fibre Channel	◐	●

¹ Total capacity on Active Tier only

² Total capacity with DD Cloud Tier software for long-term retention

Data Domain DD3300

Innovation without compromise



Simple and
comprehensive

2U platform

*with wide protected
application ecosystem*

Modern UI

Intuitive user interface

Cloud-ready

Up to 4.8PB

logical capacity with the cloud

Cloud LTR & Cloud DR

as available DD Add-Ons

Multi-site scalability

10-55x

avg dedupe rate

Up to 98%

lower bandwidth requirement

Пример применения систем Data Domain

Пример отчета с DD от реального заказчика

DELL EMC |  Заказчик - Банк

```
From: 2015-09-15 06:00 To: 2015-09-22 06:00
```

	Pre-Comp (GiB)	Post-Comp (GiB)	Global-Comp Factor	Local-Comp Factor	Total-Comp Factor (Reduction %)
-----	-----	-----	-----	-----	-----
Currently Used:*	125570.1	1509.2	-	-	83.2x (98.8)
Written:					
Last 7 days	33845.7	68.0	207.8x	2.4x	497.5x (99.8)
Last 24 hrs	4160.1	9.3	180.9x	2.5x	445.2x (99.8)
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Защищено



Логический

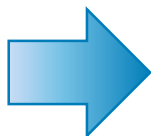
125 TB

Использовано



Физический

1,5 TB



83 x
Дедупликация

D  **LEMC**