



Решения Dell Technologies для резервного копирования данных для частных и публичных облаков.

4-6 сентября 2019
МОСКОВСКАЯ ШКОЛА УПРАВЛЕНИЯ СКОЛКОВО



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Технологии настоящего, инновации будущего



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PARTNER PROGRAM

Data Protection Challenges

CHALLENGES

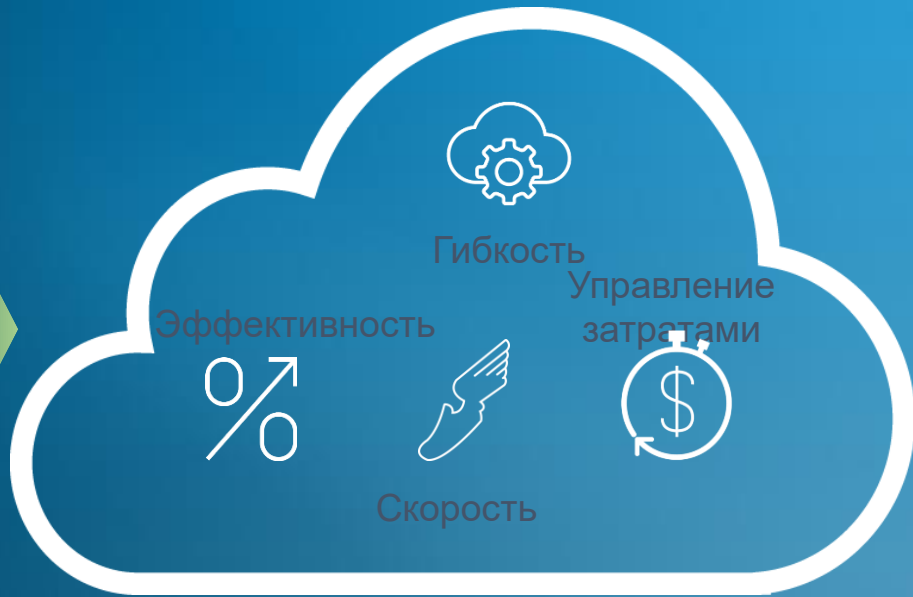

Рост объемов,
пользователя,
приложений


ИТ
трансформация


Делай больше
меньшими
ресурсами



IaaS / PaaS



“CLOUD FIRST”

Защита данных в облаках

67%

Переоценка
поставщиков защиты
данных

30% ESG

Сменят поставщика
поддерживающего
облака

47% ESG

Самый экономичный
носитель для резервного
копирования

74% ESG

объем резервных копий
будет размещены on-
premise

85%

Бизнесов будет программно
определяемыми в течении
ближайших 5 лет
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5%

Дисковых хранилищ
переместиться в облака
в течении 2 лет

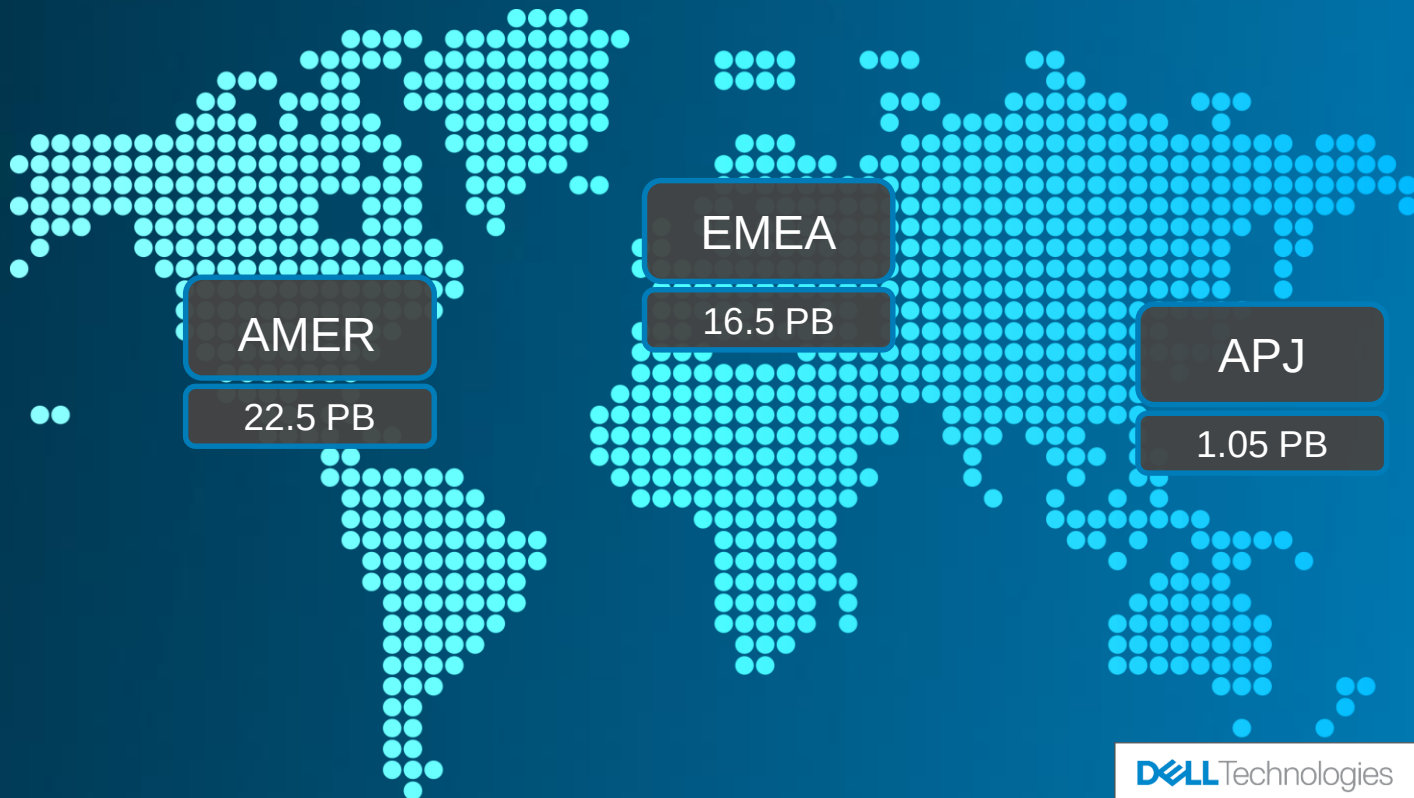


Защита данных

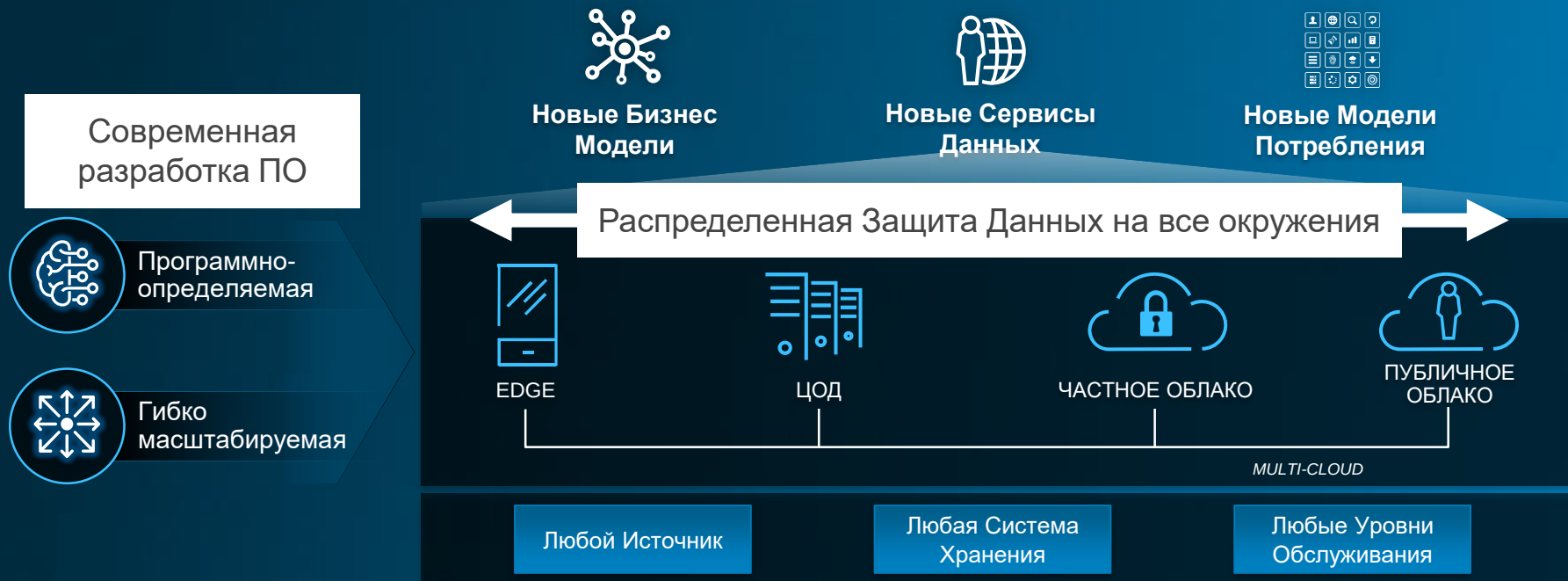
40 PB (400 PB @ 10x)

Usage Drivers

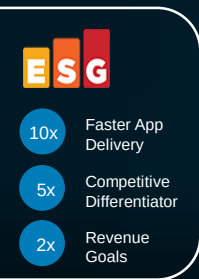
- 1 DD VE
- 2 DD Cloud Tier
- 3 Cloud Boost



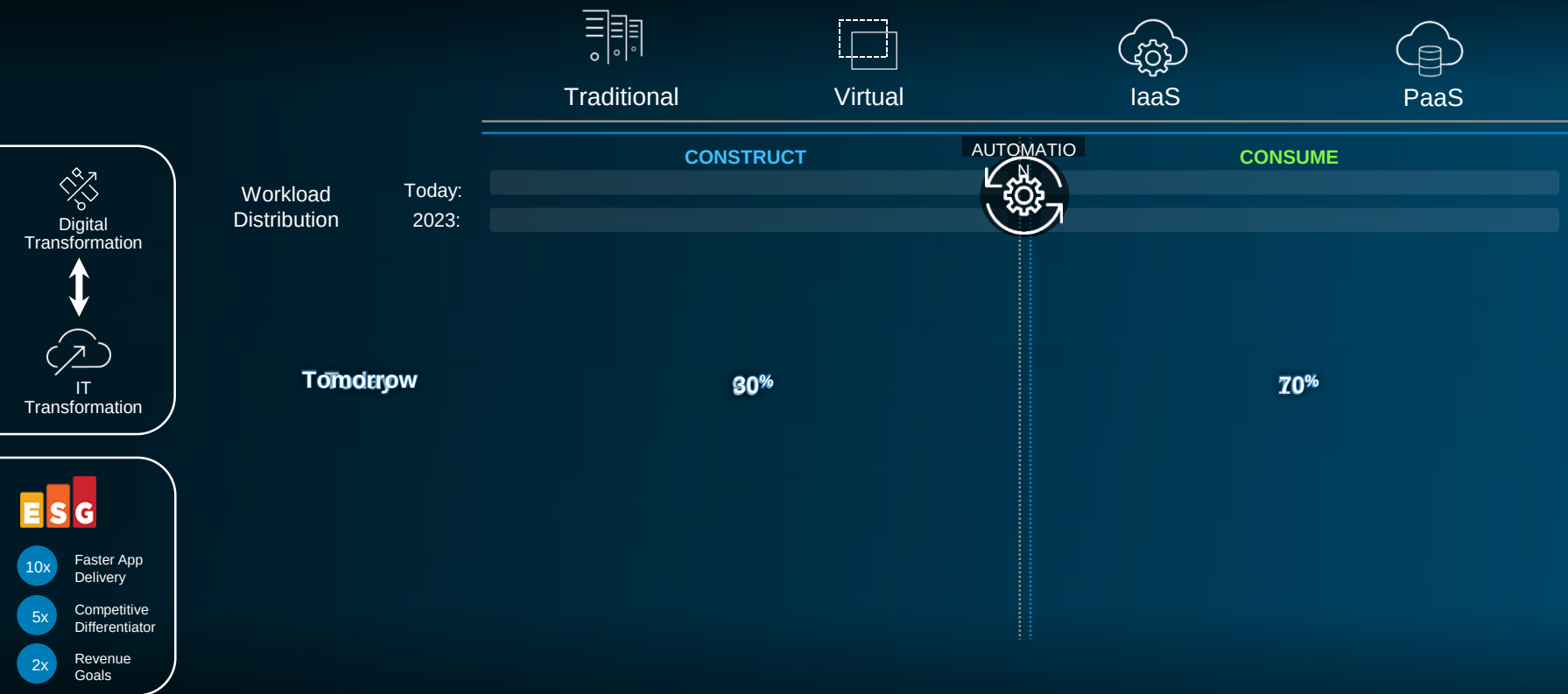
“Data-First” Стратегия



ЗАЩИТА ДАННЫХ СЛЕДУЮЩЕГО ПОКОЛЕНИЯ



ЗАЩИТА ДАННЫХ СЛЕДУЮЩЕГО ПОКОЛЕНИЯ



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ЗАЩИТА ДАННЫХ СЛЕДУЮЩЕГО ПОКОЛЕНИЯ

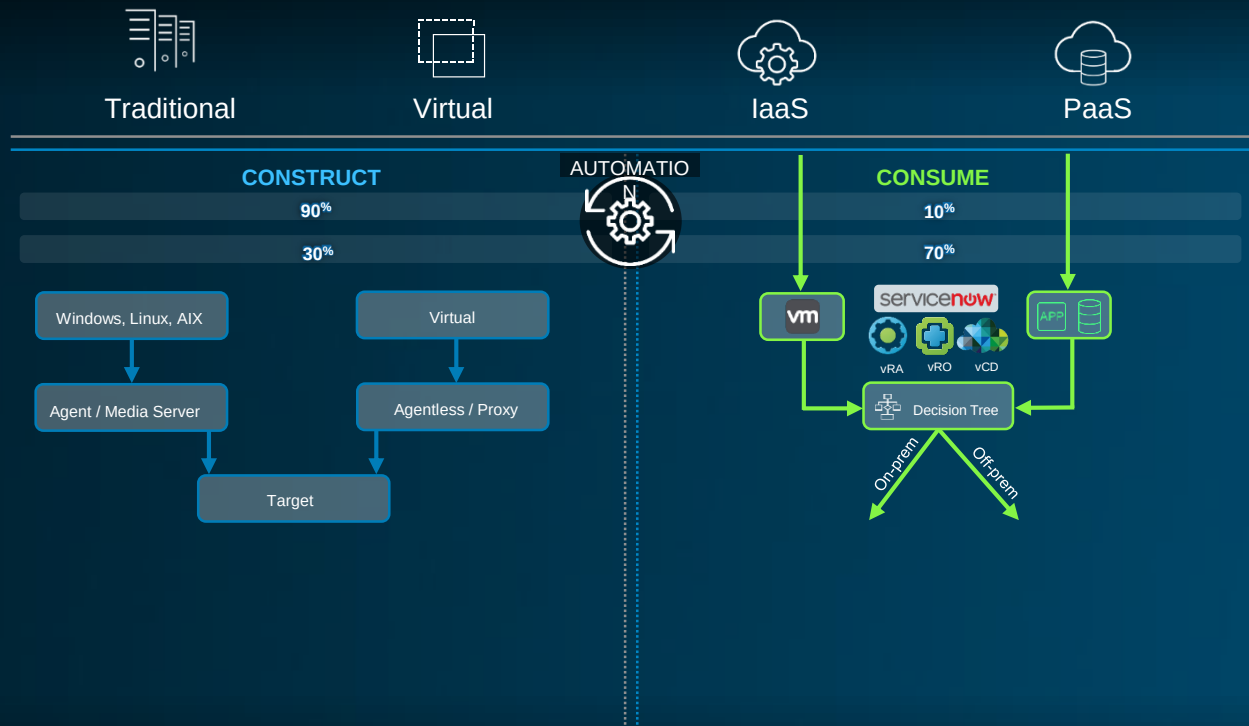


- 10x Faster App Delivery
- 5x Competitive Differentiator
- 2x Revenue Goals



Workload Distribution

Today:
2023:



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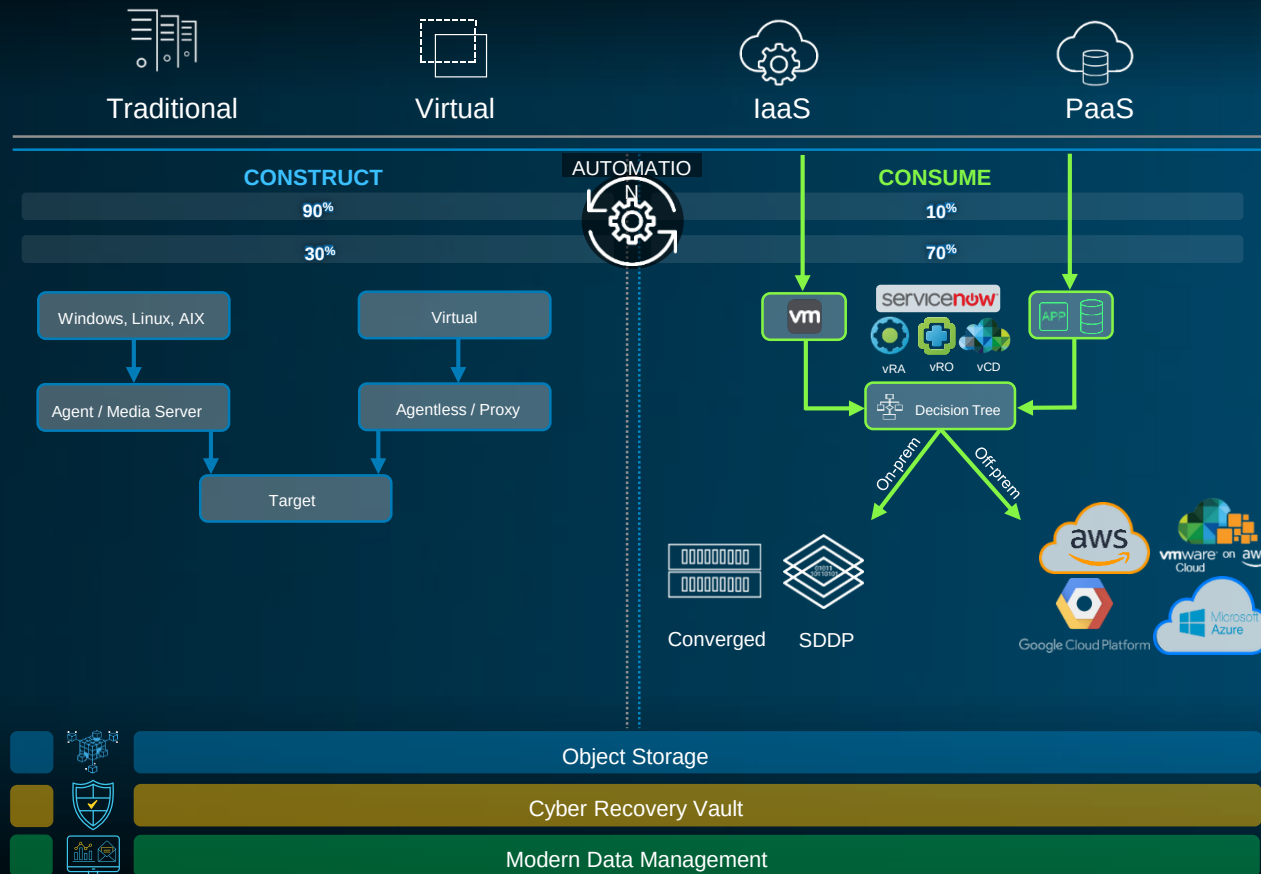
ЗАЩИТА ДАННЫХ СЛЕДУЮЩЕГО ПОКОЛЕНИЯ



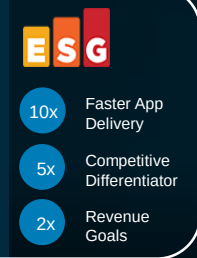
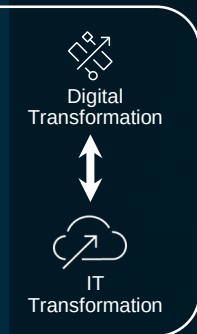
- 10x Faster App Delivery
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Workload Distribution

Today:
2023:

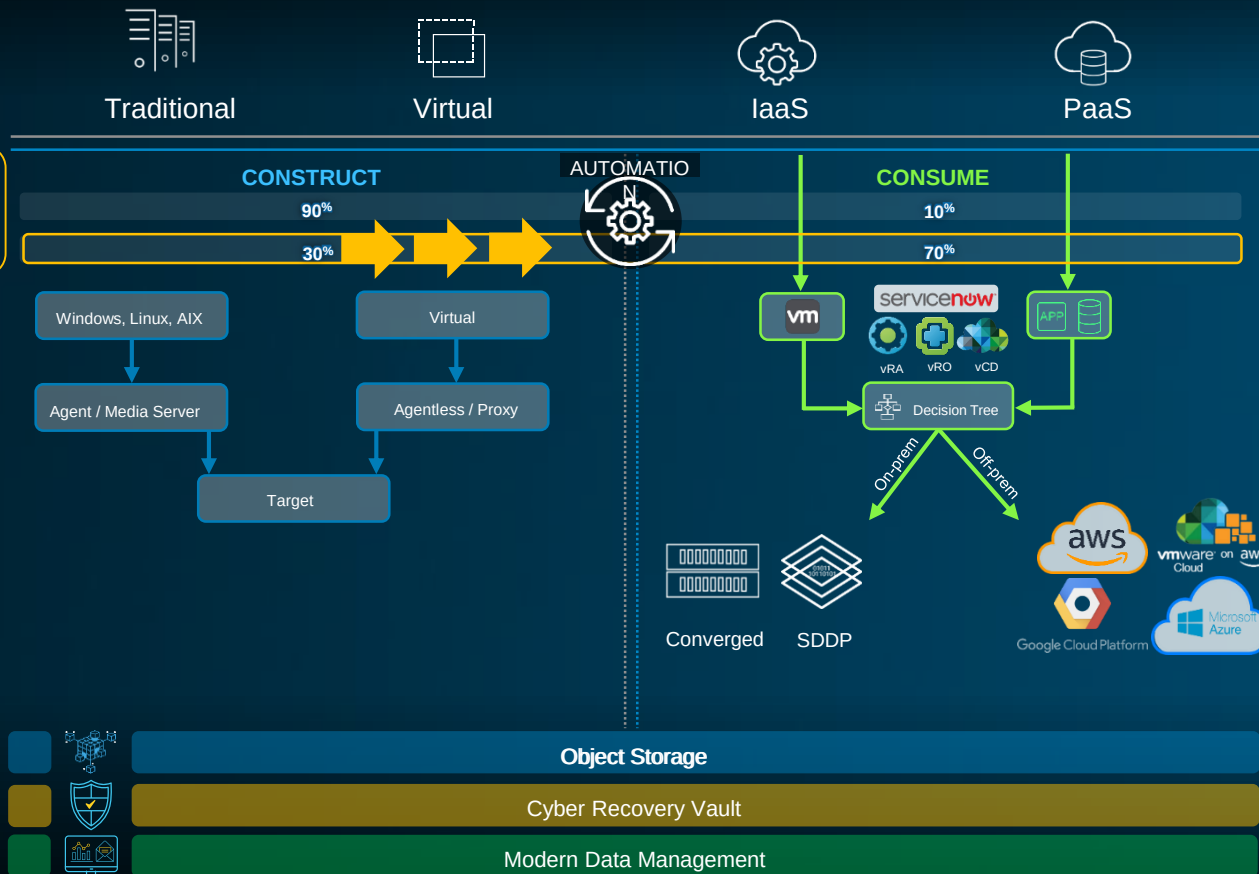


ЗАЩИТА ДАННЫХ СЛЕДУЮЩЕГО ПОКОЛЕНИЯ

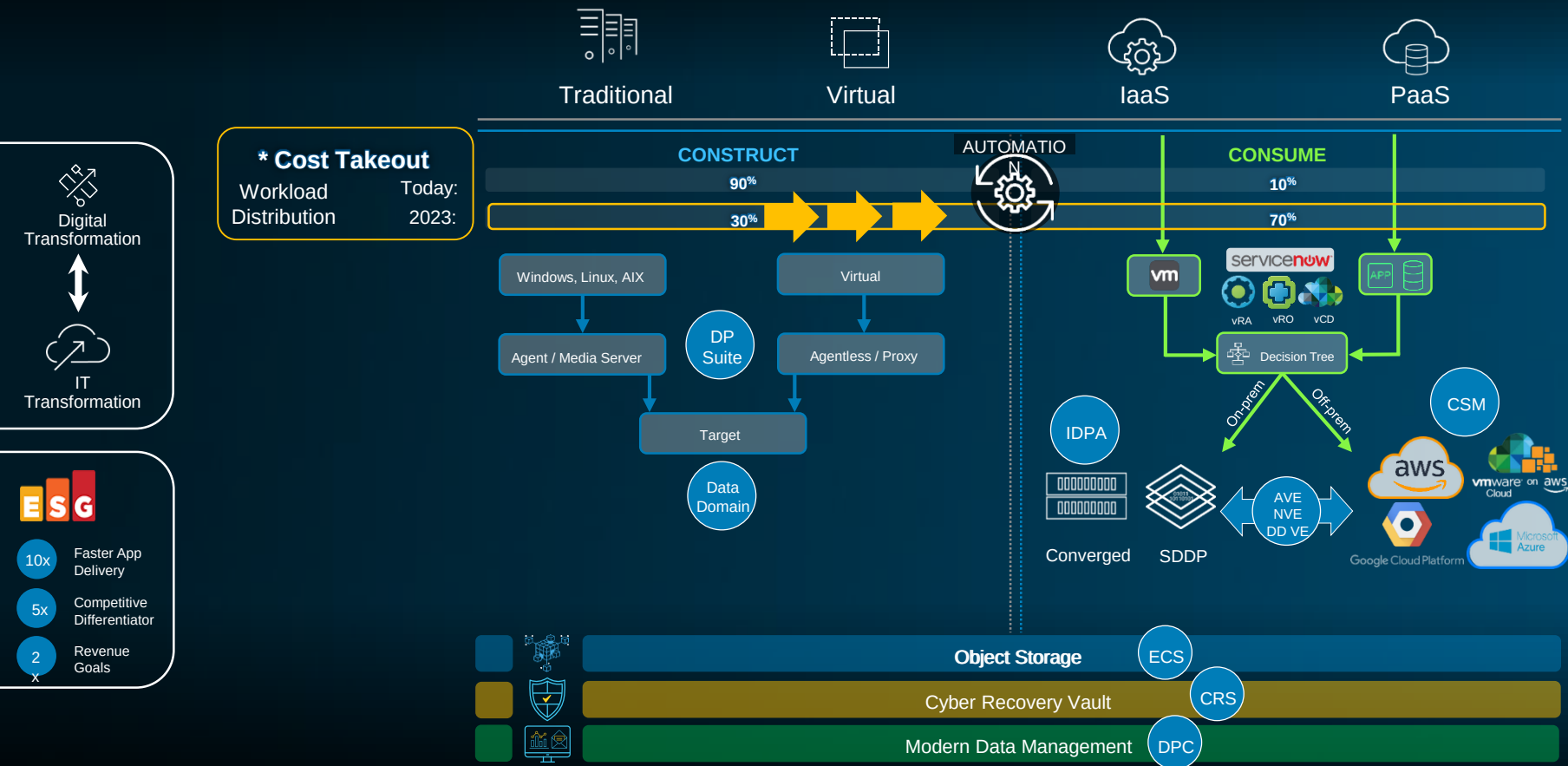


*** Cost Takeout**

Workload Distribution Today: 2023:



ЗАЩИТА ДАННЫХ СЛЕДУЮЩЕГО ПОКОЛЕНИЯ





Cloud Use Cases

EXTEND TO CLOUD



**LONG TERM
RETENTION**



**BACKUP
TO CLOUD**



**CLOUD
DR**

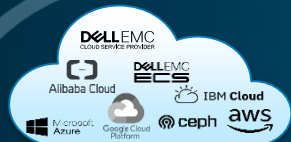
IN CLOUD



**IN CLOUD
PROTECTION**



ЗАЩИТА ДАННЫХ СЛЕДУЮЩЕГО ПОКОЛЕНИЯ



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

Важность архитектуры

Комплексность

Гибкость выбора

Самый надежный
поставщик

In-Cloud Protection Storage on



- The performance, efficiency, and reliability of Data Domain in the cloud
- Backup traditional and emerging applications
- Scales up to 96TB
- On S3 or Hot Blob for Lower TCO
- ***Now on Google Cloud Platform***

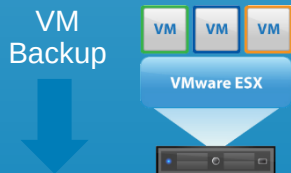


Data Domain Virtual Edition 4.0



Cloud Disaster Recovery

Extend Dell EMC on-prem data protection



Protect to Cloud Storage



Recover in Cloud



Simple to End Orchestration

Cloud DR

- DR testing & failover to AWS
- Failback to on-premises
- Recover in minutes, reducing RTO
- Application consistent recovery to AWS
- Recover directly to VMware Cloud on AWS

3 clicks to failover

Protect in AWS

- Minimal cost & footprint – pay for EC2 only in case of DR test or failover
- Seamless integration with on-premises DP
- Best-in-class deduplication
- Leverage what you know and own

2 clicks to failback

DELLEMC

Data Domain on AWS S3

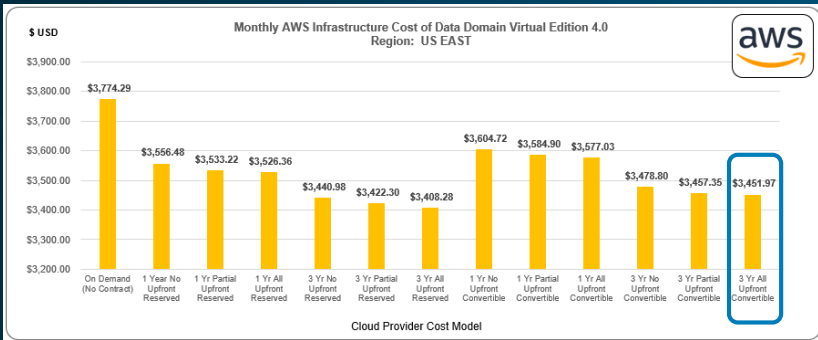
самая низкая стоимость хранения

25x

1/10th of 1¢ Per GB Per Month



Cloud Provider	Cost Model	Monthly Cost	Yearly Cost
AWS	On Demand (No Contract)	\$ 3,774.29	\$ 45,291.46
AWS	1 Year No Upfront Reserved	\$ 3,556.48	\$ 42,677.74
AWS	1 Yr Partial Upfront Reserved	\$ 3,533.22	\$ 42,398.62
AWS	1 Yr All Upfront Reserved	\$ 3,526.36	\$ 42,316.30
AWS	3 Yr No Upfront Reserved	\$ 3,440.98	\$ 41,291.74
AWS	3 Yr Partial Upfront Reserved	\$ 3,422.30	\$ 41,067.58
AWS	3 Yr All Upfront Reserved	\$ 3,408.28	\$ 40,899.34
AWS	1 Yr No Upfront Convertible	\$ 3,604.72	\$ 43,256.62
AWS	1 Yr Partial Upfront Convertible	\$ 3,584.90	\$ 43,018.78
AWS	1 Yr All Upfront Convertible	\$ 3,577.03	\$ 42,924.34
AWS	3 Yr No Upfront Convertible	\$ 3,478.80	\$ 41,745.58
AWS	3 Yr Partial Upfront Convertible	\$ 3,457.35	\$ 41,488.18
AWS	3 Yr All Upfront Convertible	\$ 3,451.97	\$ 41,423.62

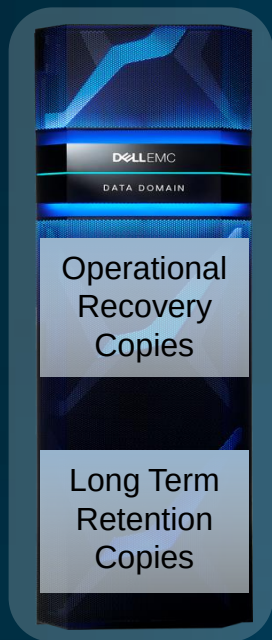


Dedupe Rate	Capacity	Cost Per GB Per Month *
0	96 TB	\$.0351
5x	480 TB	\$.0070
10x	960 TB	\$.0035
15x	1.44 PB	\$.0023
20x	1.92 PB	\$.0018
25x	2.4 PB	\$.0014

* 3 Year All Upfront Convertible

Long Term Retention to the Cloud

Operational Recovery



Tier
(Index)



Deduplicate / Encrypt

Long Term Retention

Infrequent Access



- Up to 2PB: 20 PB @10x Deduplication
- Leverage Low Cost Infrequent Access Cloud Storage
- Massive Scale – Low Cost
- Accelerate Tapeless Journey



Cloud Snapshot Manager

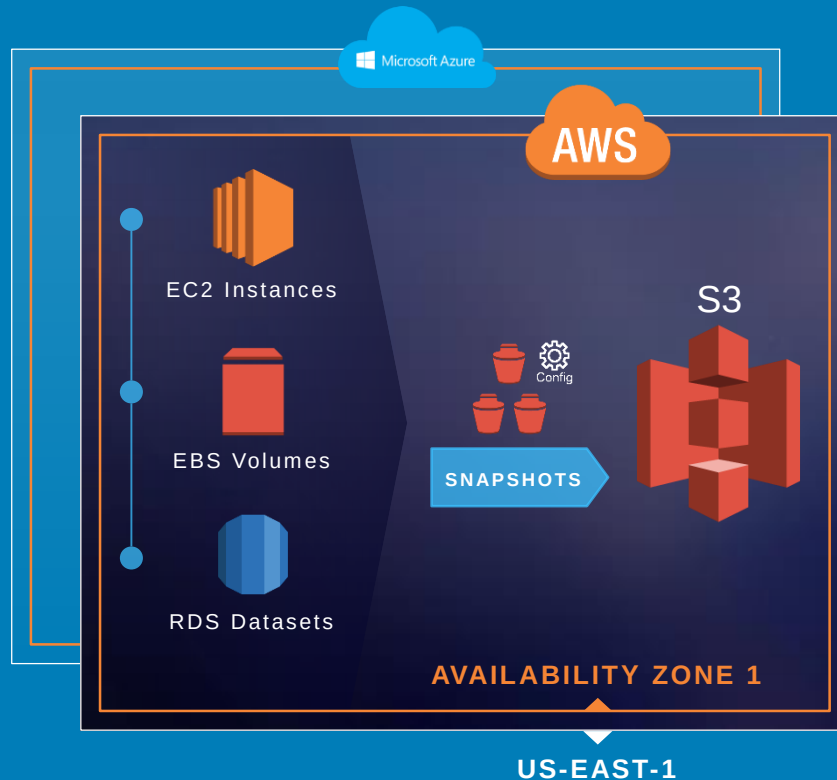
Прозрачная защита и DR между
несколькими облаками

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SaaS



- Modern UI
- Auto-scaling solution
- SaaS solution – Zero infrastructure



- Tag based policy management
- Auto discover instances
- Orchestrate snapshot creation/deletions per policy
- Preserve instance dependencies
- Protect instance configuration
- Restore within same or alternate availability zone
- Copy snapshots to other regions to recover from regional failures



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In-Cloud: Application Direct

Ускорение защиты данных для бизнес приложений

Cloud Provider



Native Application Integration



Next Gen Application

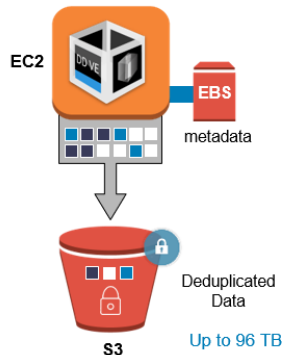


Middleware

DD Boost
Boost FS

Deduped & Compressed

Data Domain Virtual Edition 4.0



BENEFITS

- The performance, efficiency, and reliability of Data Domain in the cloud
- Directly protect traditional and emerging business applications
- Scales up to 96TB
- Leverage Industry leading deduplication for Lower TCO
- Self Service for DBA'S
- Native Application Integration
- 50% Faster Backups

INTRODUCING Dell EMC PowerProtect Software

Next generation Data Management software platform



**Software
defined**



**Multi-cloud
optimized**



**Self
service**



**SaaS-based
management**



**Modern services
based architecture**

Protection, Replication and Reuse with built-in deduplication



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Dell EMC Data Protection Portfolio

Existing portfolio



Portfolio post-PowerProtect launch

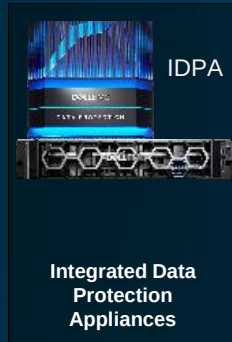
Choice of
Consumption

DELLEMC
POWERPROTECT &
SOFTWARE

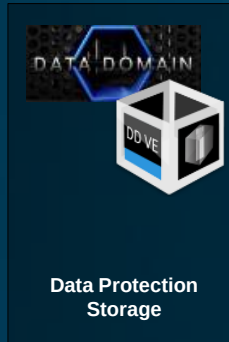


SOFTWARE

APPLIANCES



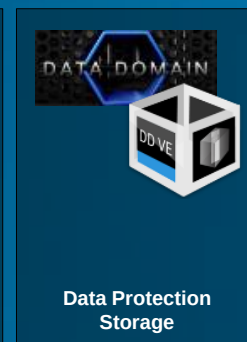
Integrated Data
Protection
Appliances



Data Protection
Storage



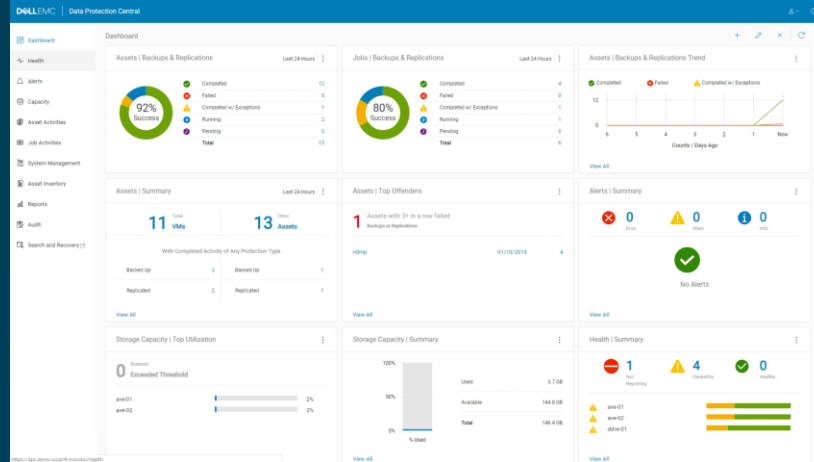
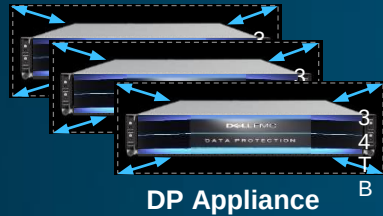
Data Protection
Appliances



Data Protection
Storage

Data Protection Central

Single pane of glass to monitor/manage your data protection environment





Демонстрация



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Спасибо
за внимание!



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