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Welcome



DATA CENTER & CLOUD
FORUM 2018

Keep your data under total control in the cloud!

Château du Lac - Genval

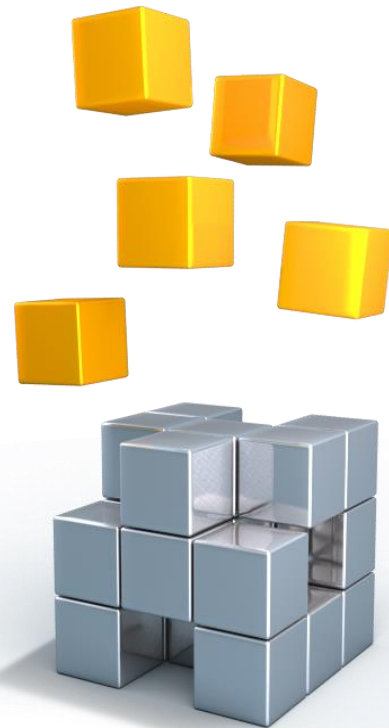
23 Octobre 2018

9:30 – 10:00

<https://datacenter-forum.eu/>

joaquim.neves@systemsolutions.be

Presales at System Solutions



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Idriss Aberkane



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*"Pour acheter un savoir,
il faut payer de l'attention multipliée par du temps"*

Knowledge = Time x Attention



Idriss Aberkane is a French teacher, lecturer and essayist.

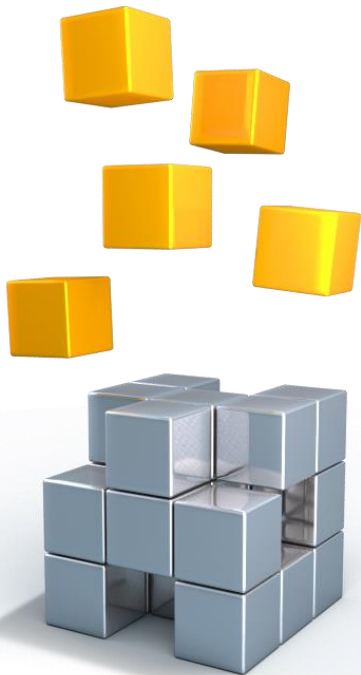
Known for his writings and lectures on economy of knowledge and neurosciences, he publishes a successful essay in 2016, entitled "Free up your mind".



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Agenda



✓ Veeam Backup for Office 365

➔ *To protect your O365 to a Public/on-Premises environments*

✓ HPE Cloud Bank

➔ *To protect on-Premises backups to Public/Private Clouds*



System Solutions Group



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SYSTEM SOLUTIONS GROUP

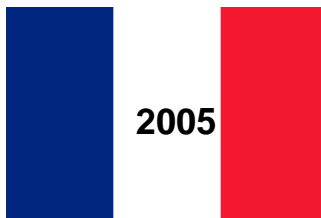
System Solutions
Luxembourg



1996



System Solutions
France



2005

System Solutions
Belgium



2010



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What we do in a nutshell?



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- **1996:** *On-premises IT Infrastructure*
- **2000:** *Licensing & Online*
- **2006:** *Staffing & Recruiting*
- **2011:** *Housing, Hosting, Private & Hybrid Cloud*
- **Now:** *XaaS “Anything as a Service” (BaaS, DRaaS, GPUaaS...)*



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Our Strategic Partners



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aruba®

**Hewlett Packard
Enterprise**



nimblestorage

a Hewlett Packard Enterprise company



vmware®



CITRIX®



veeam



Microsoft



SOPHOS



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Data Protection



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Backup's Definition:

"An independent copy of data that can be restored if the source system or service is unavailable."

3-2-1 Backup Rule:

- Have at least three copies of your data
- Store the copies on two different media
- Keep one **backup** copy offsite



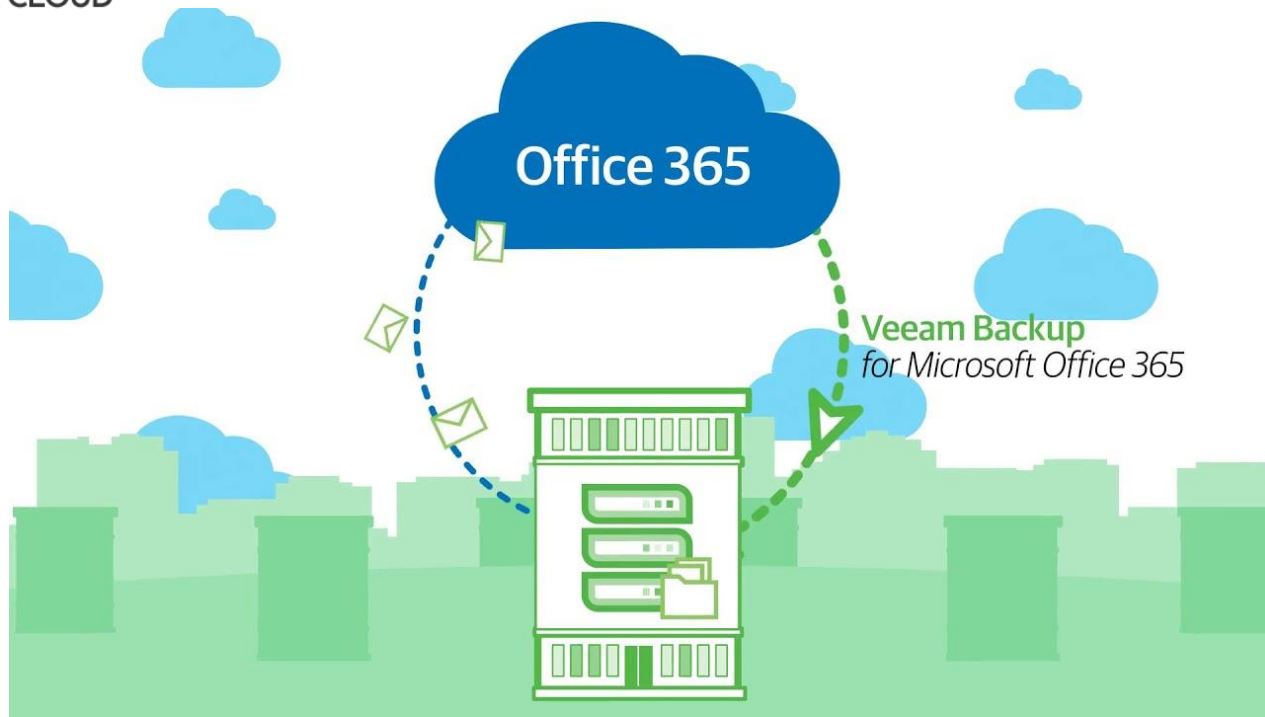
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Veeam Backup for O365



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→ To protect your O365 to a Public/on-Premises environments



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Microsoft Office 365 for Business



O365 for business includes access to **Office** applications and online productivity services, as well as:

- Exchange Online (**EXOL**)
- SharePoint Online (**SPOL**)
- OneDrive for Business (**OD4B**)
- Skype for Business (**S4B**) / Teams



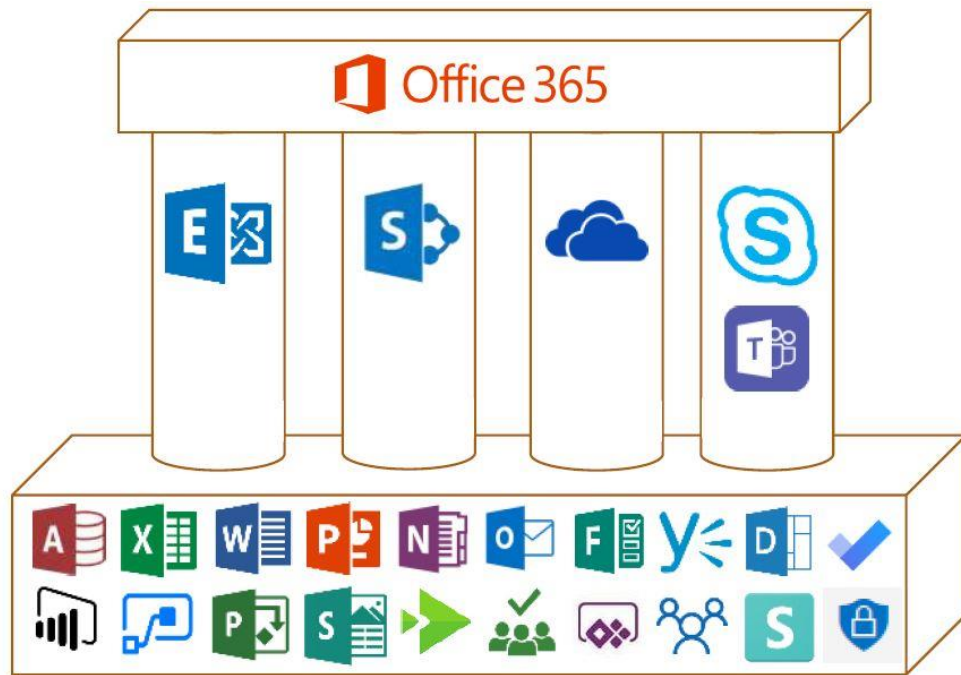
140M

Office 365 users



50M

more deploying now
or planning to in the next 12 months**



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What are we talking about here?



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Protecting your **local data** is an "easy game"...

But why do so many companies forget to protect their **SaaS data**?

How to secure an **Office 365** environment?



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Why do I need a backup of O365?



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*"Why do I need a backup?
Microsoft takes care of it."*

WRONG!

This is the biggest misunderstanding in the Office 365 market.

Customer perception

~~Microsoft takes care of everything~~



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Perception vs Reality



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Customer perception

~~Microsoft takes care of everything~~

WRONG!

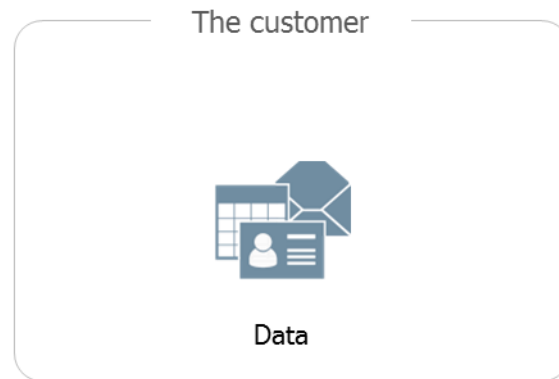


Uptime of Office 365



Customer reality

Microsoft takes care of the infrastructure,
but the data remains the customer's responsibility.



**Protection and long-term retention
of Office 365 data**



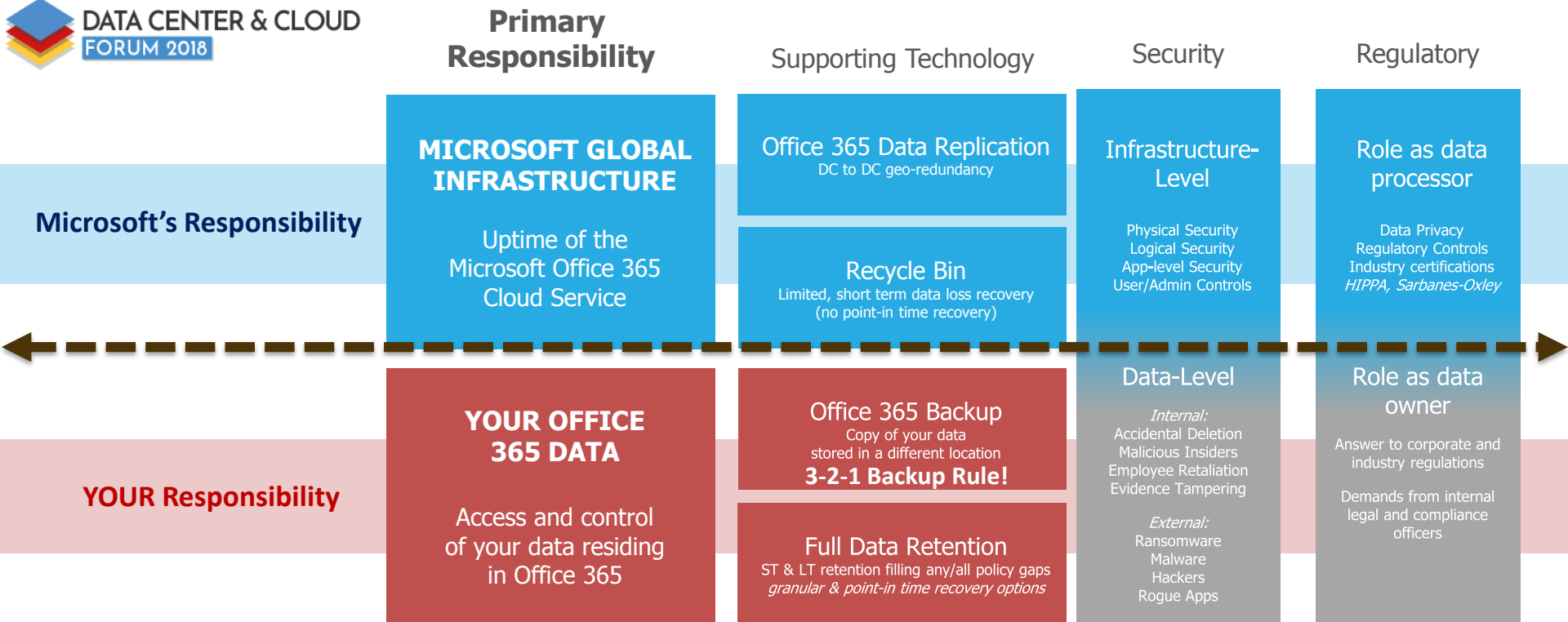
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The Shared Responsibility Model!



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Learn more from the [Office 365 Trust Center](#)



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Shared Responsibility Model Summary



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- Microsoft takes care of the infrastructure, but the data remains your responsibility
- With Office 365, it's your data. You own it. You control it!
- Office 365 Shared Responsibility Model: Uptime of the Microsoft Cloud Service
 - Office 365 Data Replication → DC to DC geo-redundancy
- Customer's Responsibility: Access and control of your data residing in Office 365
 - Copy of your data stored in a different location
 - Full data retention



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6 Reasons WHY you need an O365 backup



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**Accidental
deletion**



**Retention
policy
confusion /
gaps**



**Internal
security
threats**
Malicious insiders /
departing employees



**External
security
threats**
Ransomware /
rogue apps



**Legal and
compliance
requirements**



**Managing
hybrid
deployments
and
migrations**



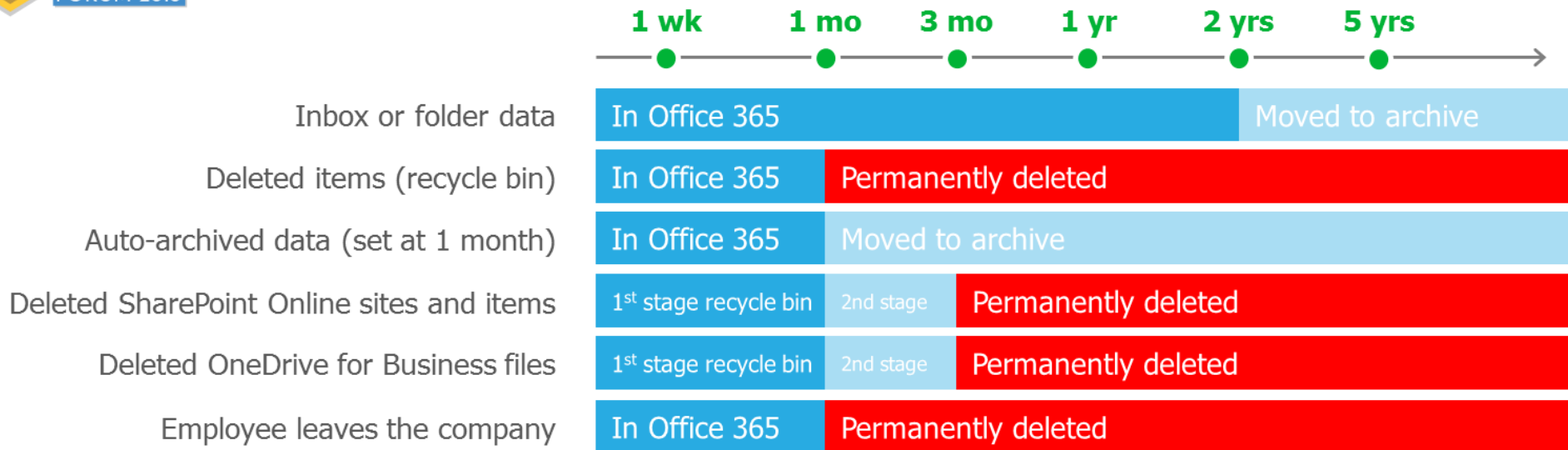
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Retention Policies: What exactly does Microsoft do?



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O365 retention policies **protect you from data loss in a limited way**!



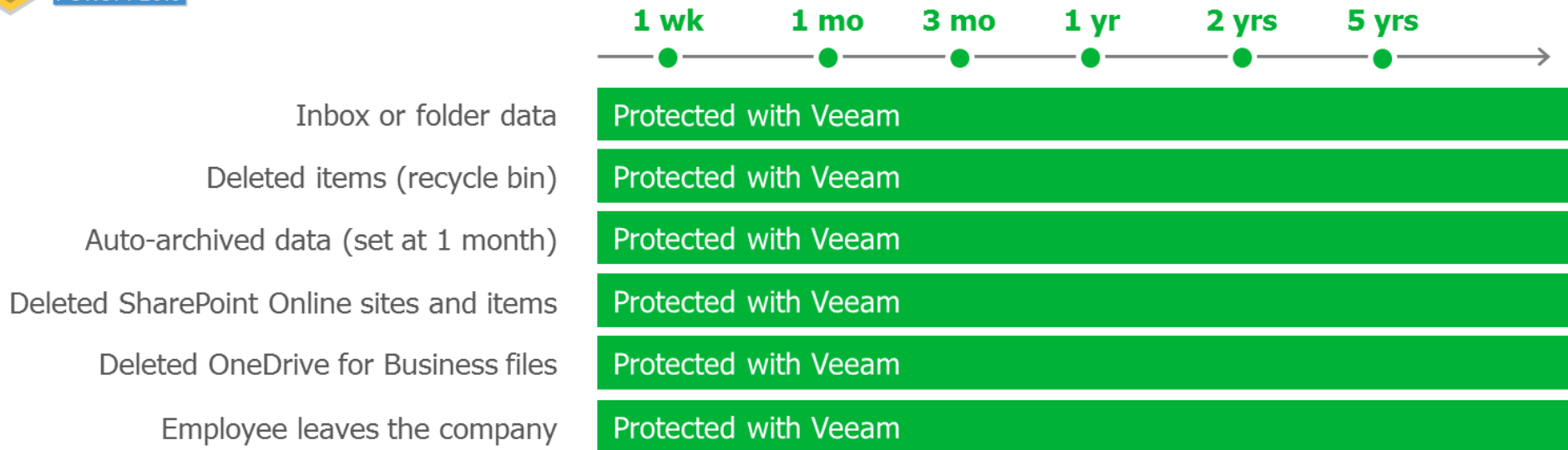
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Retention Policies: What does Veeam backup do?



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Veeam for O365 protects ALL of your Exchange Online email, OneDrive, SharePoint Online...

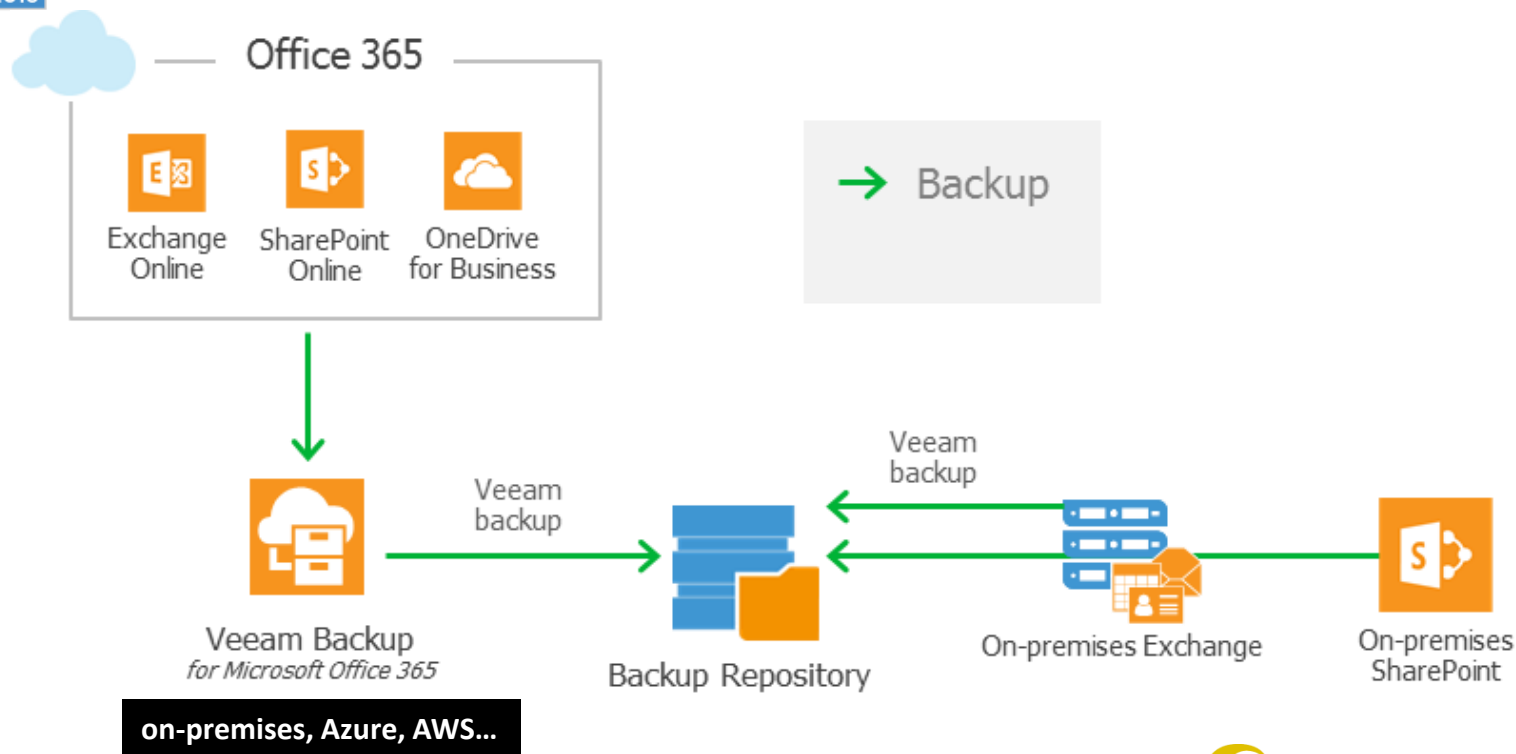


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Backup: How it works

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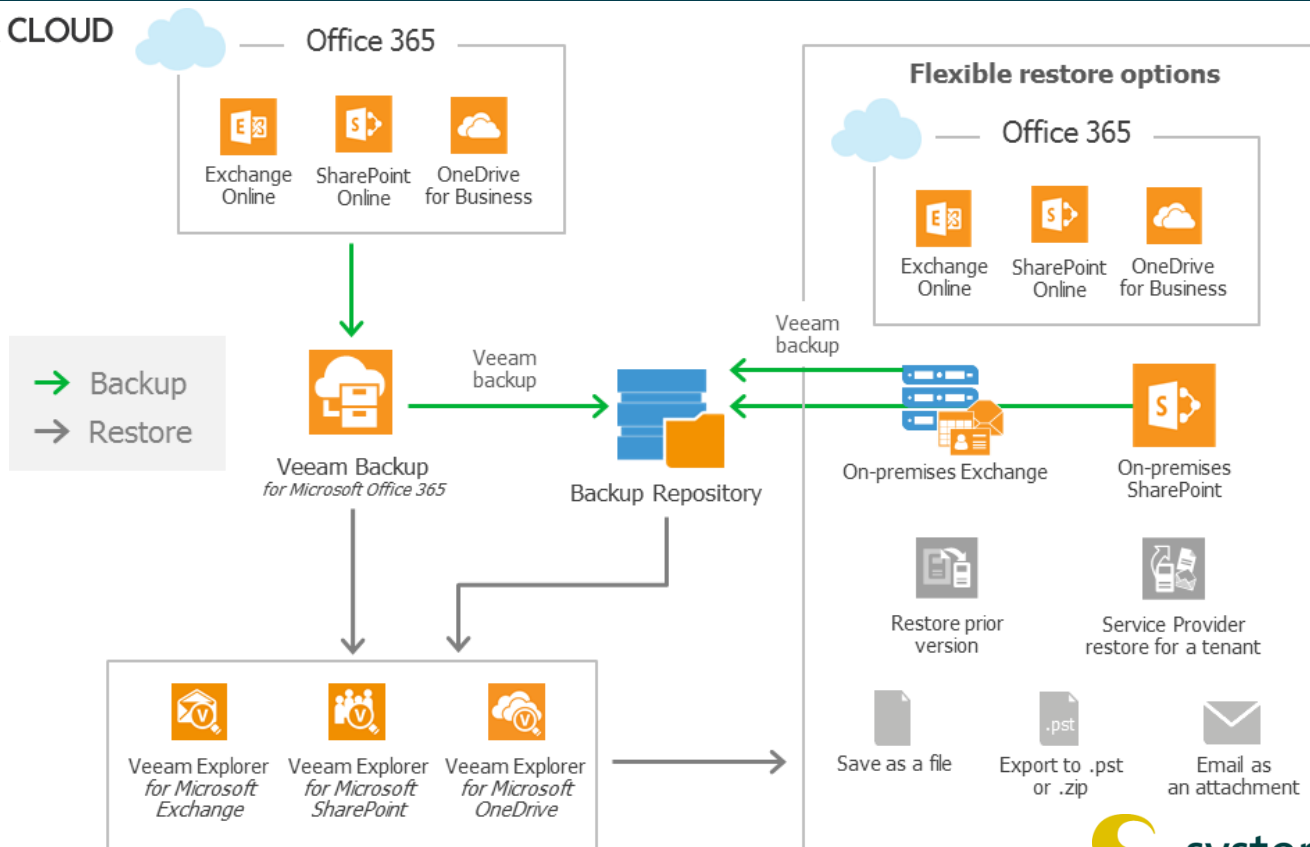
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Restore: How it works



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In Summary

Veeam Backup for Office 365



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Data protection
OneDrive for Business

Data protection
for Exchange

Data protection
for SharePoint

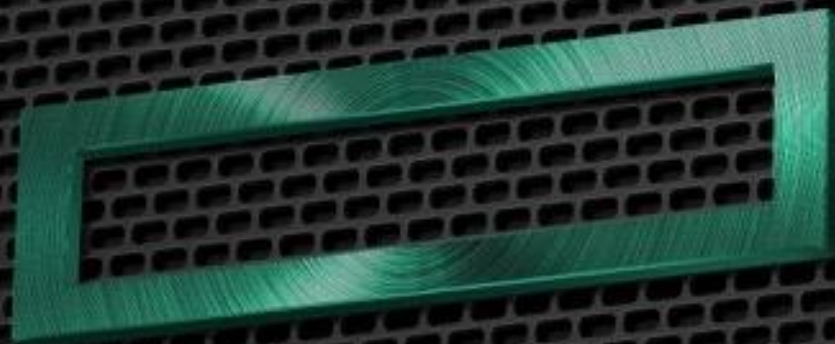
- Backup of Office 365 **to any location** (Azure, AWS, on-Premises...)
- Long-term retention
- Meet legal and compliance requirements
- Quickly restores Office 365 items
- Unified **on-Premises** and **SaaS** backup



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Hewlett Packard
Enterprise



HPE Cloud Bank

➔ *To protect on-Premises backups to Public/Private Clouds*





What are we talking about here?



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Protecting data is tougher than ever

Data growth is exploding

What / How about moving backups and archives to the Public Cloud?



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HPE Cloud Bank



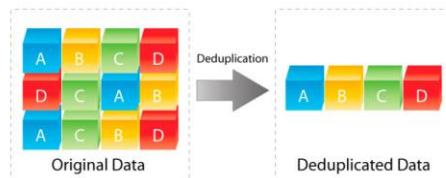
1. **New Tier of storage** for long term protection using **AWS**, **Azure** or on-premises **Object Storage**



2. **StoreOnce** – Disk-based backup appliance with built-in Catalyst deduplication



3. **Catalyst** – API / Protocol that allows deduplication anywhere!





What is StoreOnce Appliance?



StoreOnce is a “Tier 2” Storage Data Protection solution

StoreOnce is either supplied as a **hardware appliance** based or a **virtual machine (VM)**

Uses **deduplication technology “Catalyst”** to hold more backup data

Enables customer to move data over low-bandwidth **WAN**, **FC SAN** and **Ethernet** links

Provides HPE **Catalyst stores**, **Cloud Bank Storage**, traditional **NAS** and **VTL** Technology



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HPE StoreOnce Portfolio OCT 2018



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VSA*



3620

Up to 31.5 TB Local
+63 TB w/ Cloud Bank

Up to 500 TB local
+1PB w/ Cloud Bank
with up to 100
'nodes'

3640

Up to 108 TB local
+216 TB w/ Cloud Bank

5200 / 5250



Up to 216 TB / 864 TB local
+512 TB / 1728 w/ Cloud Bank



5650



Up to 1.7 PB local
+3.5 PB w/ Cloud Bank

Built on HPE ProLiant Gen10 servers

Typical backup deduplication ratio between 10:1 and 20:1



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* StoreOnce VSA is hardware **agnostic**



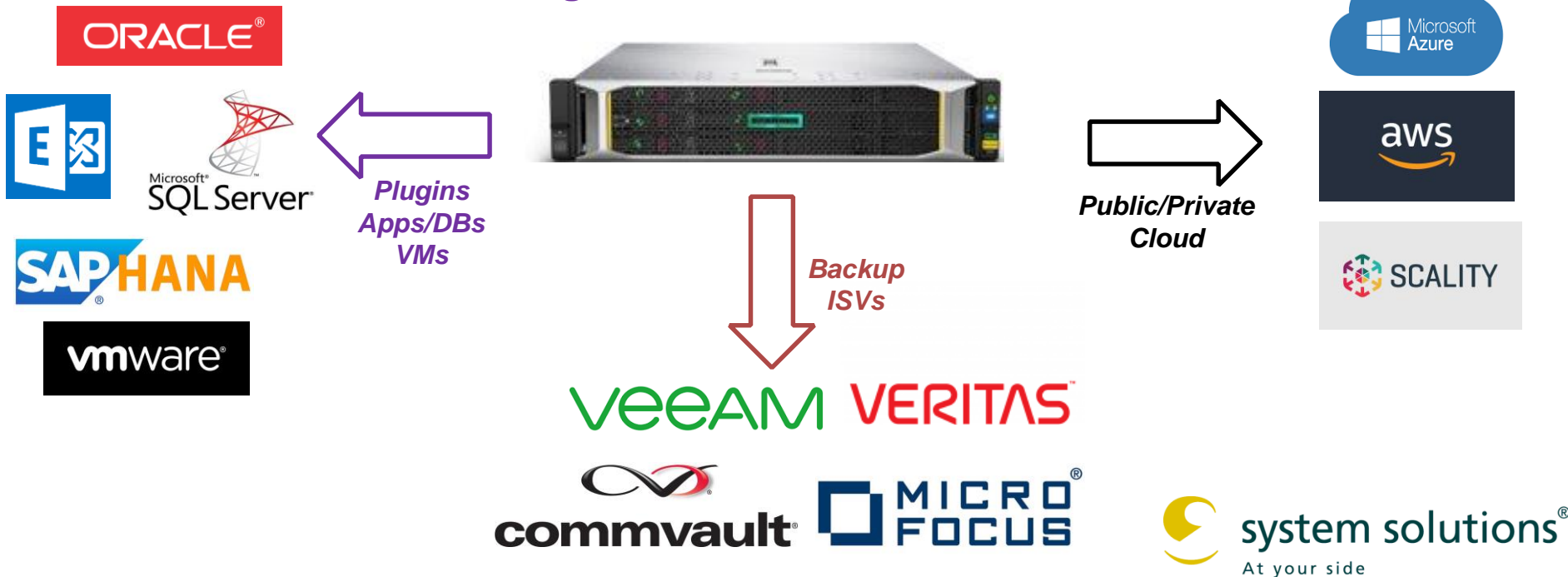
HPE StoreOnce Integration



Public/Private Cloud Integration

Backup ISVs

Plug-in with APPs/DBs/VMs...





What is Catalyst?



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HPE backup deduplication protocol optimized for disk-based data protection

Supported by Veritas Symantec, Veeam, Data Protector, Oracle...

API manages relationship between applications and Catalyst stores (inside HPE StoreOnce)

Low-bandwidth deduplication

Catalyst Copy replicates Catalyst backups



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HPE Cloud Bank: How it Works



Backup to Cloud Bank

*on-Premises Datacenter
"local"*

Data Protection
Software

Backup

Catalyst - API

*on-Premises Datacenter
"local"*

HPE StoreOnce
Disk-Based Backup Appliance

Dedup

Catalyst
Copy

Catalyst
Store

Cloud Bank
metadata

*Public or Private Cloud
AWS S3, Azure, Scalify*

Object Storage

Put Unique Data
Deduplicated & Compressed

*Deduplicated
Data*



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HPE Cloud Bank: How it Works



Restore from Cloud Bank Local copy expired

*on-Premises Datacenter
"local"*

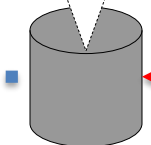
Data Protection
Software

Restore from
Cloud Bank

*on-Premises Datacenter
"local"*

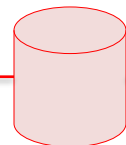
HPE StoreOnce
Disk-Based Backup Appliance

Dedup



Catalyst
Store

Catalyst
Copy



Cloud Bank
metadata

*Public or Private Cloud
AWS S3, Azure, Scalify*



*Deduplicated
Data*

Get Unique Data
Deduplicated & Compressed



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HPE Cloud Bank: How it Works



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Disaster Recovery From Cloud Bank

*on-premises Datacenter
“local”*

*on-premises Datacenter
“local”*



*Public or Private Cloud
AWS S3, Azure, Scalify*



Put / Get Unique Data
Deduplicated & Compressed

*Deduplicated
Data*



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HPE Cloud Bank: How it Works



Disaster Recovery From Cloud Bank

*on-Premises Datacenter
"local"*

Data Protection
Software

Restore from
Cloud Bank

*on-Premises Datacenter
"local"*



New HPE StoreOnce System
Disk-Based Backup
Virtual or Physical Appliance

*Public or Private Cloud
AWS S3, Azure, Scalify*



Get Unique Data
Deduplicated & Compressed

*Deduplicated
Data*



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In Summary: HPE Cloud Bank



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- New Tier of backup with **AWS, Azure** or **Private Object Storage**
- Lower cost of long-term protection
- Based on HPE StoreOnce D2D Appliance and Catalyst deduplication engine
- **Data Protection Applications** must support Catalyst Copy:
 - Data Protector, Veritas Symantec, CommVault, RMC...

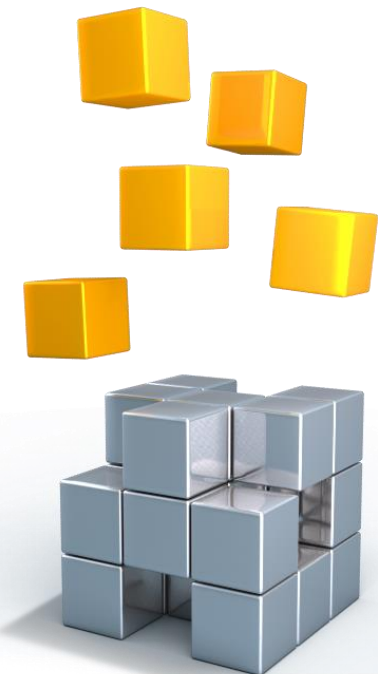


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Keep your data under total control in the cloud!



Veeam Backup for O365

HPE Cloud Bank



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