

# Évolution des architectures types adaptées à tous vos besoins.

Bechtle-IT Forum | 13.06.2023 | SwissTech Convention Center Lausanne

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The Veeam logo is a green rounded rectangle with the word "VEEAM" in white, uppercase, sans-serif font.

# *Évolution des architectures types adaptées à tous vos besoins*

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**Benoît Henriot**

Senior Systems Engineer  
Veeam Software Switzerland



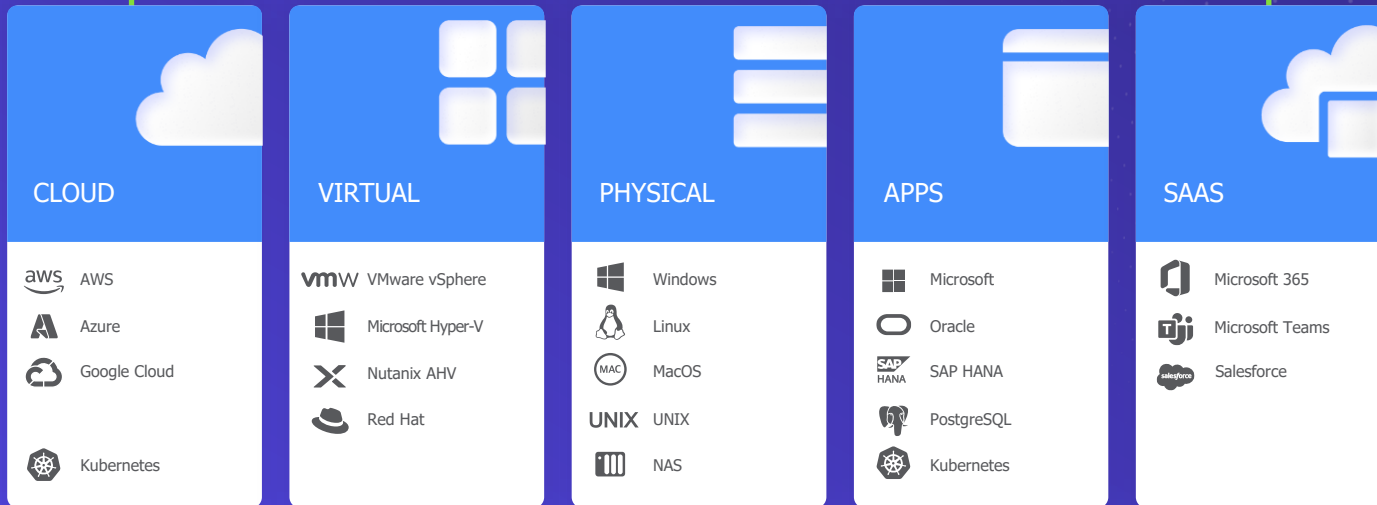
**Christian Bocquet**

Solution Architect  
Bechtle Suisse SA

# Backup any workloads

## Veeam Data Platform

A Single Platform for ALL Workloads



# Key Concepts

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1

Security

2

Flexibility

3

Performance

4

Lifecycle

# Security : Master the 3-2-1 Rule

# 3



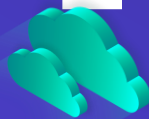
Three different copies of data

# 2



Two different media

# 1



One offsite copy

veeam

# 1



Of which is:  
offline air-gapped  
or immutable

# 0



No errors after  
automated backup  
testing &  
recoverability  
verification

# Security : *Immutability*



## Hardened Repository

Prevent modification or encryption to backups on-premises with immutable storage



## Object-lock

Prevent modification or encryption to backups in the Cloud with immutable storage



Immutability everywhere

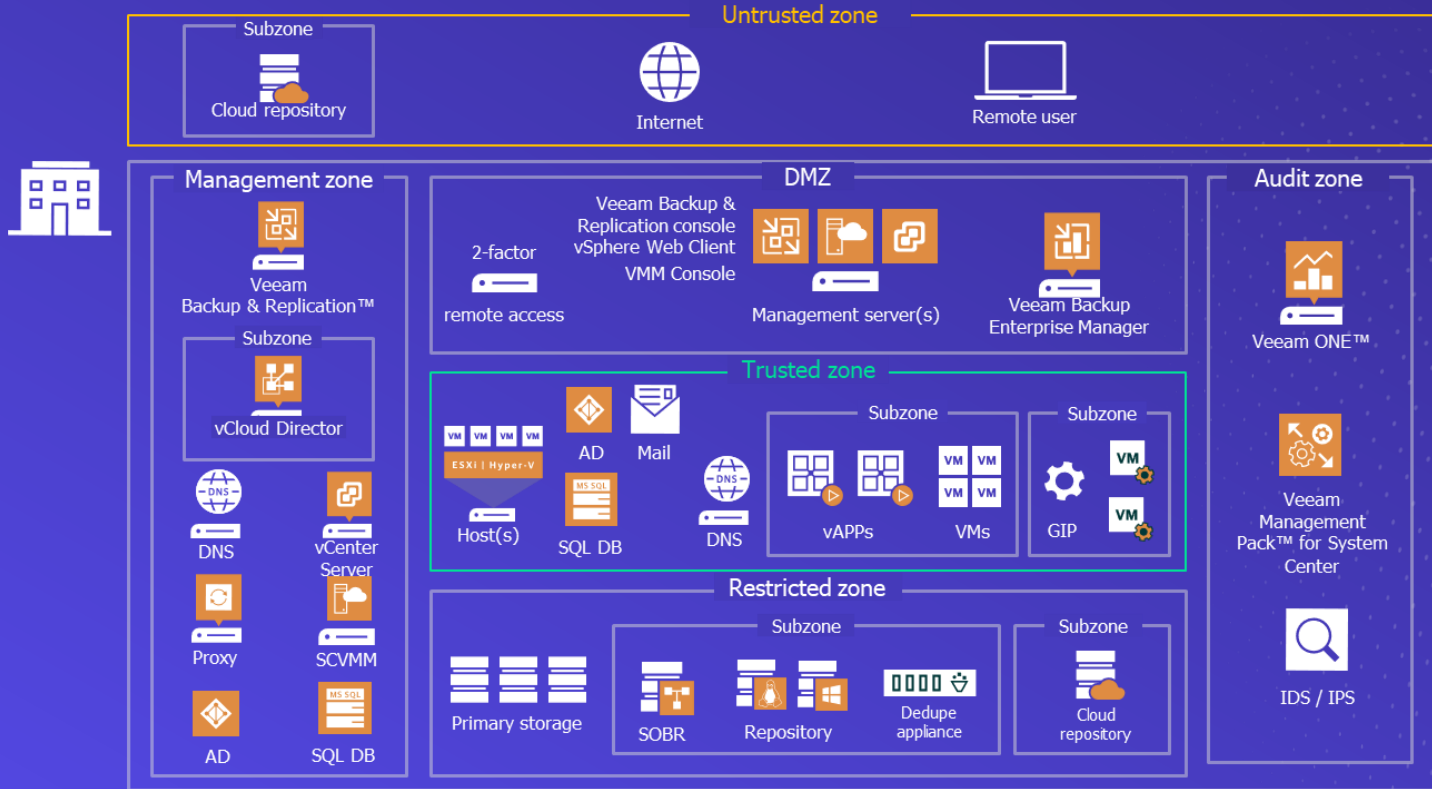


Faster ransomware recovery

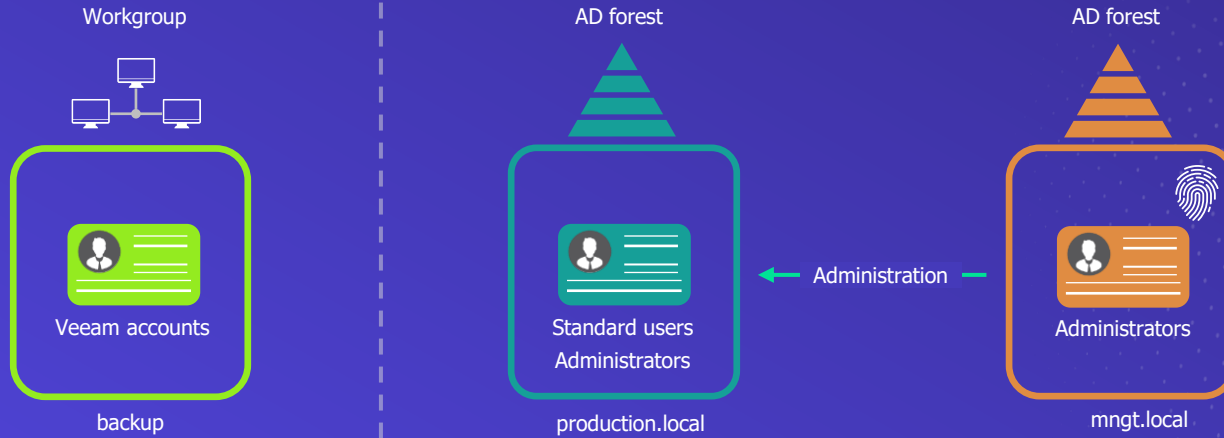


Stop cyberthreats at the door

# Security : Segmentation



# Security : *Workgroup vs Domain*



**IMPORTANT:** Active Directory is the **heart** of the IT infrastructure for nearly every organization — make sure it's **healthy!**

<https://bp.veeam.com/vbr>



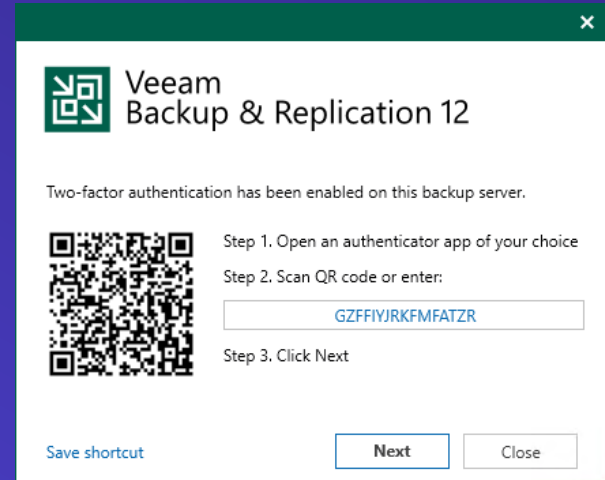
# Security : *Multi-Factor Authentication*

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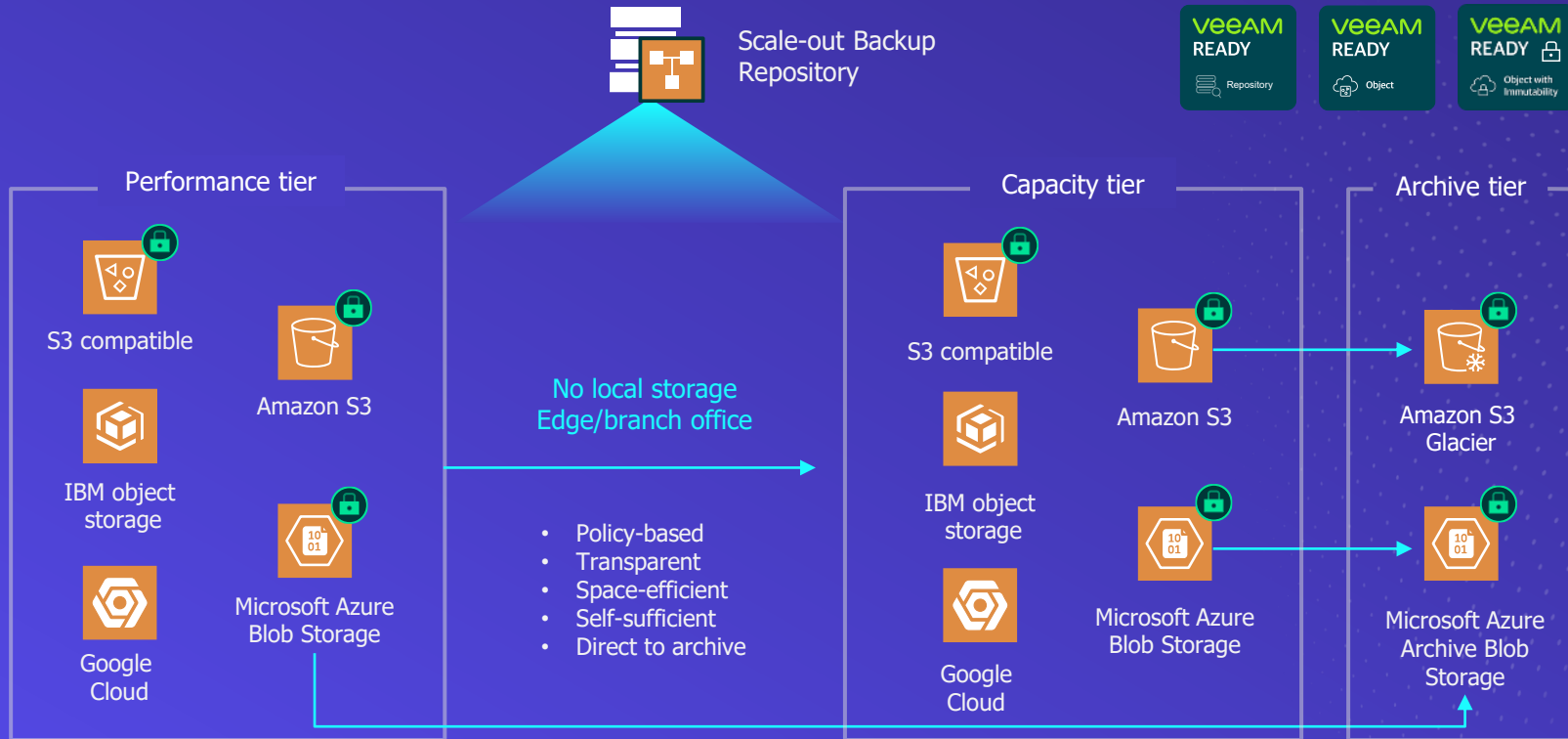
MFA is configured for all users

Works with **offline** VBR servers / consoles

Can be **complex** to configure  
when VBR does not belong to a domain



# Flexibility : Object Storage



# Flexibility : *Cloud Agents vs Cloud Appliance*

Workload / Functionality	Veeam Agents	Veeam Backup for Cloud
Fast recovery from snapshots		✓
Back up directly to object storage	✓	✓
Cloud native application support		Databases, file shares etc.
Application aware processing	✓ (incl. log shipping)	✓ (VSS + scripting)
Backup if central management server down	✓	
Explorer for SQL, Postgres etc.	✓	
REFS file level restore support	✓	With VBR integration
3-2-1 rule	Backup copy job and geo redundant object storage	VM snapshot replication (AWS), backup copy job with VBR, geo redundant object storage
Archive Tier support	✓	✓
Permissions configuration	Object storage	Management server, workers, object storage
Compute costs / sizing	Backup server, existing CPUs in VMs	Backup server, workers
Scalability	5000 managed agents, 1000 running	10,000 workloads

# Performance : *Fast Block Cloning*

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Fast Clone integration with the Windows ReFS and Linux XFS file systems enables **10x faster synthetic operations**, as data blocks are not moved or copied between files.



- Space-less full backup
- Decrease storage required
- **Linux XFS outperforms Windows ReFS !**

*Backup with 1831 VM in one Job. Last 3 runs :*

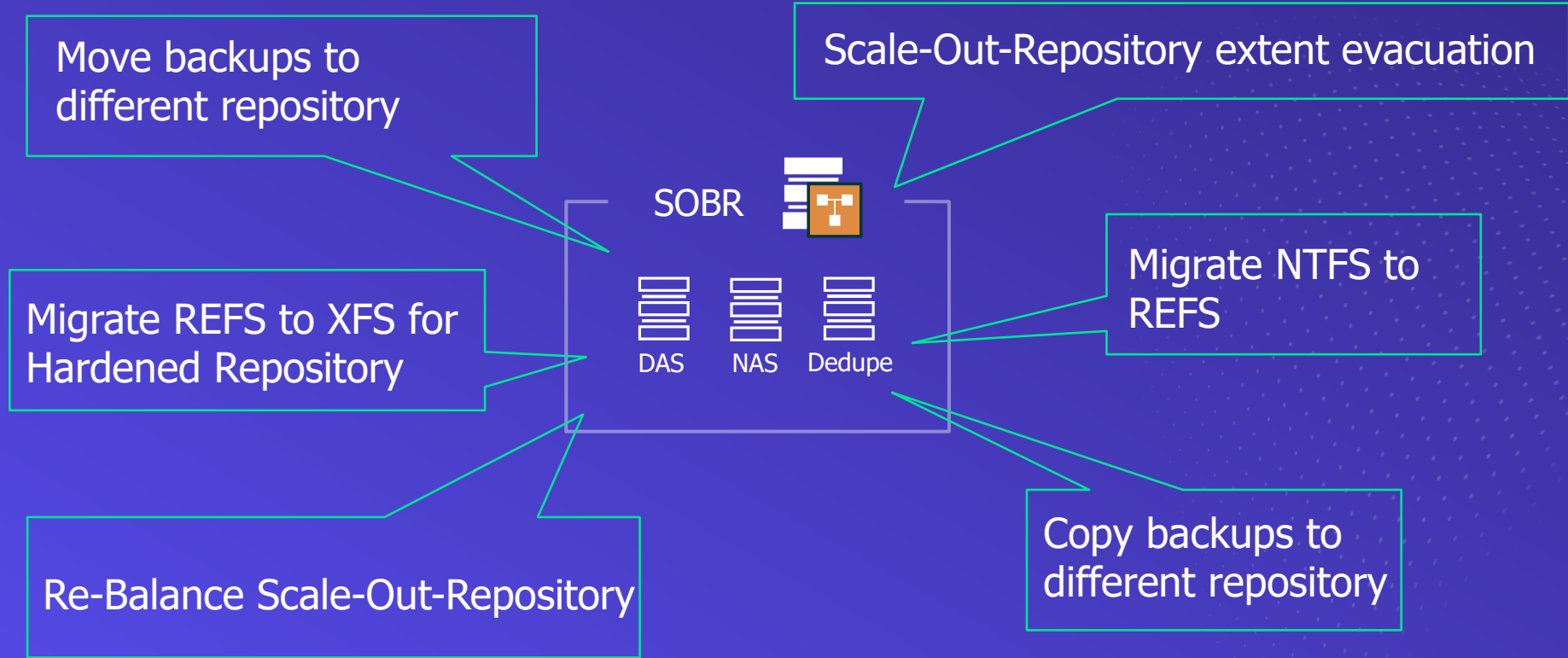
**ReFS: 222:12, 223:13, 197:37**

**XFS: 47:12, 48:27, 68:51**



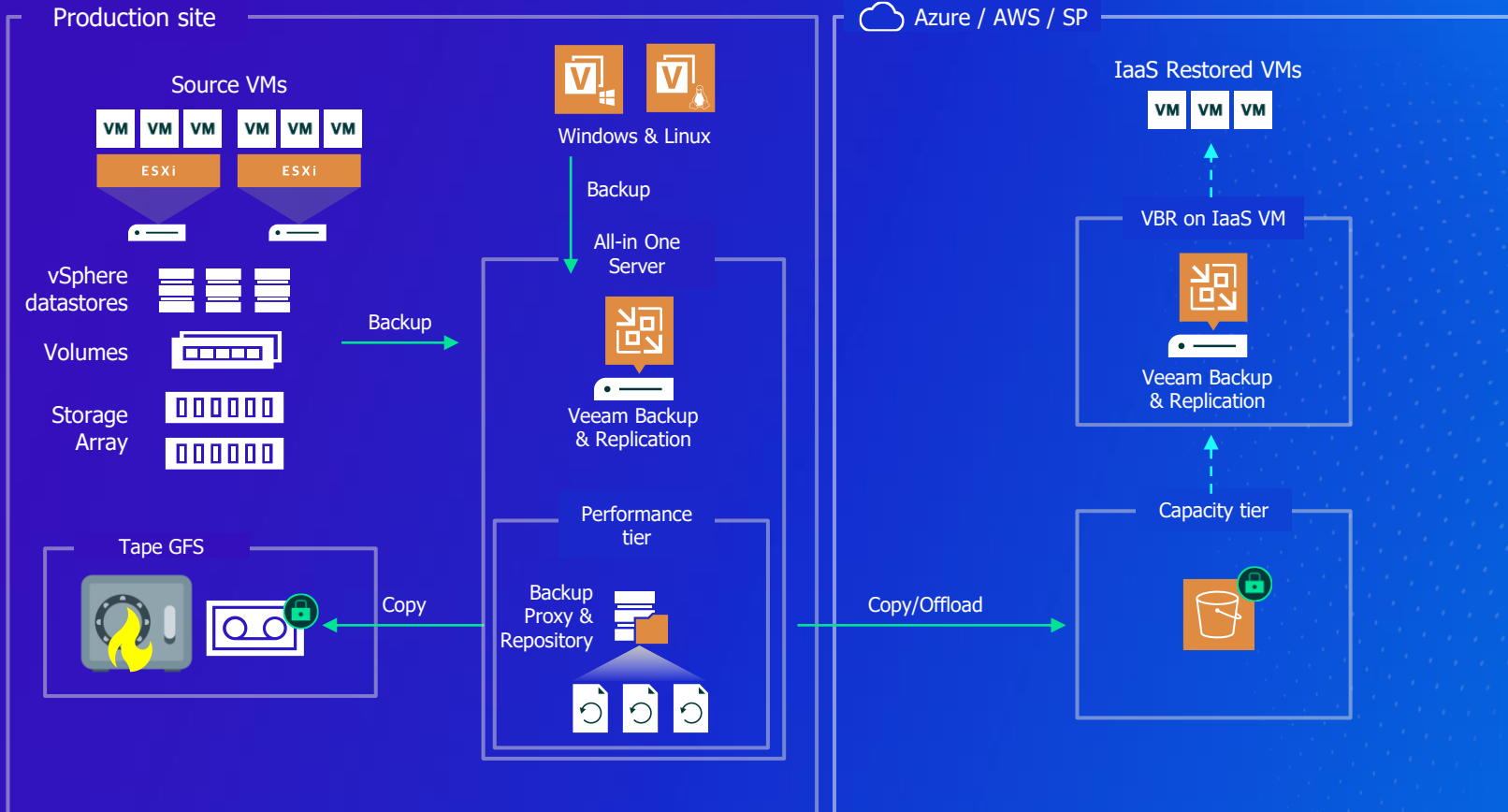
# Lifecycle : *SOBR Seal & Rebalance, Copy & Migrate*

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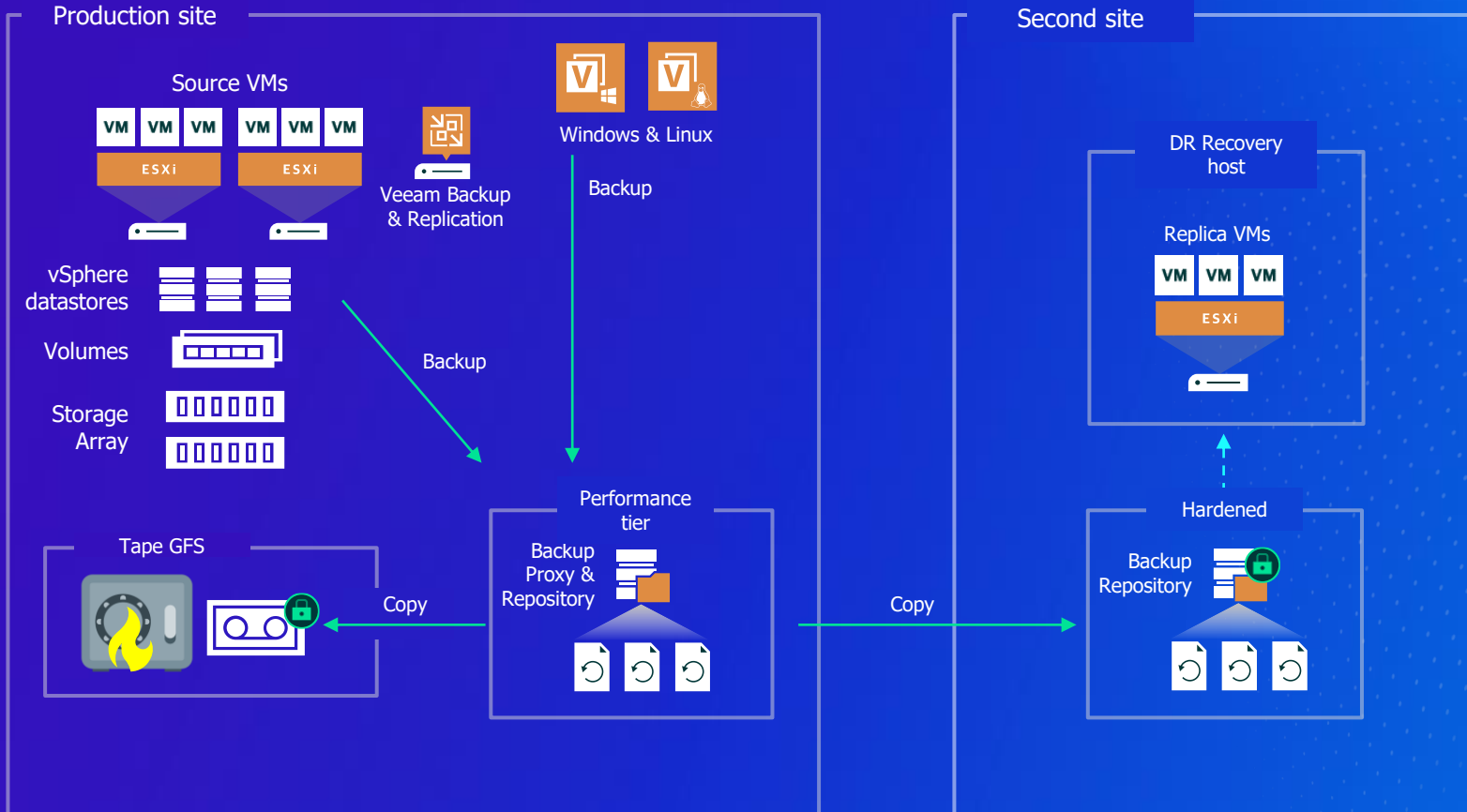


# Backup *for small business*

# Small business : *Single On-Premises site*



# Small business : 2 or more On-Premises sites

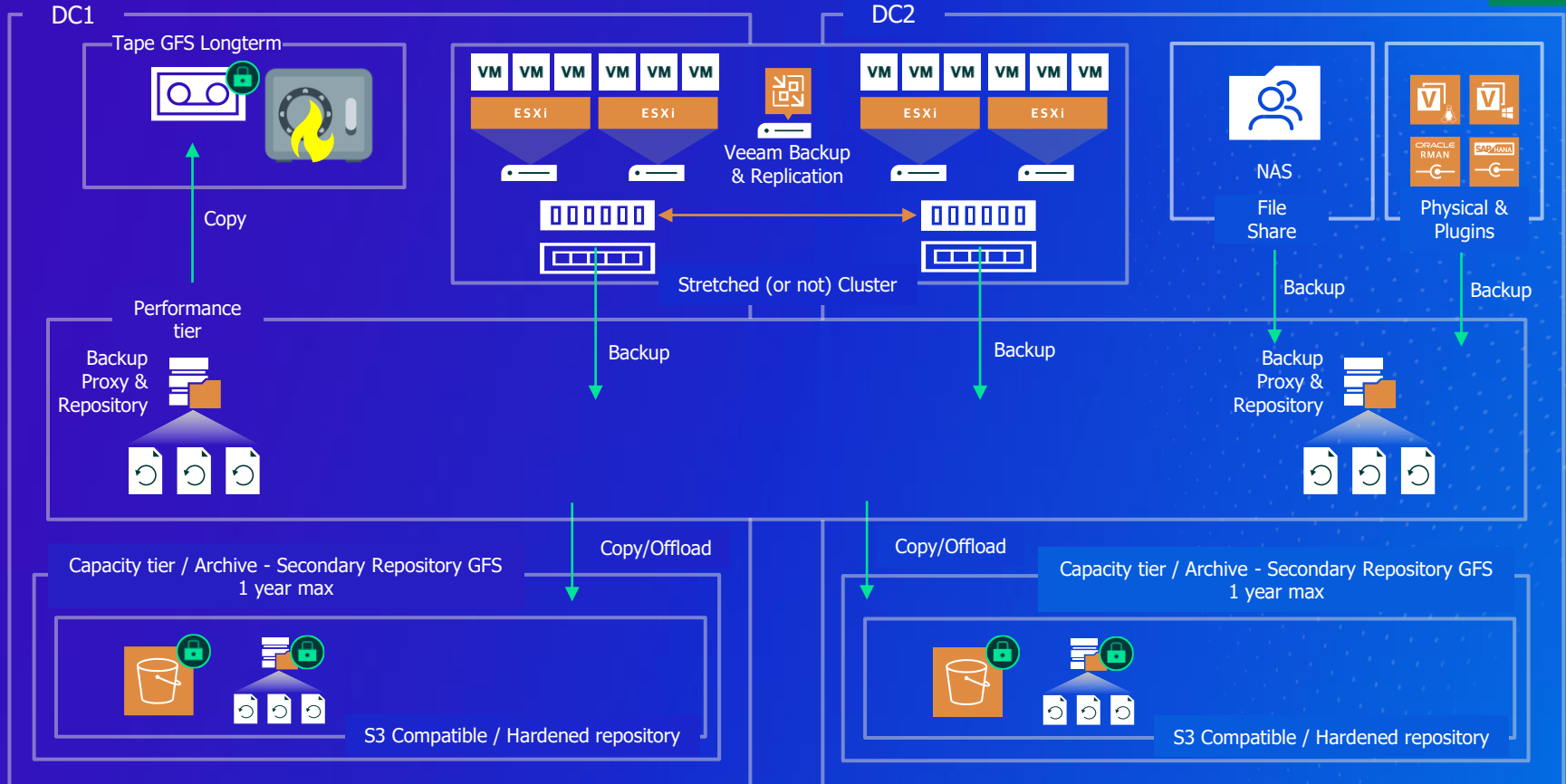




**Backup** *for medium business*

# Medium business : 2 or more On-Premises sites

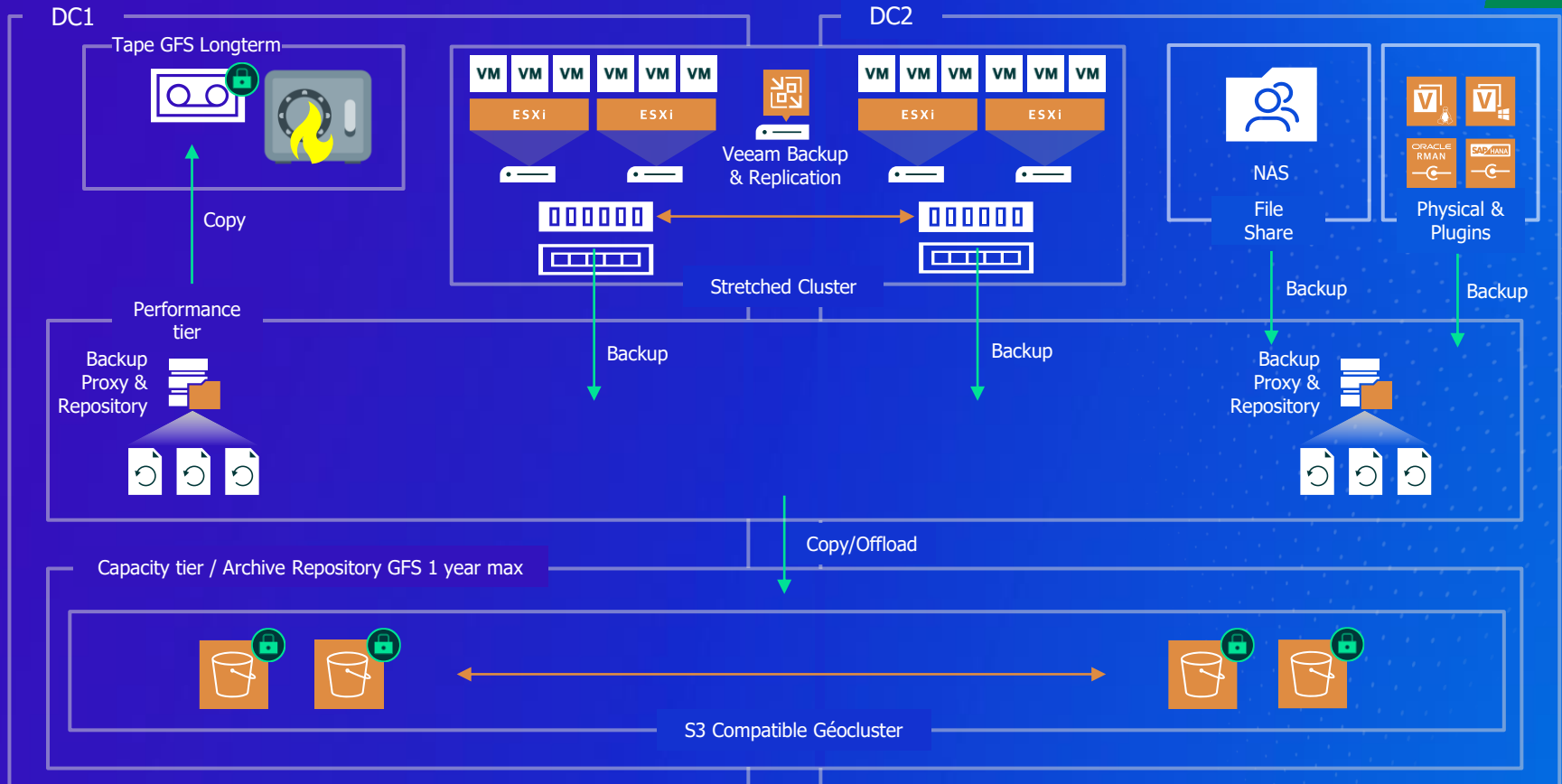
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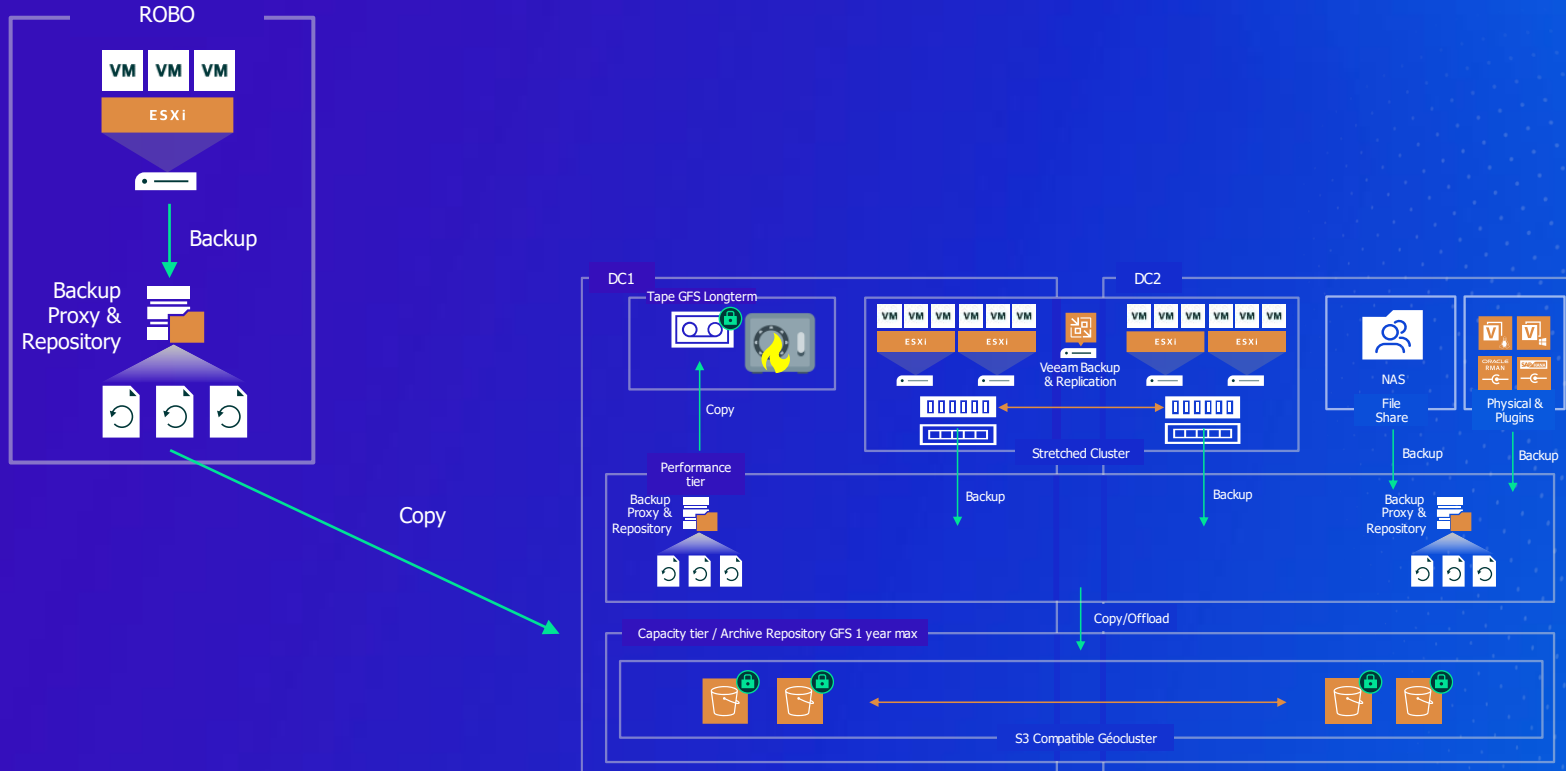
**Backup** *for enterprise business*

# Enterprise business : 2 or more On-Premises sites

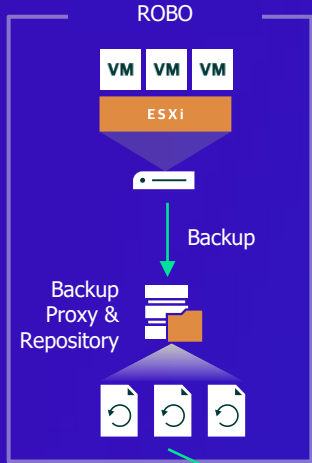
BECHTLE



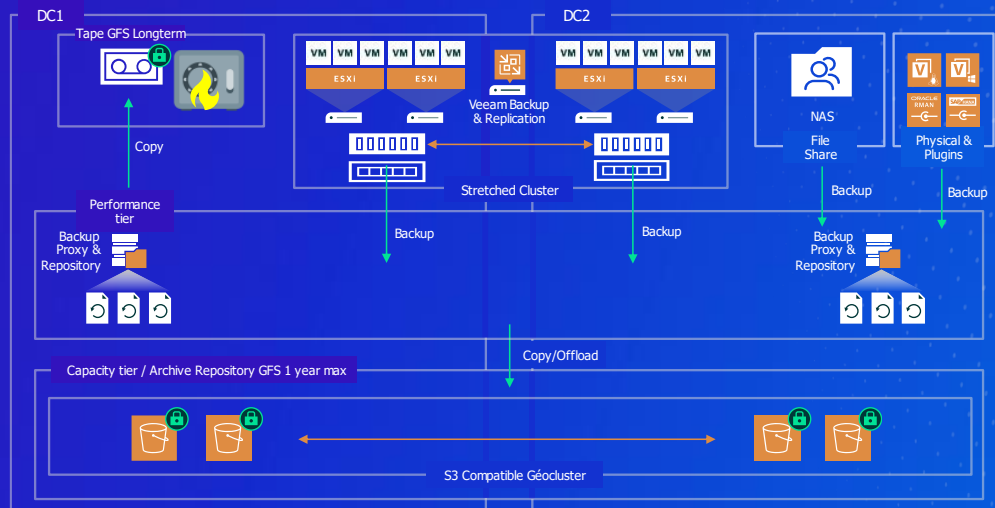
# Any business : *ROBO sites*



# Any business : Any workloads



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# Merci!

Des questions? Contactez-nous: [it-forum.ch@bechtle.com](mailto:it-forum.ch@bechtle.com)

Plus d'informations :  
[bechtler.com](https://www.bechtler.com)

