

veeAMON 2023

# The Essential Guide to Veeam Recovery Orchestrator for Disaster Recovery Management



Andre Atkinson  
Senior Cloud Product Manager  
Veeam Vanguard



Ben Thomas  
Solutions Advisor  
Veeam Vanguard & Microsoft MVP



# Agenda

- Why Veeam® Recovery Orchestrator?
- Recovery Orchestrator **v6** capabilities
- Veeam Recovery Orchestrator tips & tricks
- Q&A



# Why Veeam Recovery Orchestrator?

# Accidents and outages happen

And we almost never prepare for them



# Make sure your plan works

Regularly,  
before you need it.



# Veeam Recovery Orchestrator



## Up-to-date documentation

Automatically updated reports for pre-checks, tests and executions help detect & correct issues with DR readiness



## Zero-impact testing

## Zero-impact testing

Veeam DataLabs™ tests increase confidence, simulating disaster recovery without impacting production systems



## Know your compliance

RTO and RPO reporting help meet compliance standards and SLA targets



## 1-click recovery at scale

Recover single apps or an entire site with one click, secured by role-based access control

Supported platforms and applications:



Azure, vSphere



Agents:  
Windows & Linux



Apps:  
Exchange, SQL, SharePoint



Storage:  
NetApp, HPE, Lenovo



Custom scripting



# Recovery Orchestrator v6 capabilities

# V6 new features



## Cloud DR

Recover any backup as an **Azure VM**



## Agent DR

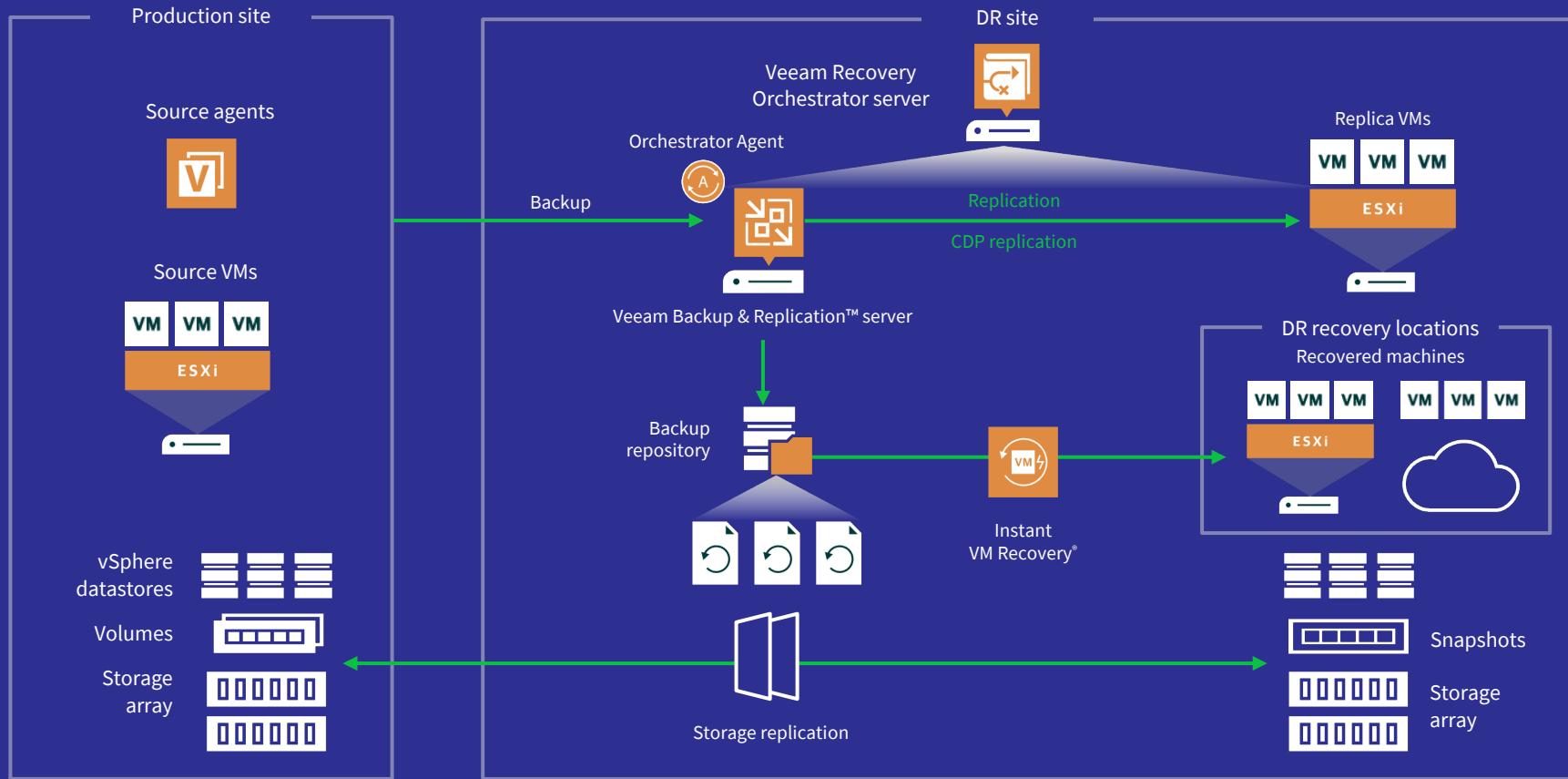
Recover Veeam **Agent** backups as VMs



## Clean DR

Scan for **ransomware** during recovery

# Architecture overview of Orchestrator v6



# Cloud DR



Orchestrated **cloud restore**

Recover your backups as **Azure** VMs

Works with Agent and vSphere backups

Compatible with Windows and Linux OS

# Cloud DR prerequisites

- An Azure Compute Account must be added to the Veeam Backup & Replication server.
- An Azure Storage Account must be pre-provisioned.
- At least one Azure vNet must be pre-provisioned.
- A Linux helper appliance must be provisioned in Azure if direct restore of Linux backups are required.
- (Optional) an Azure cloud proxy can be deployed to improve performance of restores.

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Demo



# Veeam Disaster Recovery Orchestrator

Scopes (All)

Dashboard

Inventory

DR Planning & Testing

Orchestration Plans

DataLabs

Lab Calendar

DR Documentation

Reports

Report Templates

## Plan Execution

Reports...



Not Running

All

## Plan Readiness Check

Reports...



Checked  
2 of 2



Warning  
1



Passed  
1

## Plan DataLab Testing

Reports...



Test Required  
All

### Top plans by RPO Issues

Plan	Achieved RPO	Target RPO
Recover MGMT Servers Locally	✓ 18 h 9 min	1 d
Recover MGMT Server to Cloud	✓ 3 h 57 min	1 d

### Top plans by RTO Issues

Plan	Achieved RTO	Target RTO
Recover MGMT Servers Locally	✗ 2 h 21 min	1 h
Recover MGMT Server to Cloud	✓ 17 min	1 h

### Current Issues

Plan  Action: All State: - x !

Plan	VM	Action	Step	State	Duration	Start Time	Finish Time	...
Recover MGMT S...	a-sp-nz-mg01.nz.i...	Check	Create Cloud VM	⚠ Warning	1 sec	4/29/2023 7:55:4...	4/29/2023 7:55:4...	...

Activate Windows  
Go to Settings to activate Windows.



# Agent DR



Orchestrated **direct restore**

Recover Veeam **Agent** backups to **vSphere**

Recover Veeam **Agent** backups to **Azure**

Compatible with Windows and Linux OS

Agent and VM groups can be in the same plan

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Demo



Veeam Disaster Recovery Orchestrator TestVM02 - Microsoft Azure https://site-b-custvd01.cust1.nz.int.provider.cloud:9898/#config/configuration/recoveryLocations

Ben Thomas (Admin) (INT-ROOT\ben) Administrator

Exit Administration

Overview

Infrastructure

Orchestrator Agents

vCenter Servers

Storage Systems

SMTP Server

Configuration

Recovery Locations

Plan Steps

Settings

Permissions

Credentials

Roles and Scopes

DataLab Configuration

Scope Inclusions

Email Subscriptions

Licensing

License

Location Filter (None)

Add Edit Remove Clone Assign to Plan Properties

Location	Type	Agents	VMs	Plan	Instant VM Reco...	Storage System	Description
Agent Recovery - Production Site	Restore	Enabled	Disabled	Recover MGMT Se...	Enabled	N/A	
Azure - AU East - vSphere Restores	Cloud	Disabled	Enabled	CloudDR Demo V...	N/A	N/A	Recovery Loc...
Azure - Australia East	Cloud	Enabled	Enabled	Recover MGMT Se...	N/A	N/A	
Netapp in DR	NetApp	N/A	Enabled	—	N/A	100.71.254.36	
Original VM Location	Restore	N/A	Enabled	—	Enabled	N/A	Original locat...

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# Clean DR



## Orchestrated **Secure Restore**

Scan restore points at recovery time

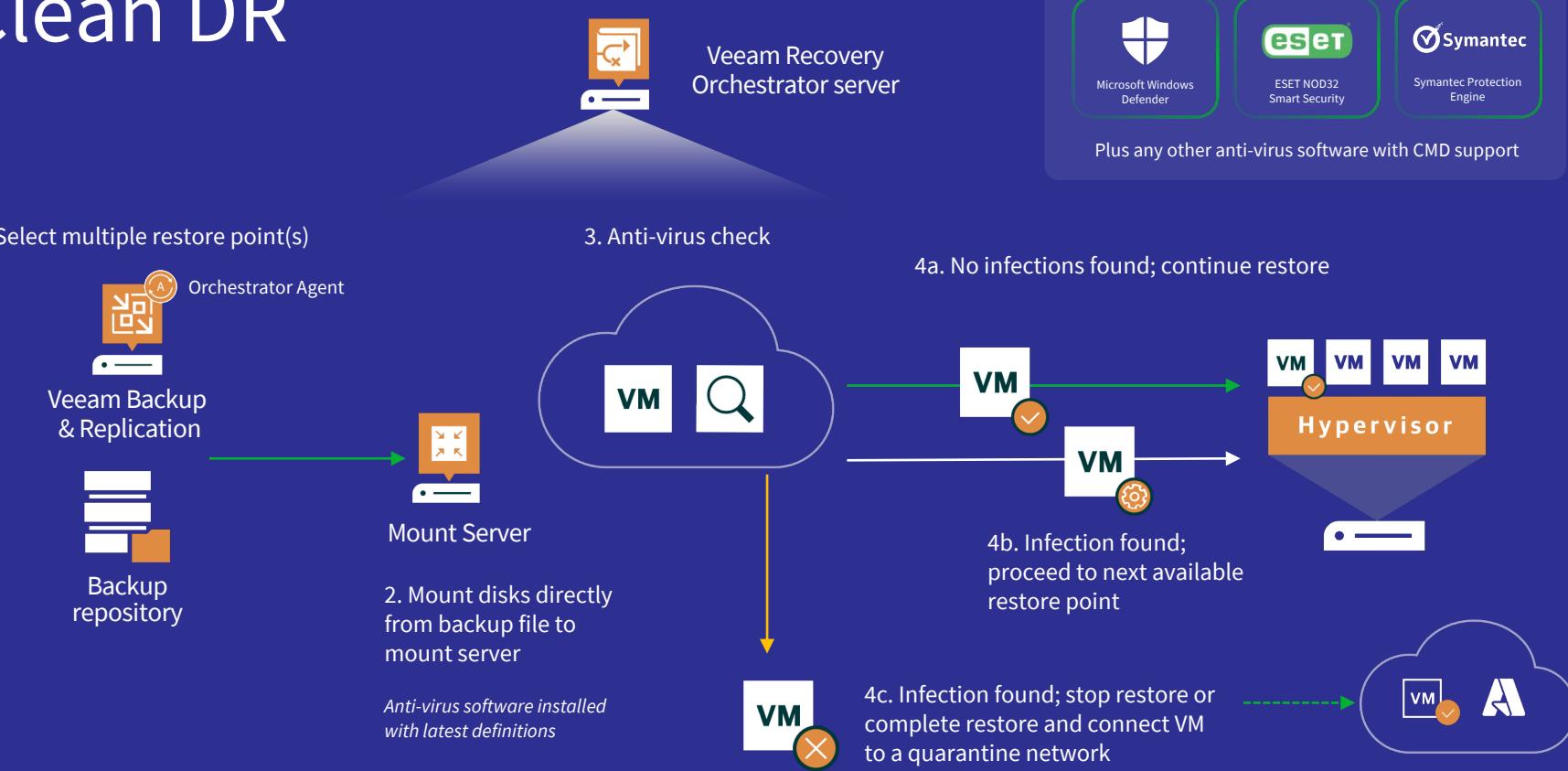
Supports multiple AV solutions in Windows OS

Works with vSphere and Agent backups

Works for recovery to vSphere and Azure



# Clean DR



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Demo



Veeam Disaster Recovery Orchestrator | rg-veeam - Microsoft Azure | + | https://site-b-custvd01.cust1.nz.int.provider.cloud:9898/#config/configuration/recoveryLocations

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Agent Recovery - Product...	Restore	Enabled	Disabled	Recover MGMT Se...	Enabled	N/A	
Azure - AU East - vSpher...	Cloud	Disabled	Enabled	CloudDR Demo V...	N/A	N/A	Recovery Location...
Azure - Australia East	Cloud	Enabled	Enabled	Recover MGMT Se...	N/A	N/A	
Netapp in DR	NetApp	N/A	Enabled	—	N/A	100.71.254.36	
Original VM Location	Restore	N/A	Enabled	—	Enabled	N/A	Original location o...

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# Veeam Recovery Orchestrator tips & tricks

# VRO deployment design tips

- 
- 1 Start with clean VM (cannot co-exist with existing Veeam Backup & Replication/Veeam ONE™)
  - 2 Use single-server deployment ONLY for POCs
  - 3 Install Veeam Disaster Recovery Orchestrator Agent on all Veeam Backup & Replication servers
  - 4 Use embedded Veeam Backup & Replication for VRO standalone deployment  
(orchestrating storage ONLY)
    - Embedded Veeam Backup & Replication is fully functional.
  - 5 Embedded Veeam ONE is for VRO categorization only
    - No performance data.
    - Embedded Veeam ONE can be used to push vSphere tags.
  - 6 Run VRO & VBR at the DR Site, or at a third site. You don't want them to be unavailable at DR time!

# Clean DR tips

-  Only supports scanning backups from on-premises repos.
  - Object storage and Scale-out Backup Repository™ unsupported at current release.
-  Only use when you suspect malware might be present in the environment.
  - Increases RTO as every disk needs to be scanned by the AV engine.
  - Only a single machine per repo can be scanned at a time.
-  Currently only supports Windows-based workloads.
-  Quarantine network only supported by cloud DR restores. On-premises plans will restore without a network connected.



# Tags – they run the world



## 1 Automatic tags for Veeam Backup & Replication objects:

- vSphere Backup Jobs.
- Agent Backup Jobs & Protection Groups.
- vSphere Replication Jobs.
- vSphere CDP Replication Jobs.

## 2 Import vSphere tags:

- Configure Veeam ONE to import vSphere Tags.
- Tag all your resources in vCenter logically (Prod vs Dev, LoB App A vs LoB App B).

## 3 Custom business views:

- Create additional categories in Veeam ONE Business View as needed.
- Manual selections, or based on one or more conditions (Power Status, Datastore Location, etc.).

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Q&A



# Thank you!

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