



# Achieving Radical Resilience

With the Veeam Data Platform



Arjan Henselmans

Senior Pre-Sales Engineer  
Veeam Benelux



# Agenda

Disasters

NIS-2

Ransomware Trends

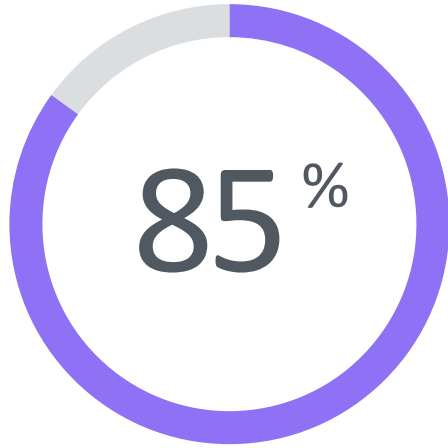
Navigating a Cyber Attack –  
Assume Breach

Veeam Data Platform  
Overview of Features

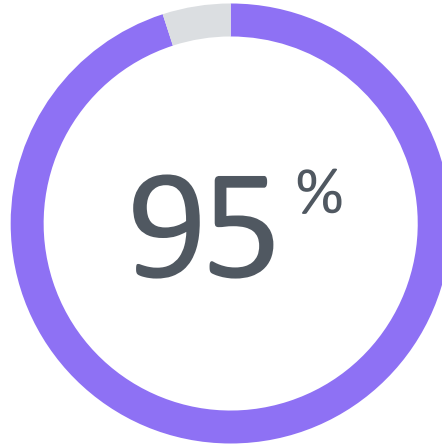
Q&A

# Disasters

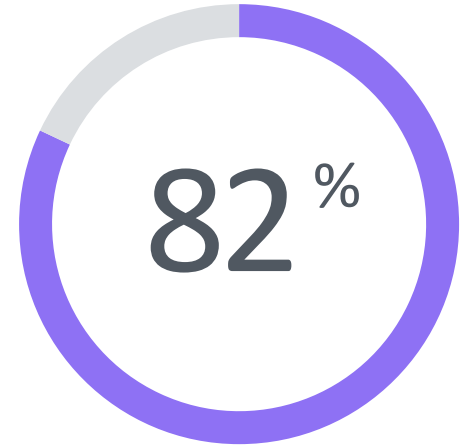
# Outages and data loss are an unfortunate reality



of companies have experienced  
at least 1 ransomware attack  
in the past year\*



of organizations are moderately to  
extremely concerned about cloud  
security\*\*



of companies use manual  
processes to recover their data  
after an outage\*

\*2024 Veeam Data Protection Trends Report

\*\*2022 Fortinet Cloud Security Report

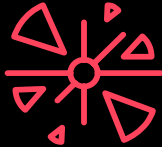
# Disasters happen all the time



Ransomware



Fire



Hardware  
failure



Flood

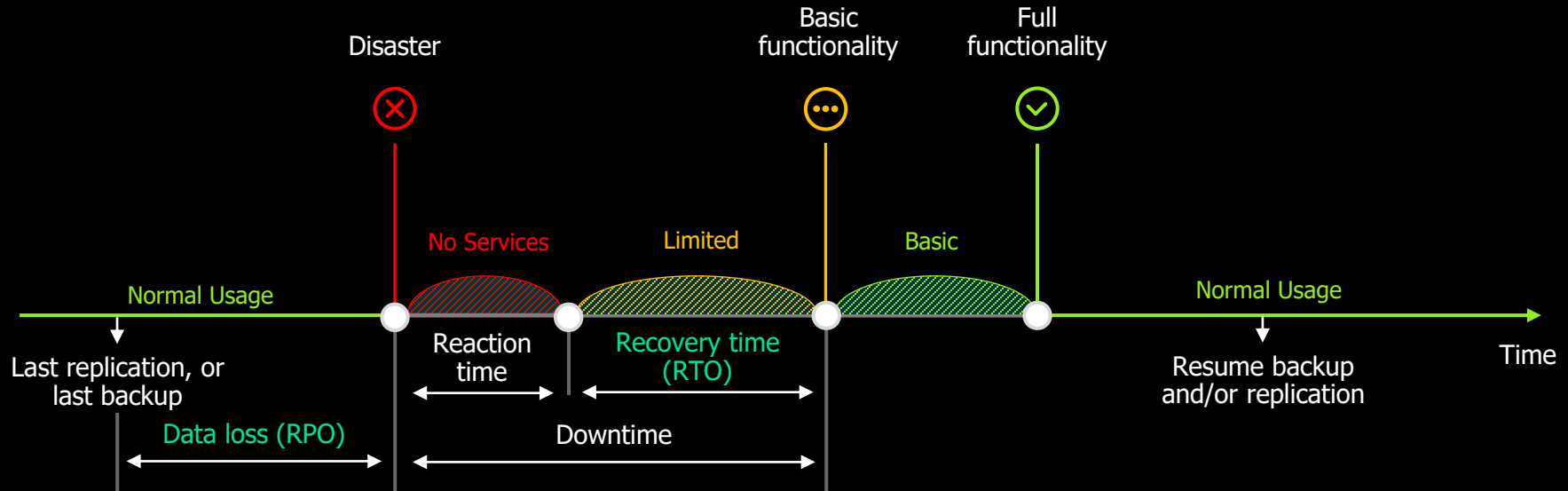


Corruption

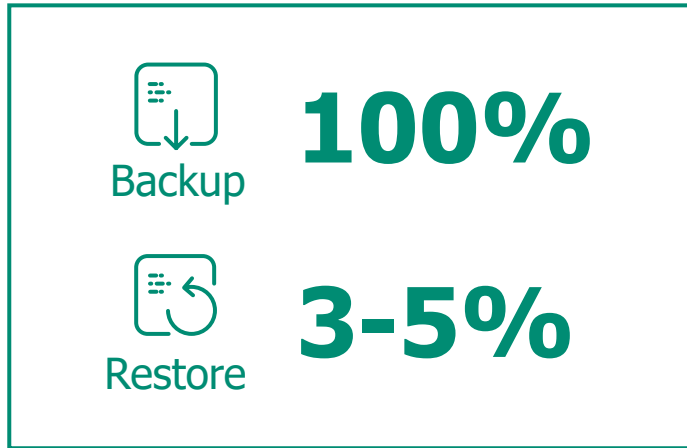


Storm

# Recovery timeline



# Design for Mass Recovery!



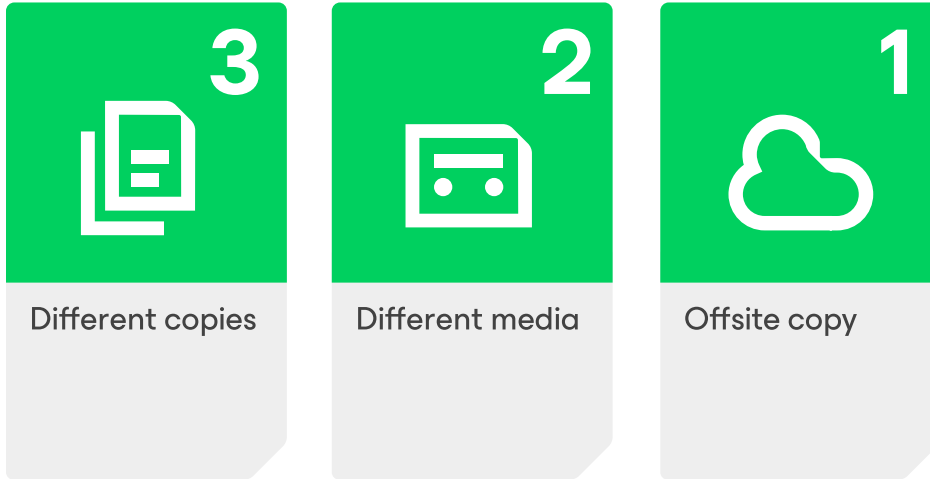
**PAST**



**PRESENT**

~95% of ALL organizations designed for backup

# Veeam's 3-2-1 Backup Rule





# NIS-2

# NIS-2 – Dit begrijpt toch iedereen...

- (31) Tot de digitale-infrastructuursector behorende entiteiten zijn in wezen gebaseerd op netwerk- en informatiesystemen en daarom moeten de hun uit hoofde van deze richtlijn opgelegde verplichtingen op een omvattende manier betrekking hebben op de fysieke beveiliging van dergelijke systemen in het kader van hun maatregelen voor het beheer van cyberbeveiligingsrisico's en rapportageverplichtingen. Aangezien die aangelegenheden onder deze richtlijn vallen, zijn de verplichtingen van de hoofdstukken III, IV en VI van Richtlijn (EU) 2022/2557 niet van toepassing op dergelijke entiteiten.

- 
- (<sup>11</sup>) Verordening (EG) nr. 300/2008 van het Europees Parlement en de Raad van 11 maart 2008 inzake gemeenschappelijke regels op het gebied van de beveiliging van de burgerluchtvaart en tot intrekking van Verordening (EG) nr. 2320/2002 (PB L 97 van 9.4.2008, blz. 72).
- (<sup>12</sup>) Verordening (EU) 2018/1139 van het Europees Parlement en de Raad van 4 juli 2018 inzake gemeenschappelijke regels op het gebied van burgerluchtvaart en tot oprichting van een Agentschap van de Europese Unie voor de veiligheid van de luchtvaart, en tot wijziging van de Verordeningen (EG) nr. 2111/2005, (EG) nr. 1008/2008, (EU) nr. 996/2010, (EU) nr. 376/2014 en de Richtlijnen 2014/30/EU en 2014/53/EU van het Europees Parlement en de Raad, en tot intrekking van de Verordeningen (EG) nr. 552/2004 en (EG) nr. 216/2008 van het Europees Parlement en de Raad en Verordening (EEG) nr. 3922/91 van de Raad (PB L 212 van 22.8.2018, blz. 1).
- (<sup>13</sup>) Richtlijn (EU) 2022/2557 van het Europees Parlement en de Raad van 14 december 2022 betreffende de weerbaarheid van kritieke entiteiten en tot intrekking van Richtlijn 2008/114/EG van de Raad (zie bladzijde 164 van dit Publicatieblad).

# NIS-2 – Wat betekent het voor u?

... en voor uw toeleveranciers?

## Zorgplicht

Bescherm uw data  
Zorg voor toegangscontrole  
Maak recovery plannen

## Rapportage

Aantonen van effectief beheer  
Informatie voor toezichthouders  
Bij cyberaanval; Voorlopige en definitieve rapportages

## Toezicht

Er worden audits uitgevoerd. Bij herhaaldelijk overtreden kan dit ook persoonlijke consequenties hebben



**KPMG**

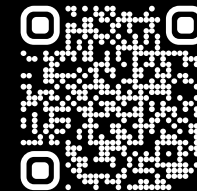
**pwc**

**EY**

# Ransomware

# Ransomware event frequency

How many ransomware attacks has your organization suffered in the last 12 months? (n=1,932)



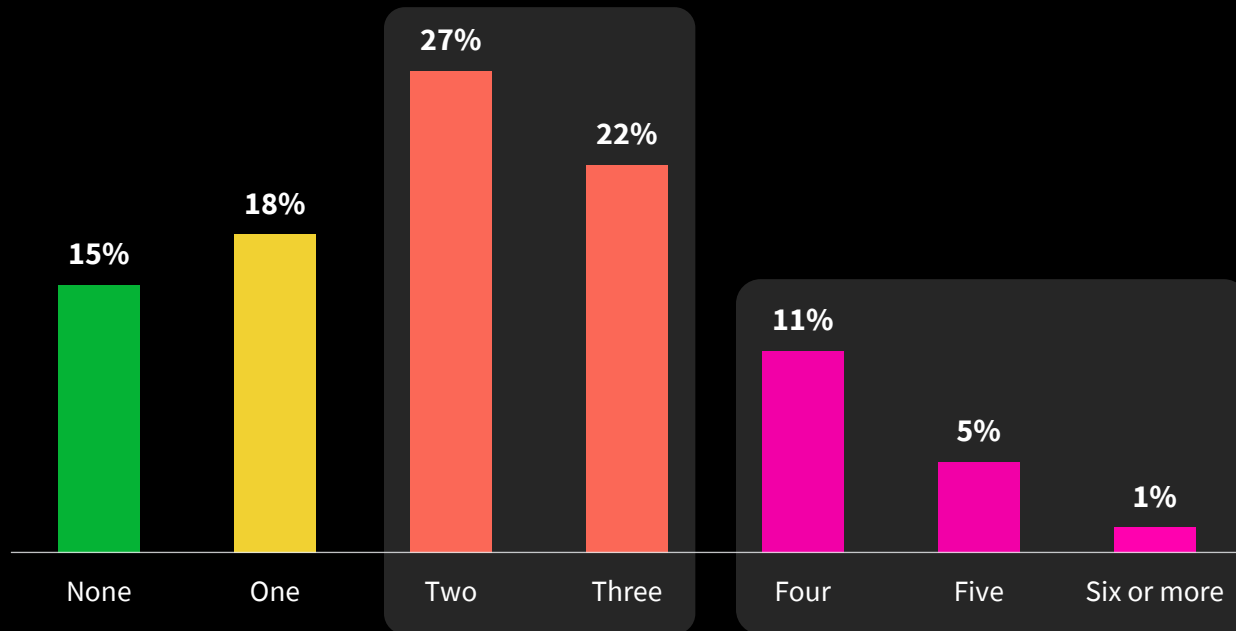
**85%**

of organizations suffered at least one ransomware attack

More people (**17%**) suffered four or more attacks than had zero attacks (**15%**)

**49%**

of organizations suffered two to three ransomware attacks



Source: Data Protection Trends Report 2024  
<https://vee.am/DPR23>

# (Ransomware) Recovery is a team effort

## Who's involved:

1. **Sr. Leadership** is driving the process
2. **Legal, HR, and public relations** determine the course of action
3. **Incident responders** drive the investigation and the recovery process
4. The **backup team** supports the recovery with clean data



# Understanding Cyberattacks

# Understanding cyberattacks

Information is gathered on the victim's people, processes and technology in play

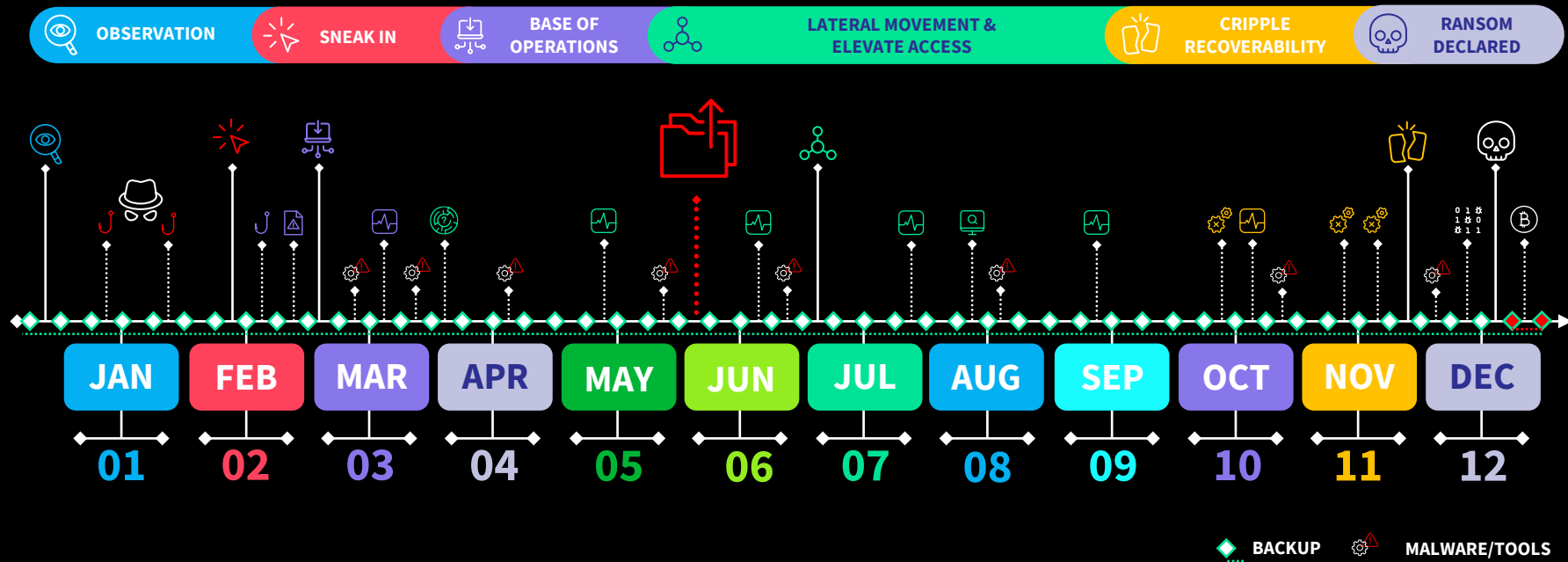
Gain access to the victim by sending phishing emails and let them click a link

Creating a base of operations and let's make it redundant and highly available

Snooping around without being detected and compromise higher value targets

Alter routines, documentation and security systems to reduce/deny restore capabilities

Encrypt victim's data, wipe archives/backup/data, issue ransom demands!





# Assume Breach

# Embrace the Breach

## Cyber Security Design Principles

- Establish the context before designing a system.
- Make compromise difficult.
- Make disruption difficult.
- Make compromise detection easier.
- Reduce the impact of compromise.



Principle of assume breach

Overview of Features

# Veeam Data Platform (Security) Capabilities

# Veeam Data Platform

Recovery Orchestration

Monitoring & Analytics

Backup & Recovery

Native APIs

Platform  
Extensions

aws AWS

A Azure

Google Cloud

Kubernetes



Cloud



Virtual



Physical



Apps



SaaS

Microsoft 365

Salesforce

On-Premises • In the Cloud • XaaS

Why Veeam...

# Secure Backup and Fast Recovery

Own, control, backup and  
recover all your data,  
anywhere in the hybrid  
cloud

Reduce risk with  
comprehensive  
data security



**Secure  
Backup**

Meet recovery  
objectives with  
confidence



**Instant  
Recovery**

Accelerate your  
move to the  
hybrid cloud



**Multi-cloud  
Mobility**

Why Veeam...

# Proactive Monitoring and Analytics

Maintain full visibility for  
proactive management  
and recovery success

Quickly mitigate potential  
issues before they  
become threats



**Real-time  
Monitoring**

Stay secure by  
always knowing your  
protection status



**Suspicious  
Activity Alerts**

Minimize downtime by  
eliminating the need for  
manual responses



**Automated  
Remediation**

Why Veeam...

# Proven Recovery Orchestration

Be compliant and ready  
for disaster with  
orchestrated recovery

Automate test to highlight  
potential impacts to your  
recovery



**Automated  
Testing**

Take the headache out  
of documentation and  
compliance



**Automated  
Documentation**

Recover faster  
from any disaster



**One-click  
Recovery**

# We keep your business running



Data Security



Data Recovery



Data Freedom



# Veeam Data Platform

Recovery Orchestration

Monitoring & Analytics

Backup & Recovery

Native APIs

Platform  
Extensions

aws AWS

A Azure

Google Cloud

Kubernetes



Cloud



Virtual



Physical



Apps



SaaS

Microsoft 365

Salesforce

On-Premises • In the Cloud • XaaS

# VDP Detect + Identify cyberthreats

Minimize the devastation of a cyberattack

**(New)**

## Early threat detection

AI-powered built-in **Malware Detection Engine** performs low-impact inline entropy and file extensions analysis during backup for immediate detection

**(New)**

## Proactive threat hunting

Backup anomalies are instantly reported into **ServiceNow** and other **SIEM** tools of your choice so you can immediately perform triage and reduce further risk to your data

**(New)**

## Get a second opinion

Let your cyber-threat tool report infections directly into the **Veeam Incident API**, marking existing restore points as infected or trigger backup

# VDP Respond + Recover faster from ransomware

Empower your team to slash incident response time

(New)

## Avoid recovery reinfection

### **YARA content analysis**

helps to pinpoint identified ransomware strains to prevent reintroduction of malware into your environment

(Enhanced)

## Automate clean recovery

Perform orchestrated recovery of an entire environment using **malware-free restore** points

(New)

## Recover with precision

Perform point-in-time recovery to the moment prior to infection with the **I/O Anomaly Visualizer**, ensuring the lowest possible data loss thanks to Veeam CDP

# VDP Secure + Compliant protection for your data

Complete your security & compliance standing

## (New) Guarantee your survival

Prevent accidental or malicious deletion or encryption of backups by employing a zero-trust architecture, **“Four-eyes” admin protection** and immutable backups

## (Enhanced) Verify security and compliance

Ensure recovery success with automated scans using the **Security & Compliance Analyzer**, leveraging infrastructure hardening and data protection best practices

## (New) Put the spotlight on malware

Highlight threats, identify risks and measure the security score of your environment in the **Veeam Threat Center**



## General options

Full VM restore	VM files restore	Multi-VM Instant Recovery	VM hard disk restore	File-level recovery (Windows)	FLR: Restore permissions only	File-level recovery (Multi-OS)
Restore changed items only	Quick Rollback	U-AIR restore	Restore from a replica VM	Replicate VM from a backup	Failover to a replica VM	V2V conversion to vSphere/Hyper-V
Instant VM disk recovery	Instant first-class disk recovery	Staged Restore	Secure Restore	Data Integration API	Instant DB recovery	DB restore with recovery token



## Agents

Agent Backup to a Hyper-V VM	Guest OS files/folders/volumes	Agent Linux
Agent Mac	Agent Windows	Export a point as a virtual disk
P2C conversion	Application-level restore	Bare-metal recovery



## Backup Enterprise Manager

1-click VM/file restore	Virtual disk restore	Launch failover plan
Restore of vCD infrastructure	Exchange item restore	SQL/Oracle/PG DB restore
Self-service Restore Portal	Restore via RESTful API	Instant VM recovery



## Cloud

Restore from the VCC Provider	Partial/full site failover	Instant Recovery as a Service
Restore to Azure VM	Restore to AWS EC2	Restore to Google CE
Restore from "deleted" VCC backups	Restore from object storage	C2V conversion via "external repository"



## Veeam Explorers

### PostgreSQL

Restore the latest point	Restore to specific time/transaction	Publish latest state	Publish point-in-time state
--------------------------	--------------------------------------	----------------------	-----------------------------

### Active Directory

Export container/object	Restore system objects/GPO	Save data	Send data	Save file/as ZIP	Send post/file
Restore a deleted container/object	Restore a changed container/object	Restore folder/Item/mailbox	Export to PST file	Restore team/channel/tab/post/file	Export post

### Exchange

### Teams

### SharePoint

### OneDrive

### Oracle

Save library/document	Send library/document	Save folder/document	Send document	Restore the latest state	Restore to a specific point in time
Restore library/list/document/site	Export library	Restore folder/document	Copy data to same/different user	Restore to a specific transaction	Restore from Oracle RMAN backup

### SQL

Restore the latest point	Restore to specific time/transaction	Restore/export DB schema	Export latest or point-in-time state	Publish latest or point-in-time state	Export as MDF/BAK
--------------------------	--------------------------------------	--------------------------	--------------------------------------	---------------------------------------	-------------------

# 105

## Recovery scenarios with Veeam Backup & Replication v12

veeam



## Network Shares

Restore entire file share	Rollback to a point in time	Restore files and folders
Restore permissions and security attributes	Instant share publishing	Instant file share recovery

## </> Extra

Restore via PowerShell	Restore via REST API	
Extract utility	File restore audit	Restore under user context



## vCloud Director

Instant VM Recovery into vApp/vSphere	Full restore into vApp/vSphere	vCloud vApp restore	Linked Clone VMs to vCD
---------------------------------------	--------------------------------	---------------------	-------------------------



## Tape

Full VM to infrastructure	Files from tape	Backup from tape	Tenant restore
---------------------------	-----------------	------------------	----------------



## Explorer for Storage Snapshots

Guest files (Windows/Multi-OS)	Instant VM/disk Recovery	SQL/Oracle DB restore	Exchange/SP/AD item restore
--------------------------------	--------------------------	-----------------------	-----------------------------



## Even voorstellen

- Lead Consultant
- [d.vanderaalst@previder.nl](mailto:d.vanderaalst@previder.nl)
- Dennis van der Aalst

# Samenwerking Previder <-> Veeam

## Preferred partner t.a.v. Backup

- Backup klantomgeving
- Backup IaaS-platform
- Cloud Connect
- Microsoft 365 Backup



previder

# Samenwerking Previder <-> Veeam

**Heb je vragen over:**

- Backup
- Disaster recovery / Uitwijk
- Ransomware
- Of iets anders





# Q&A

The Veeam logo is centered on a green background. It features the word "veeam" in a white, lowercase, sans-serif font. The text is enclosed within a white-outlined rectangular box with rounded corners and a small notch on the right side. Behind the box, there are two large, light-green, semi-transparent geometric shapes that resemble stylized mountain peaks or abstract letterforms.

# veeam

Follow us!



Join the community hub:

