

Veeam Availability Platform

for the Hybrid Cloud



Backup war gestern - Verfügbarkeit mit Veeam
FastLane GmbH 8.6.17

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System Engineer



Willkommen bei Veeam

Veeam ist ein weltweit operierendes Unternehmen mit Hauptsitz in Baar, Schweiz

Veeam wurde 2006 gegründet

Exponentielles Wachstum bei Umsatz und Kunden



> 13,3 Mio

VMs gesichert in **180** Ländern

Mehr als
45.000
ProPartner

Mehr als
2.600+
Mitarbeiter

230.000+
Kunden weltweit



Veeam Availability Platform for the Hybrid Cloud









Die Welt verändert sich...





...leider auch zum Negativen



Eine neue Bedrohung: Ransomware as a Service

Eine Bedrohung aus dem Inneren,
welche die IT Welt verändert

Quelle: <https://www.helpnetsecurity.com/2017/01/20/satan-ransomware/>

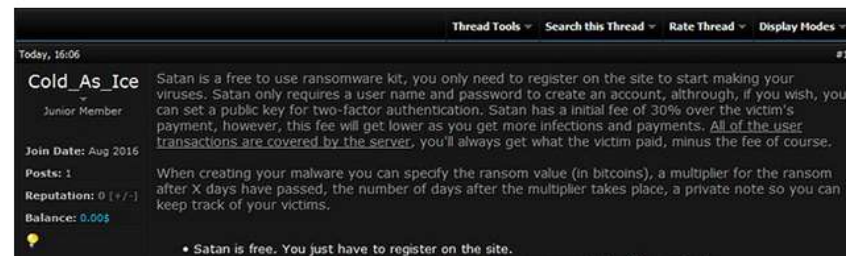


Satan: A new Ransomware as a Service

Free tool download: [Netwrix Change Notifier for Active Directory](#)

If you've been hit by ransomware that has scrambled the names of your encrypted files and has appended the `.stn` extension to them, you've been targeted by Satan – not the “Prince of Darkness”, but by the eponymous new [Ransomware as a Service](#).

Satan was [flagged](#) on Wednesday by security researcher Xylitol and, as it [turns out](#), the RaaS is being actively marketed on underground forums.





...es gibt aber auch Positives



Private cloud /
On-premises



Private cloud /
On-premises



Veeam Cloud
& Service Provider
(VCSP) partners

Managed cloud

Private cloud /
On-premises



Software as a
Service (SaaS)



Veeam Cloud
& Service Provider
(VCSP) partners



Managed cloud

Private cloud /
On-premises



SaaS

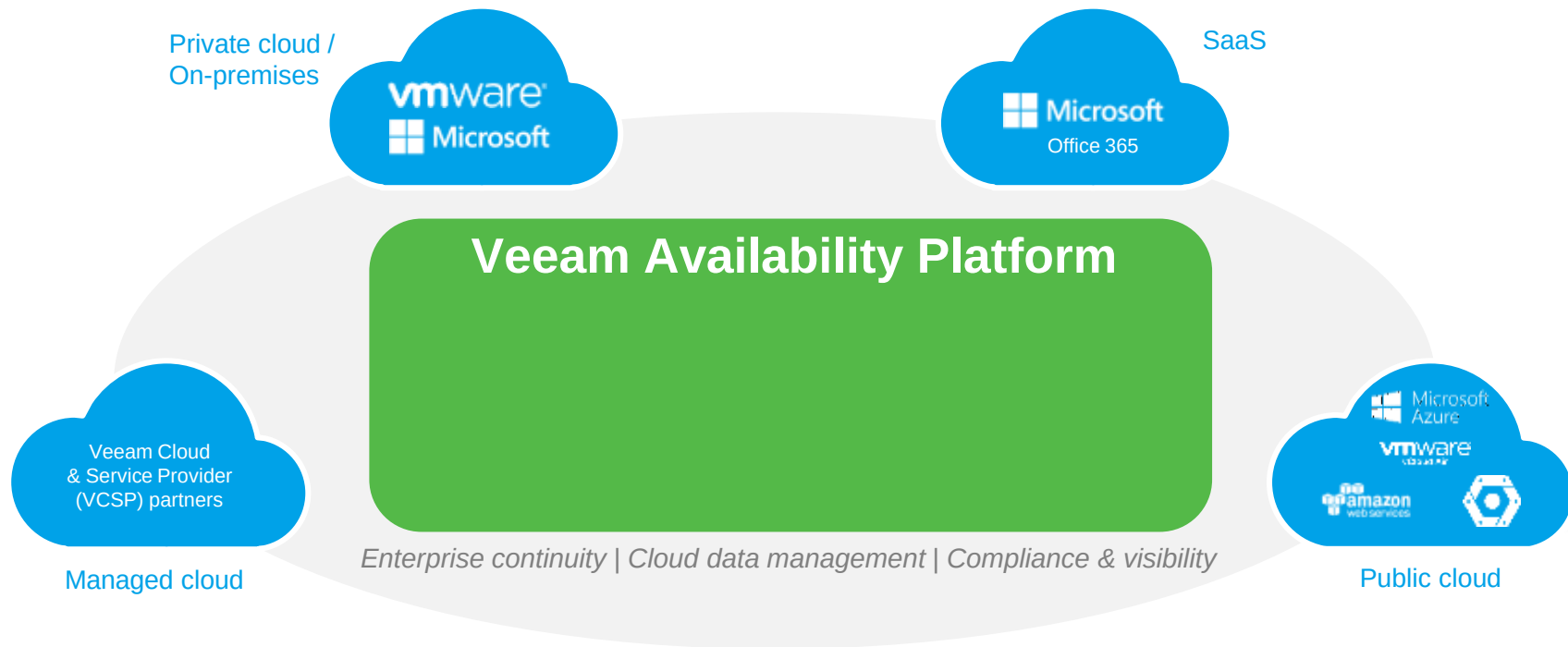


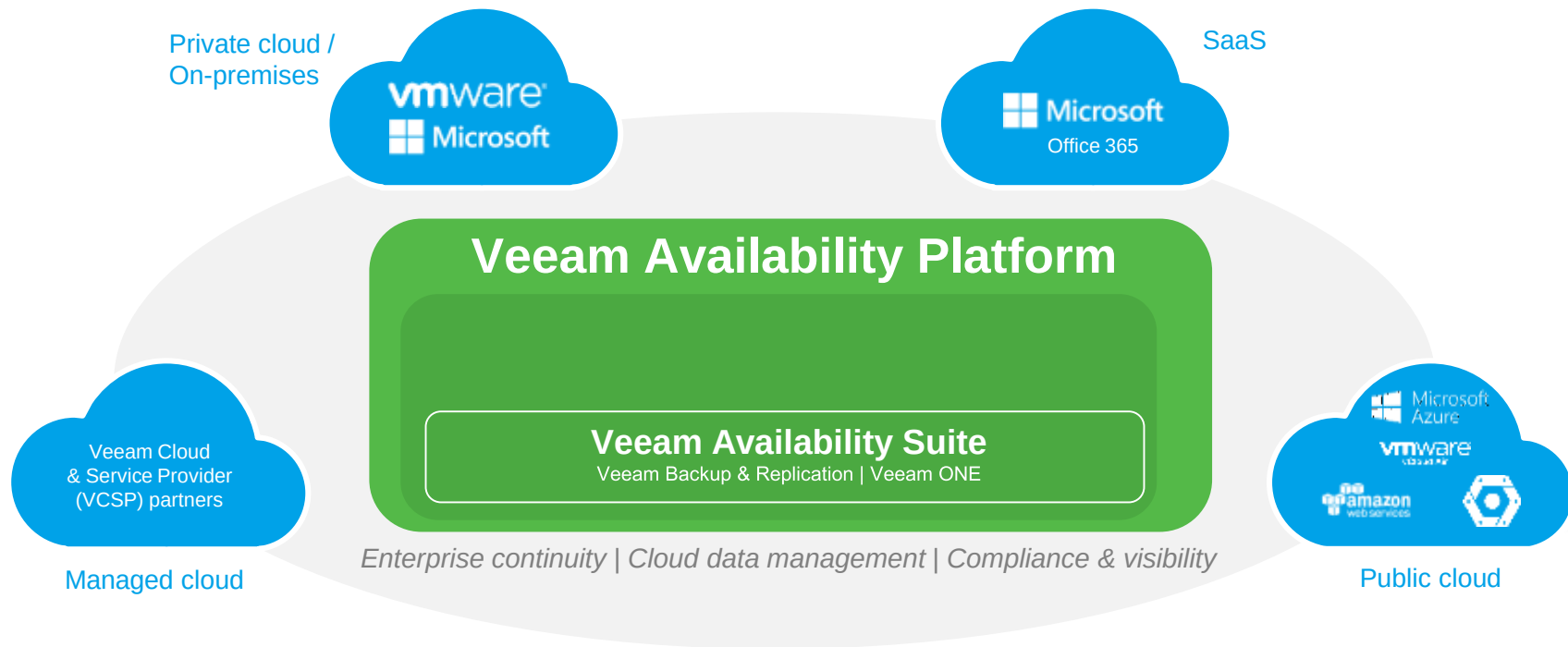
Veeam Cloud
& Service Provider
(VCSP) partners

Managed cloud

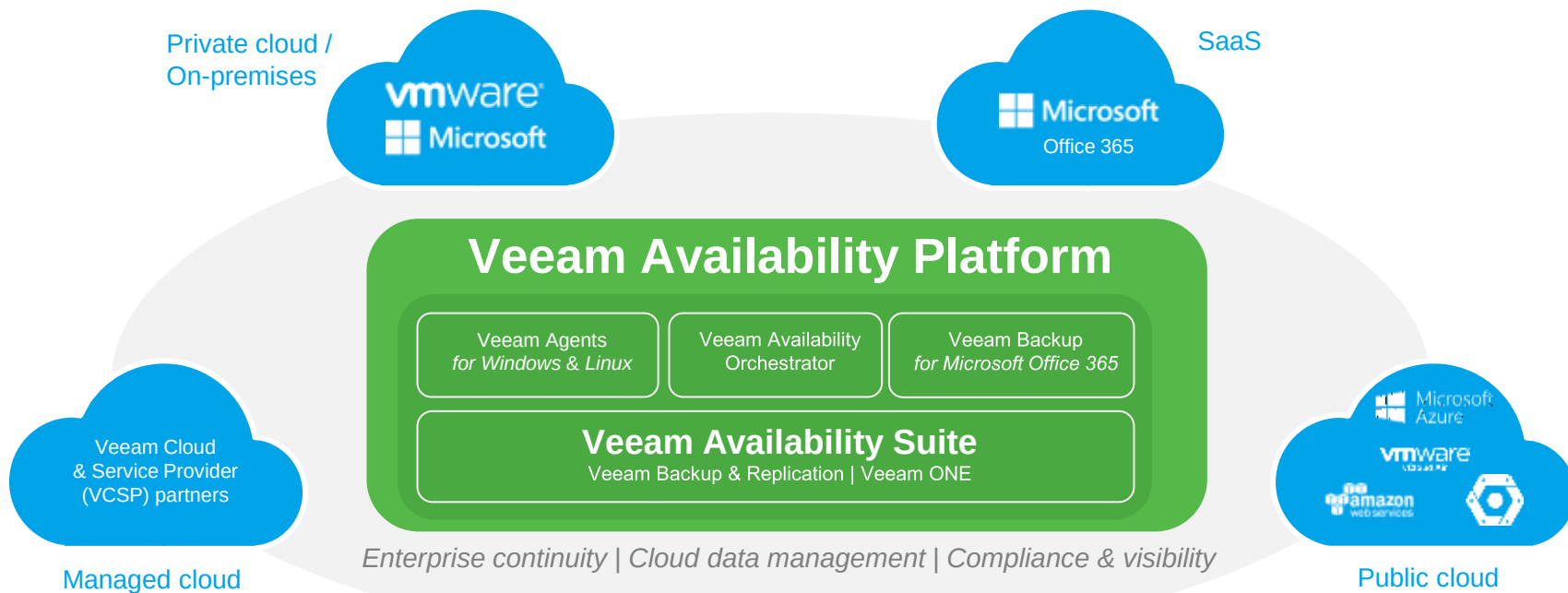


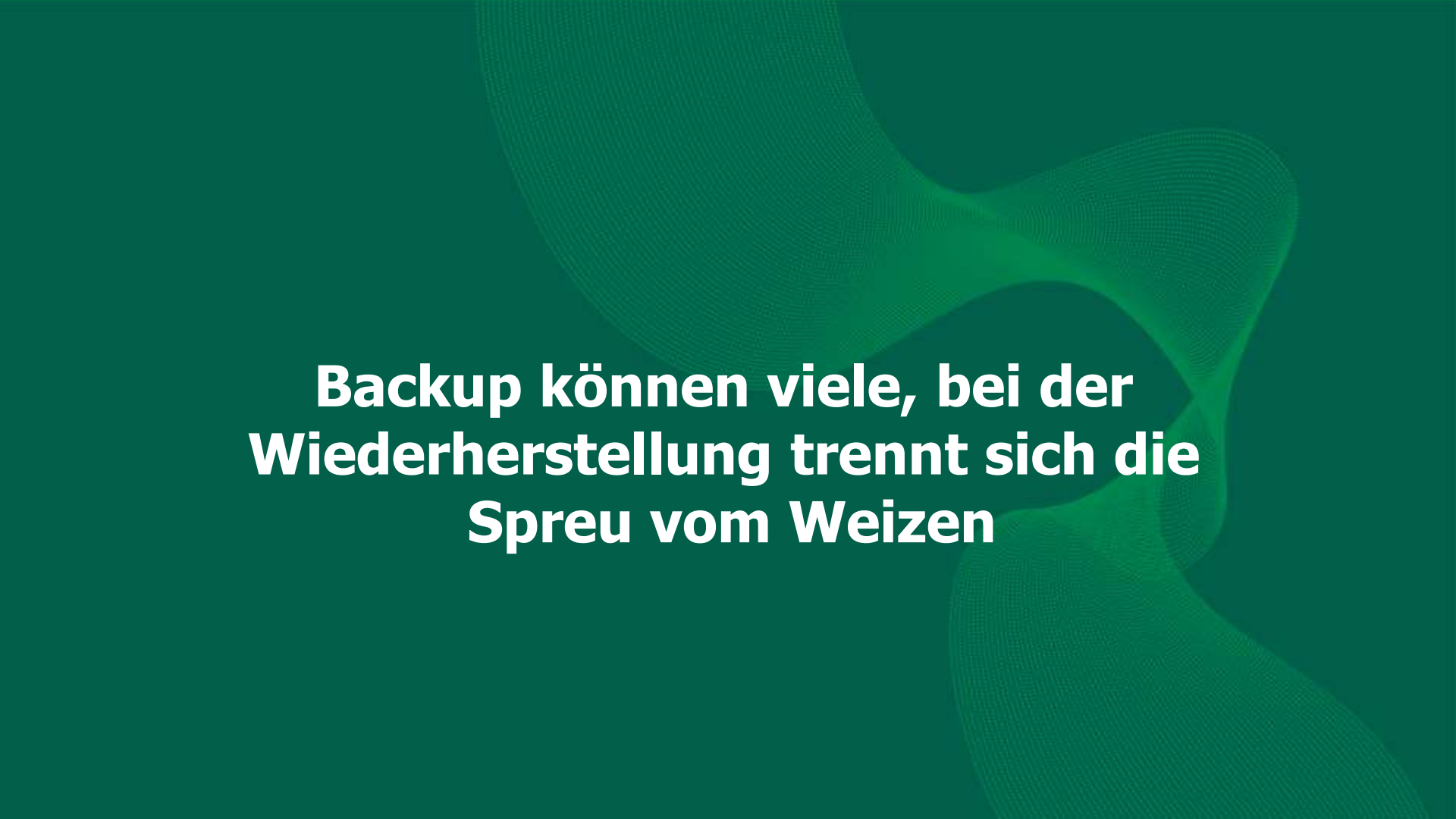
Public cloud





Veeam Availability Platform





**Backup können viele, bei der
Wiederherstellung trennt sich die
Spreu vom Weizen**

Veeam Explorer for Storage Snapshots:



Tape



General Options



vCloud Director



Veeam Explorers



57

veeam

Restore scenarios from
Veeam Backup & Replication **9.5**

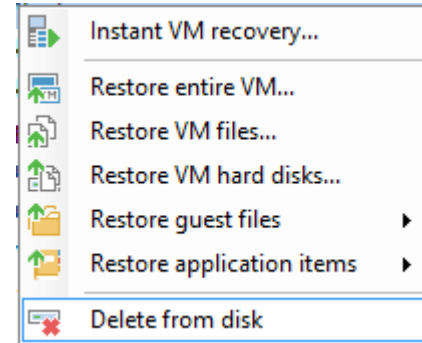
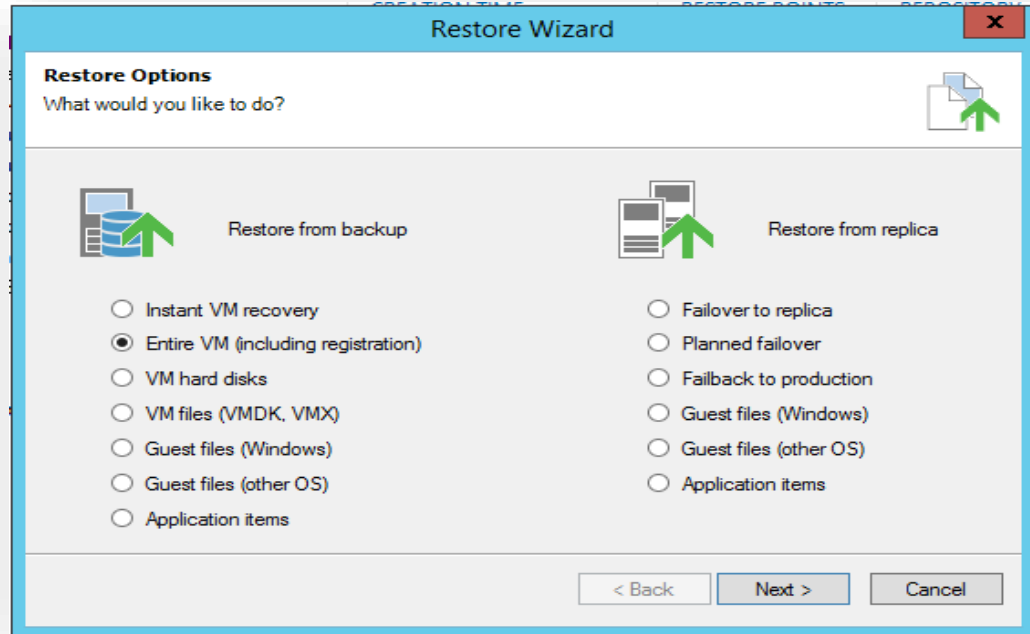
Enterprise Manager



Cloud & Command Line



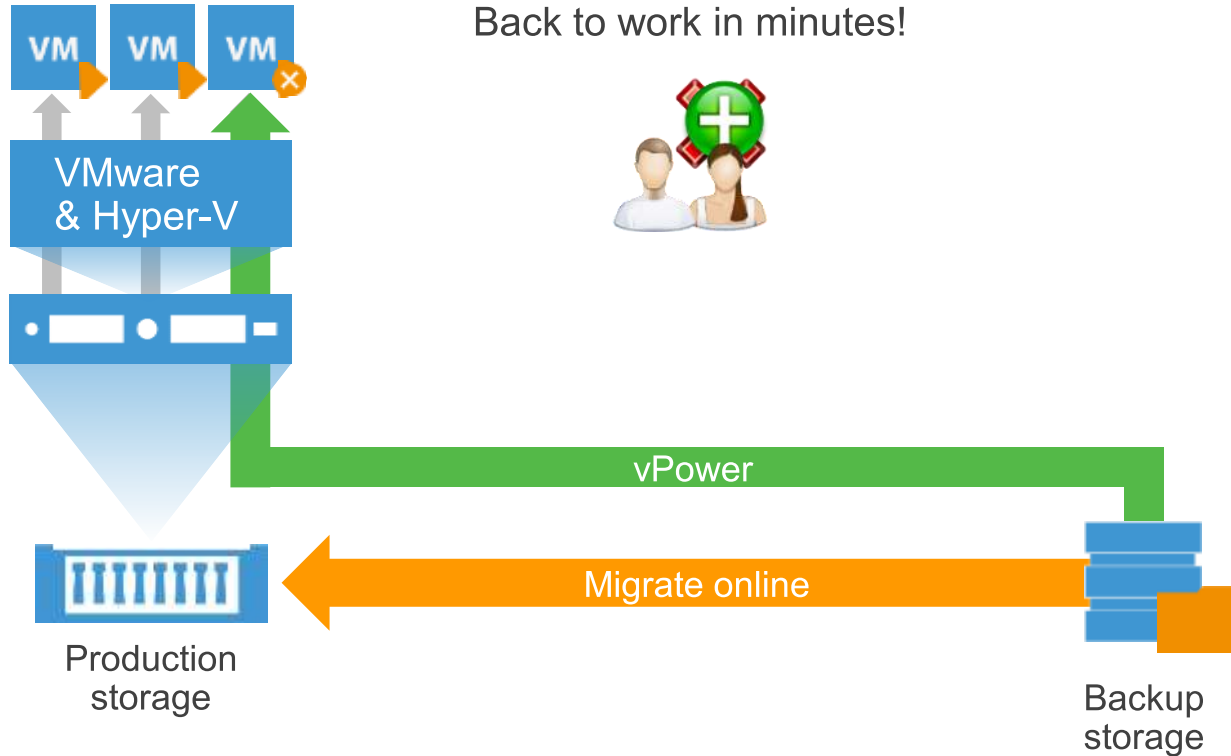
Veeam Restore



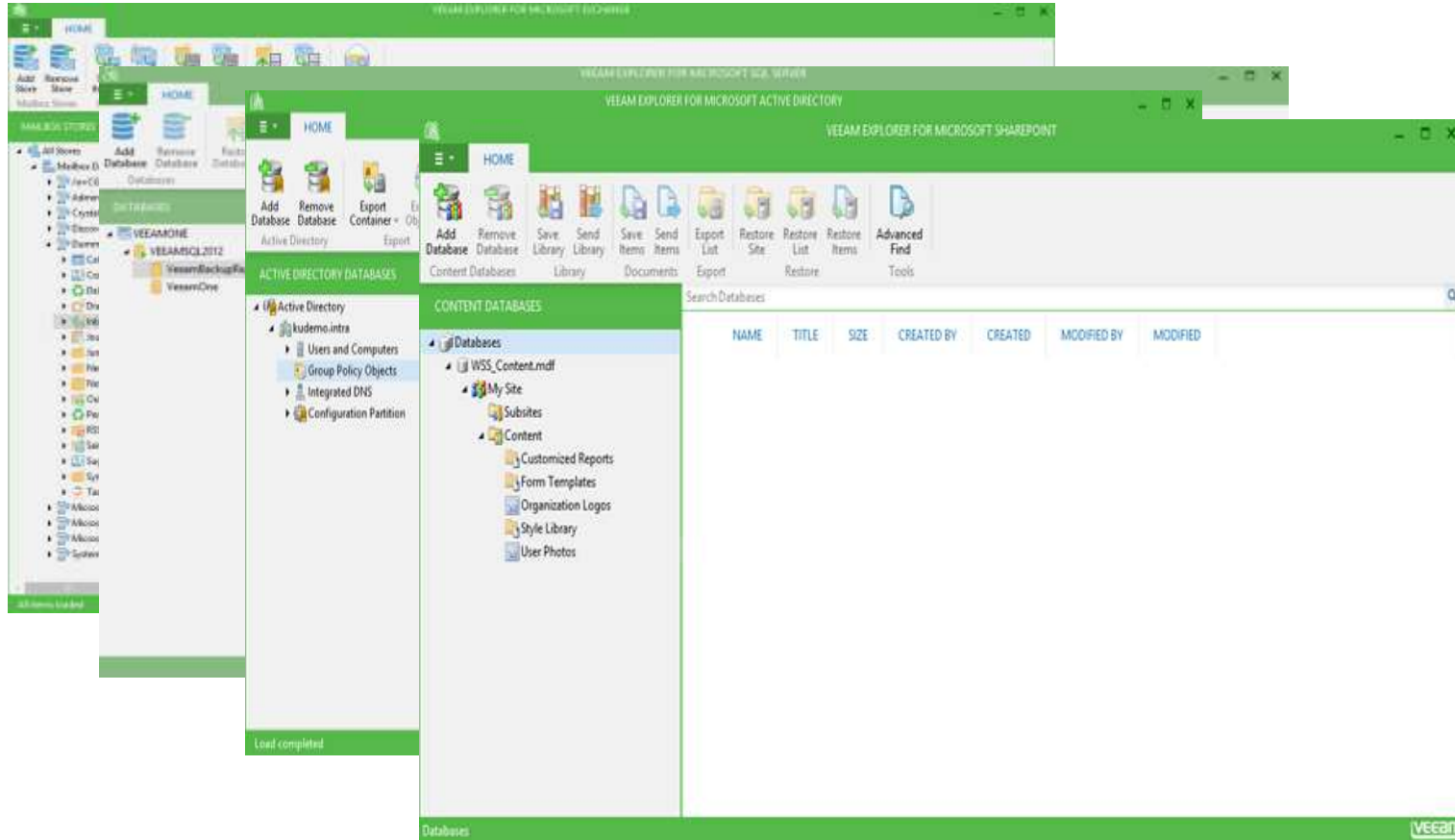
Veeam Restore

Recovery Option	Discription
Instant VM Recovery	Start the virtual Machine direct from the Backup Repository
Restore entire VM	Restore the virtual Machine Completely
Restore VM files	Restore Hypervisor Files for the virtual Machine
Restore VM hard disks	Restore Hard Disks of the virtual Machine
Restore guest files	Restore Files inside the virtual Machine
Restore application items	Restore Application Items with different Veeam Explorer for: • Active Directory • SharePoint • Exchange • MS SQL • Oracle

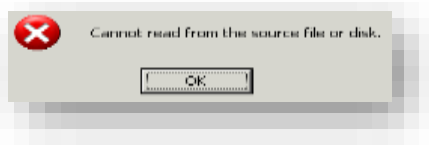
Instant VM Recovery



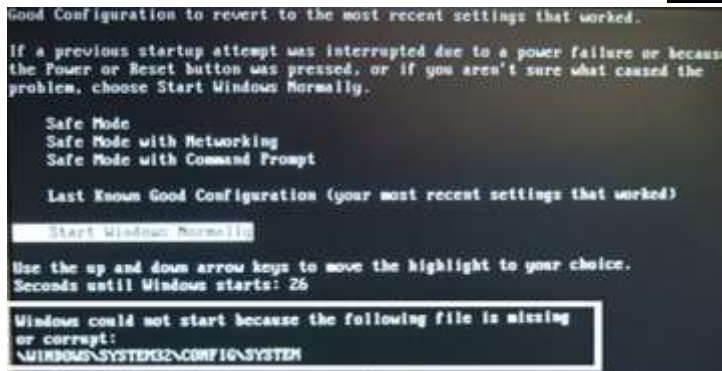
Veeam Explorer



Wiederherstellungsprüfung?

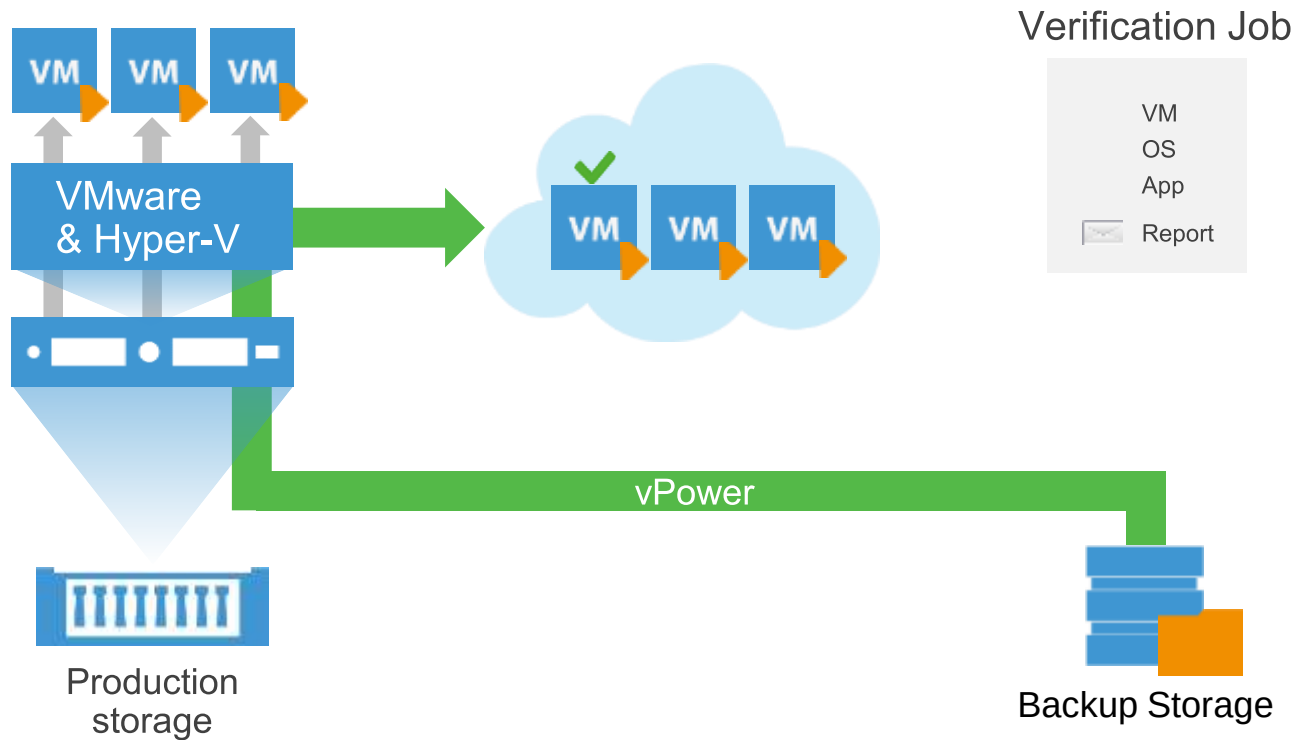


```
NTLDR is missing
Press Ctrl+Alt+Del to restart
```



```
Operating System not found
```

Sure Backup



Veeam Neuigkeiten V9.5

NEW Veeam Availability Suite 9.5



NEW Enterprise scalability
enhancements

Enhancements

Backup Beschleunigung

- verdoppelt die I/O Leistung
- verkürzt das Sicherungsfenster um bis zu dem Fünffachen
- geringere Last auf Primär & Backup Speicher, sowie vCenter

Enhancements

- Direct VM Restore von Tape
- Broker Service
- Proxy Affinity Rules

NEW Veeam Availability Suite 9.5



NEW Enterprise scalability
enhancements



NEW FULL integration with Microsoft
2016 data center technologies

Integration with Microsoft 2016 data center technologies

- **Windows Server 2016:** Support for installing Veeam® Backup & Replication™ components as well as support as a guest OS of protected VMs, including network-free communication with a guest via PowerShell Direct.
- **Microsoft Hyper-V 2016:** Integration with Resilient Change Tracking (RCT) for backups and restores, as well as support for Hyper-V hosts installed on Nano Server and Storage Spaces Direct.
- **2016 versions of Microsoft enterprise applications:**
 - AD, Exchange, Sharepoint, SQL 2016
 - Item-level recoveries through Veeam Explorers™ for fast RTOs of <15 minutes.

NEW Veeam Availability Suite 9.5



NEW Enterprise scalability
enhancements

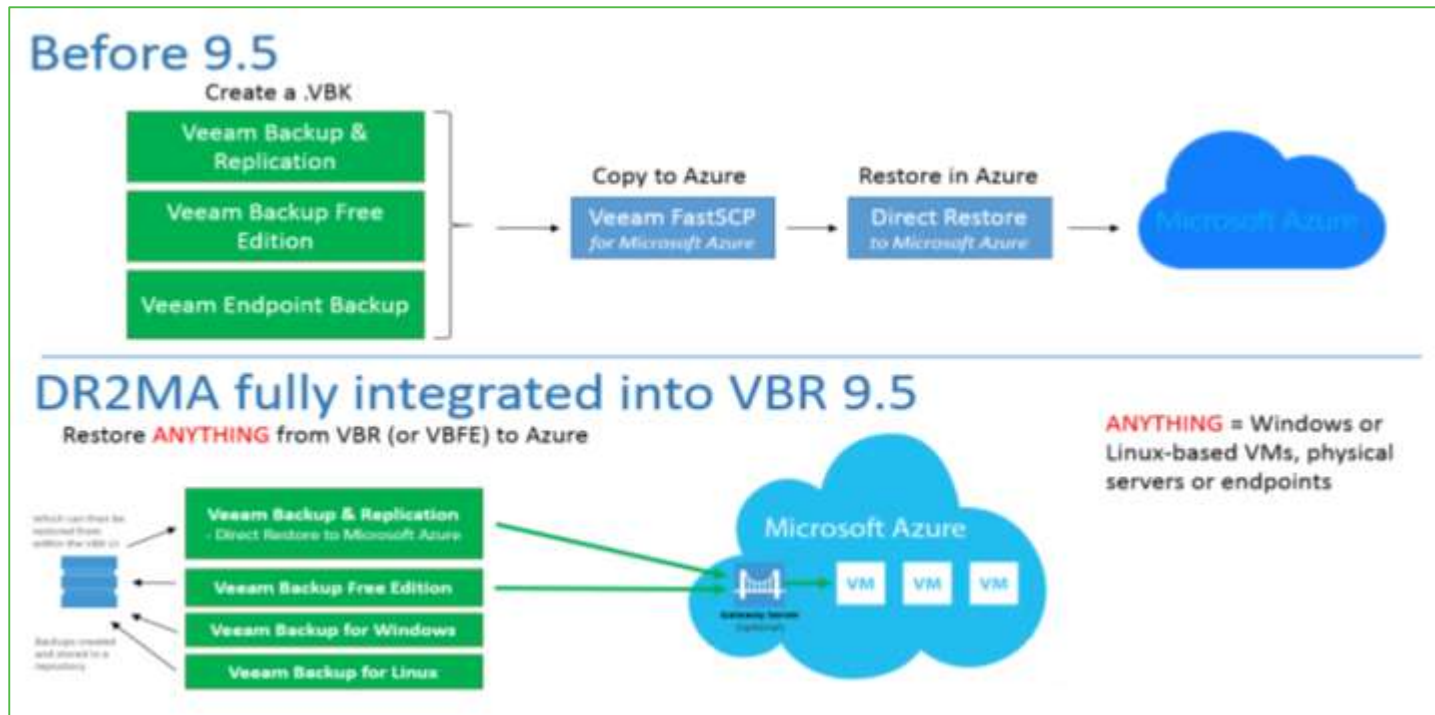


NEW FULL integration with Microsoft
2016 data center technologies



NEW Direct Restore
to *Microsoft Azure*

Direct Restore to Microsoft Azure



NEW Veeam Availability Suite 9.5



NEW Enterprise scalability enhancements



NEW Direct Restore to *Microsoft Azure*

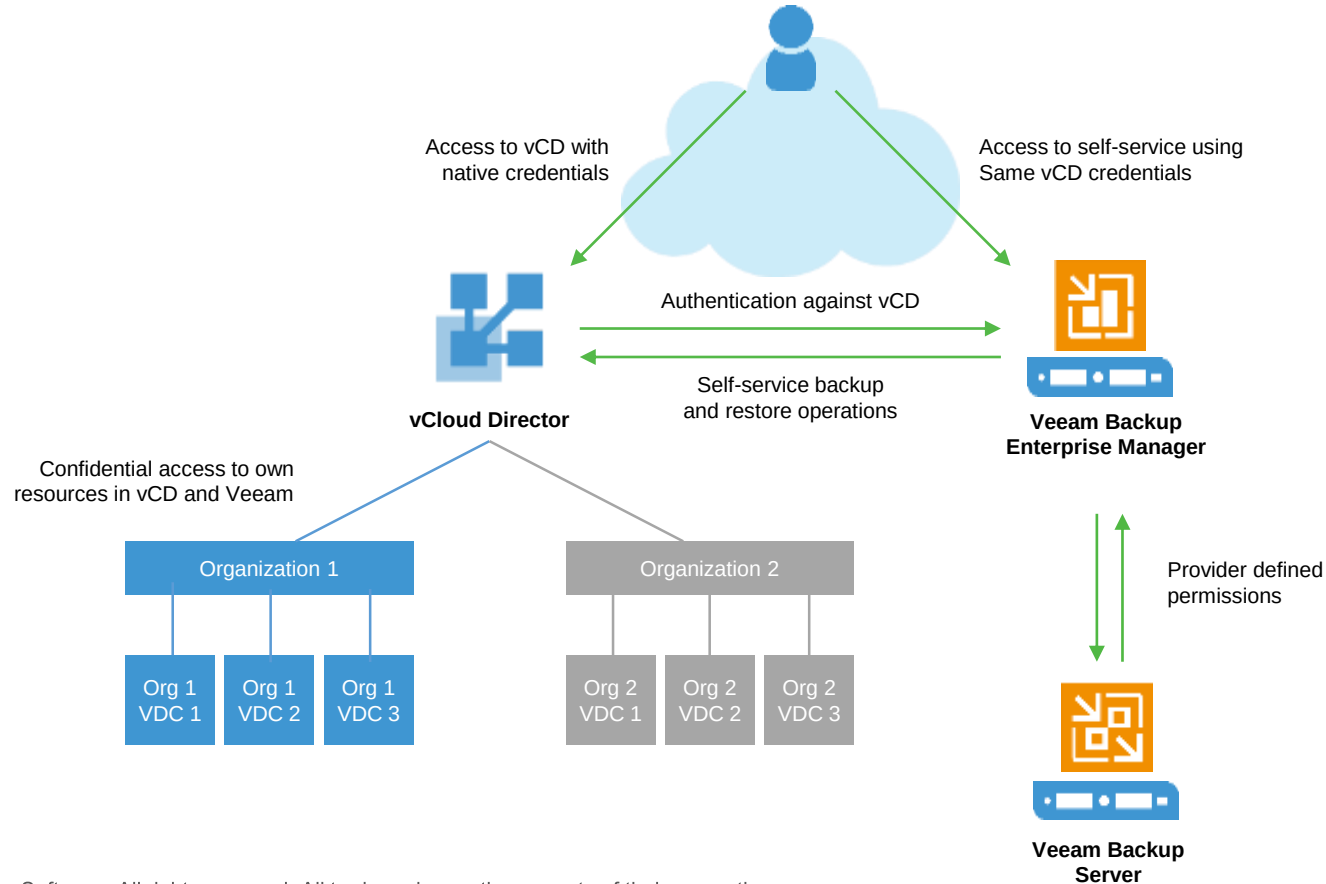


NEW FULL integration with Microsoft 2016 data center technologies



ENHANCED VMware vCloud Director support for service providers

Enhanced vCD Support



NEW Veeam Availability Suite 9.5



NEW Enterprise scalability enhancements



NEW Direct Restore to *Microsoft Azure*



NEW Chargeback and billing for virtual and backup infrastructures



NEW FULL integration with Microsoft 2016 data center technologies



ENHANCED VMware vCloud Director support for service providers

Chargeback in VeeamONE 9.5

- Chargeback: Verrechnung von Host- und VM Kosten
- Use Case: interne Fakturierung (Kostenstellen, Abteilungen,...)



NEW Veeam Availability Suite 9.5



NEW Enterprise scalability enhancements



NEW Direct Restore to *Microsoft Azure*



NEW Chargeback and billing for virtual and backup infrastructures



NEW FULL integration with Microsoft 2016 data center technologies

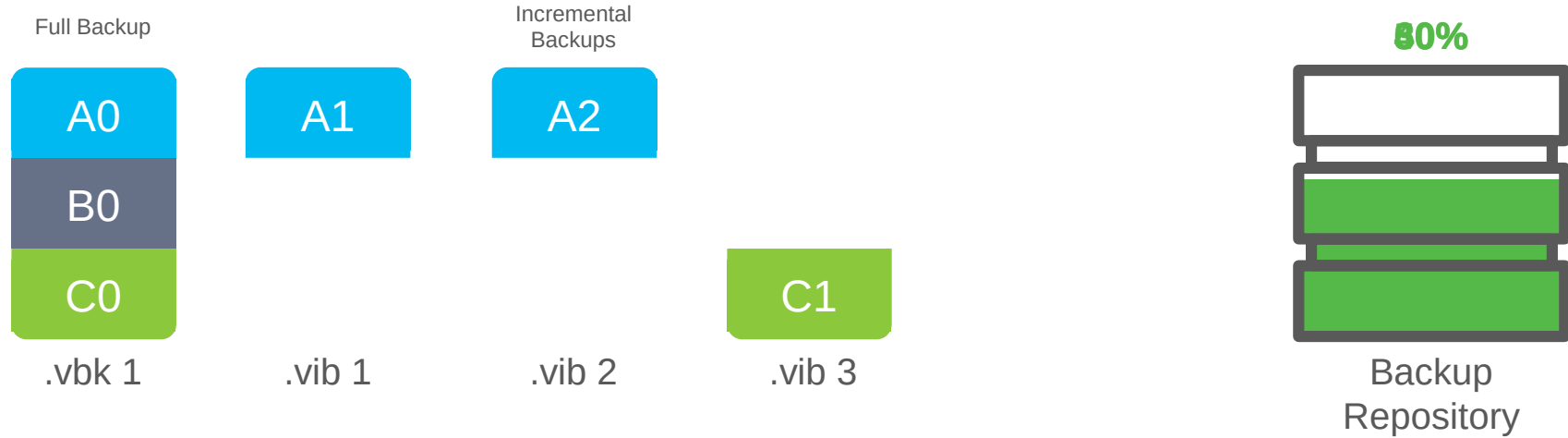


ENHANCED VMware vCloud Director support for service providers



NEW Advanced ReFS Integration

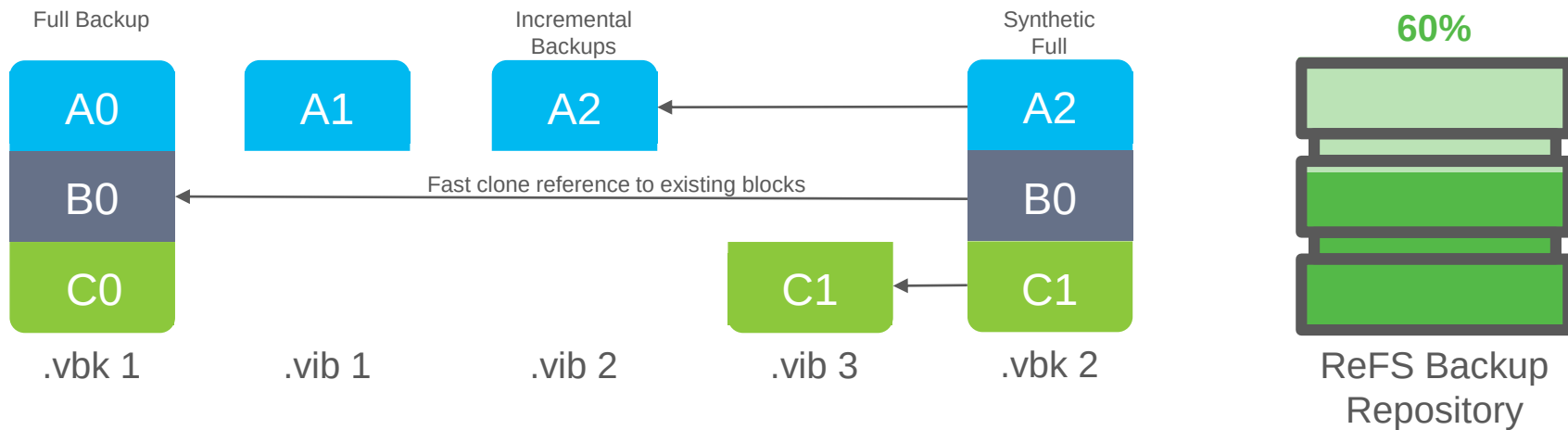
Incremental Backup



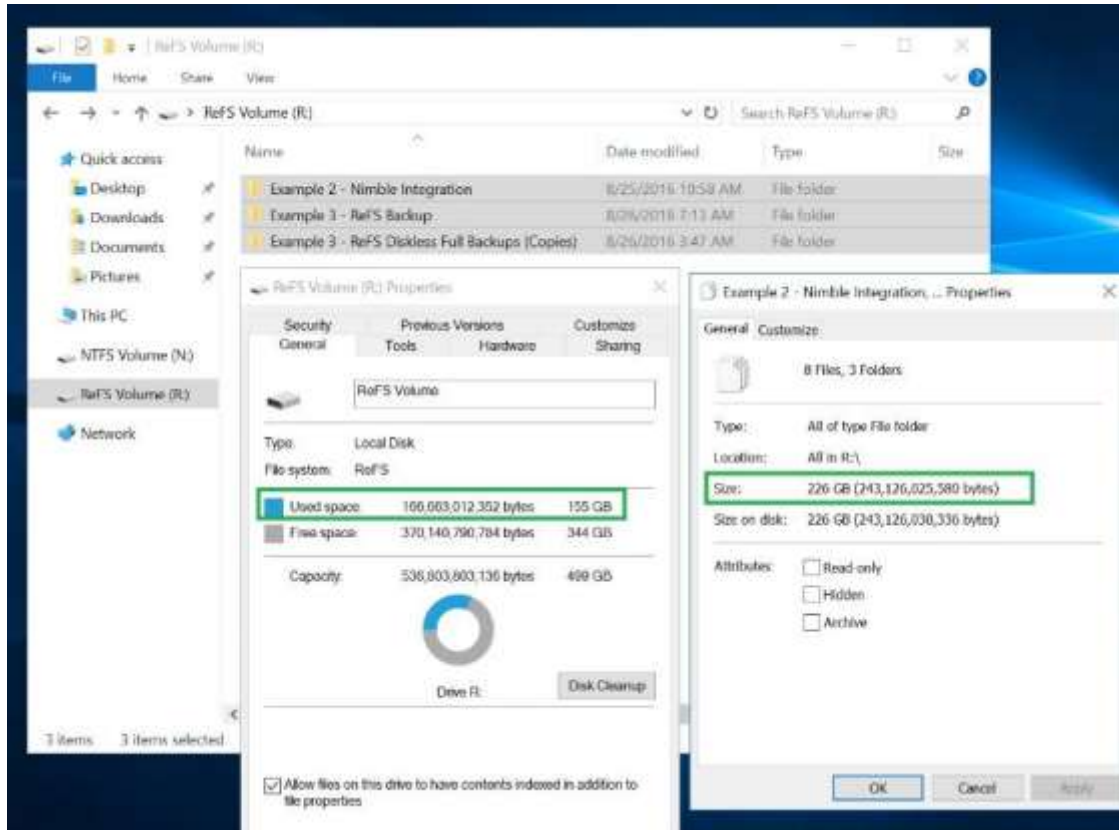
Synthetic Full Backup (Legacy)



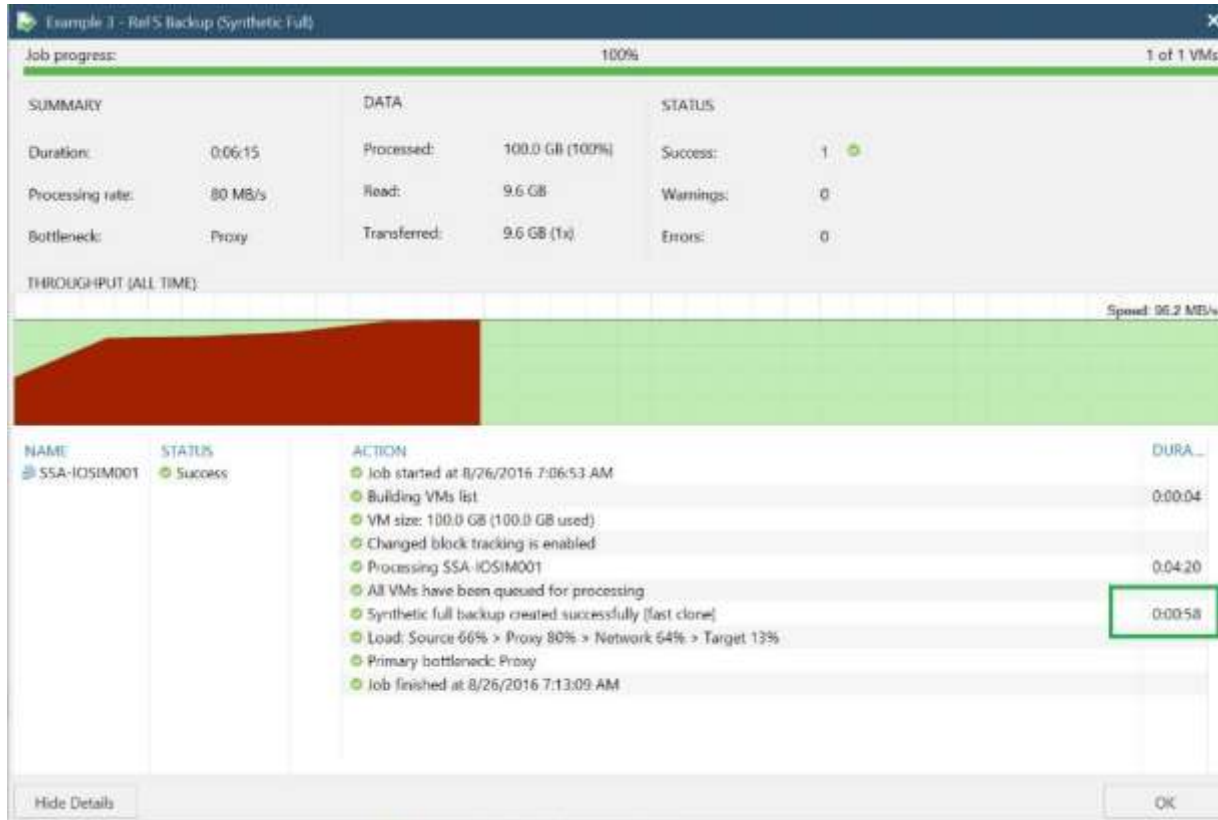
Synthetic Full Backup (ReFS)



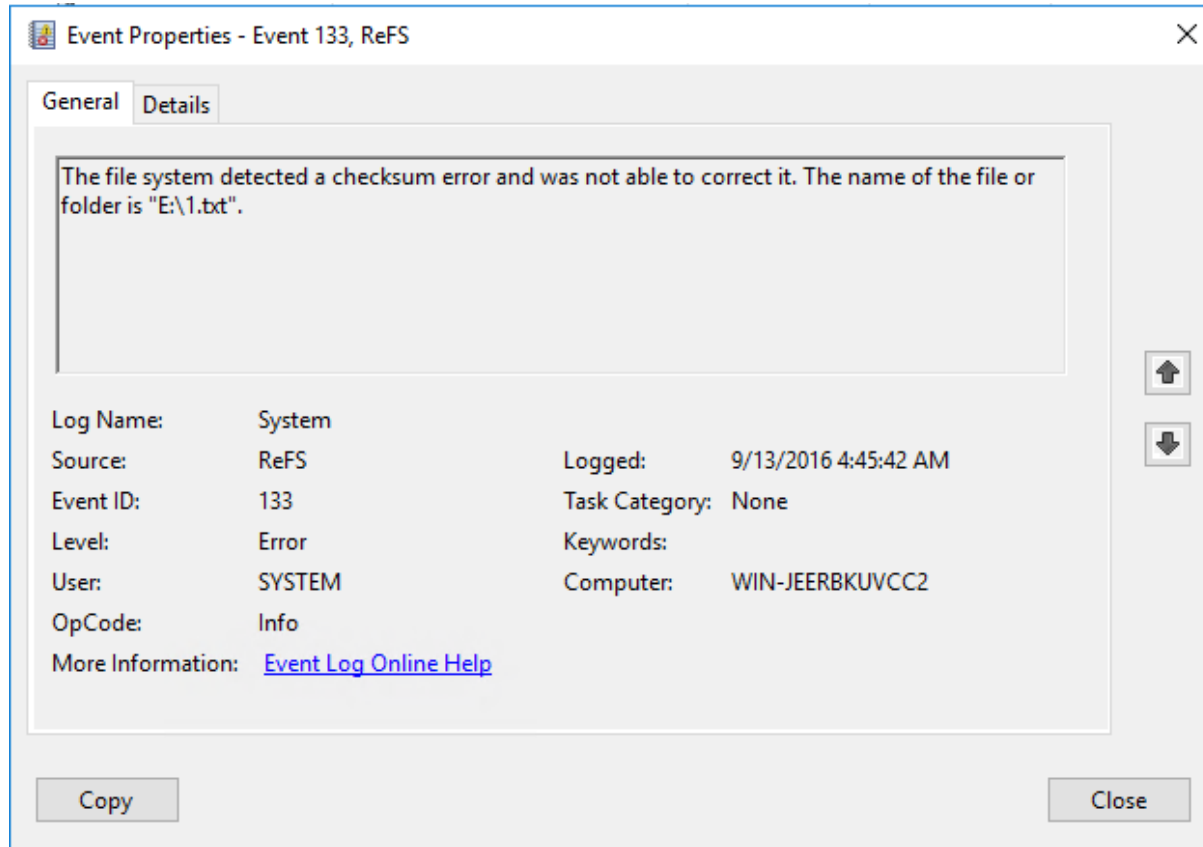
Synthetic Full Backup (ReFS)



Synthetic Full Backup (ReFS)



Synthetic Full Backup (ReFS)



NEW Veeam Availability Suite 9.5



NEW Enterprise scalability enhancements



NEW Direct Restore to *Microsoft Azure*



NEW Chargeback and billing for virtual and backup infrastructures



NEW Integration with Nimble Storage snapshots



NEW FULL integration with Microsoft 2016 data center technologies

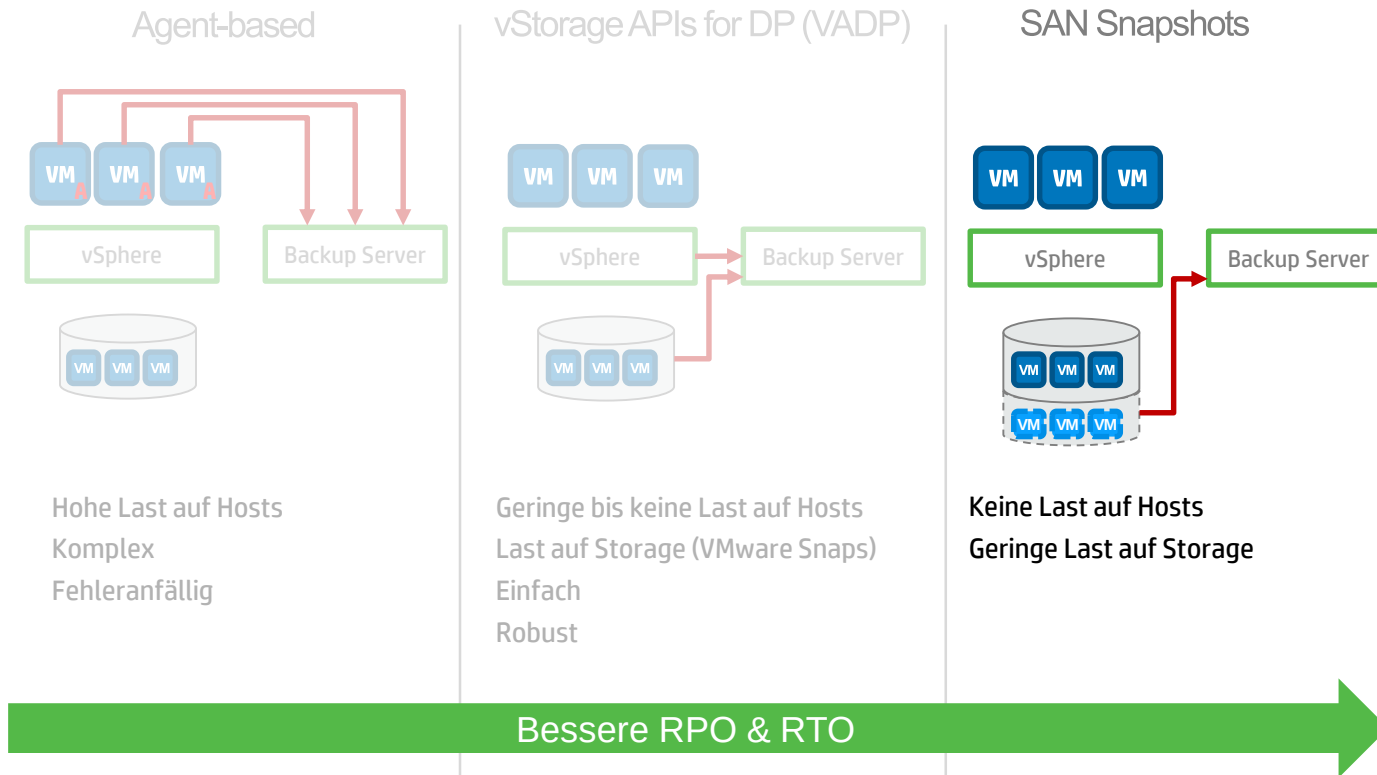


ENHANCED VMware vCloud Director support for service providers



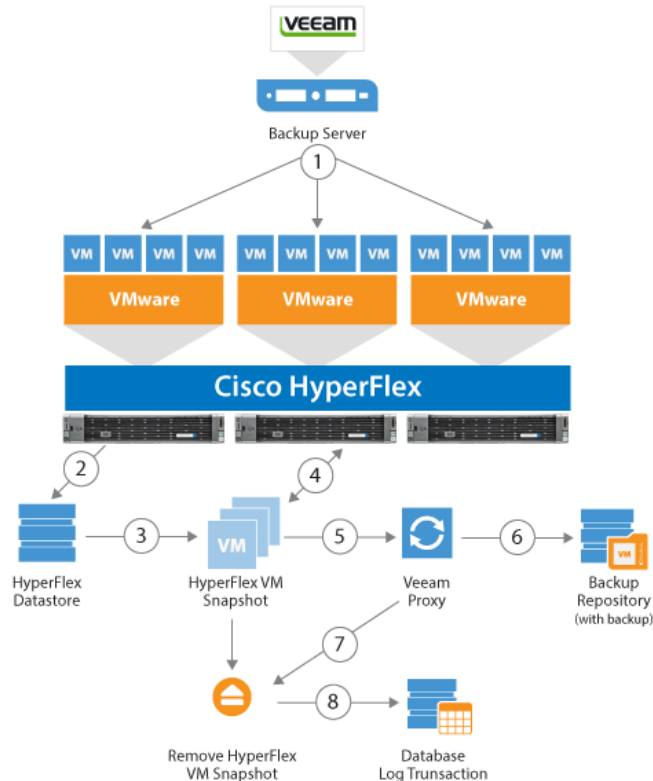
NEW Advanced ReFS Integration

Veeam: Next Generation Backup



Veeam Availability Suite 9.5U2

Integration von Cisco HyperFlex 2.0



The data flow goes as follows:

1. Analyzes which VMs in the job have disks on supported storage
2. Performs Veeam's agentless application-aware processing and consistency for a VM
3. Creates HyperFlex VM snapshot, leveraging the HyperFlex API
4. Releases the consistent state of the VM
5. Retrieves the CBT information for VM snapshots
6. Reads new and changed virtual disk data blocks
7. directly from the HyperFlex VM snapshot and transports them to the backup repository or a replica VM
8. Triggers the removal of the HyperFlex VM snapshot once the VM has been backed up
9. Truncates database logs within the VM

Veeam Agenten für Windows und Linux

Veeam Agent *für Microsoft Windows*

	Free	Workstation	Server
Instant Recovery in eine Hyper-V VM	●	●	●
Direkter Restore <i>nach Microsoft Azure</i>	●	●	●
Quell-seitige Verschlüsselung	●	●	●
Endpoint Protection für mobile Benutzer		●	●
Sicherung direkt in ein Cloud Connect Repository		●	●
Remote-Konfiguration und Management API		●	●
Application-aware processing			●
Sicherung von Transaktionsprotokollen			●
Indizierung des Dateisystems und Katalogsuche			●
24x7 technischer Support		●	●

Veeam Agent *für Linux*

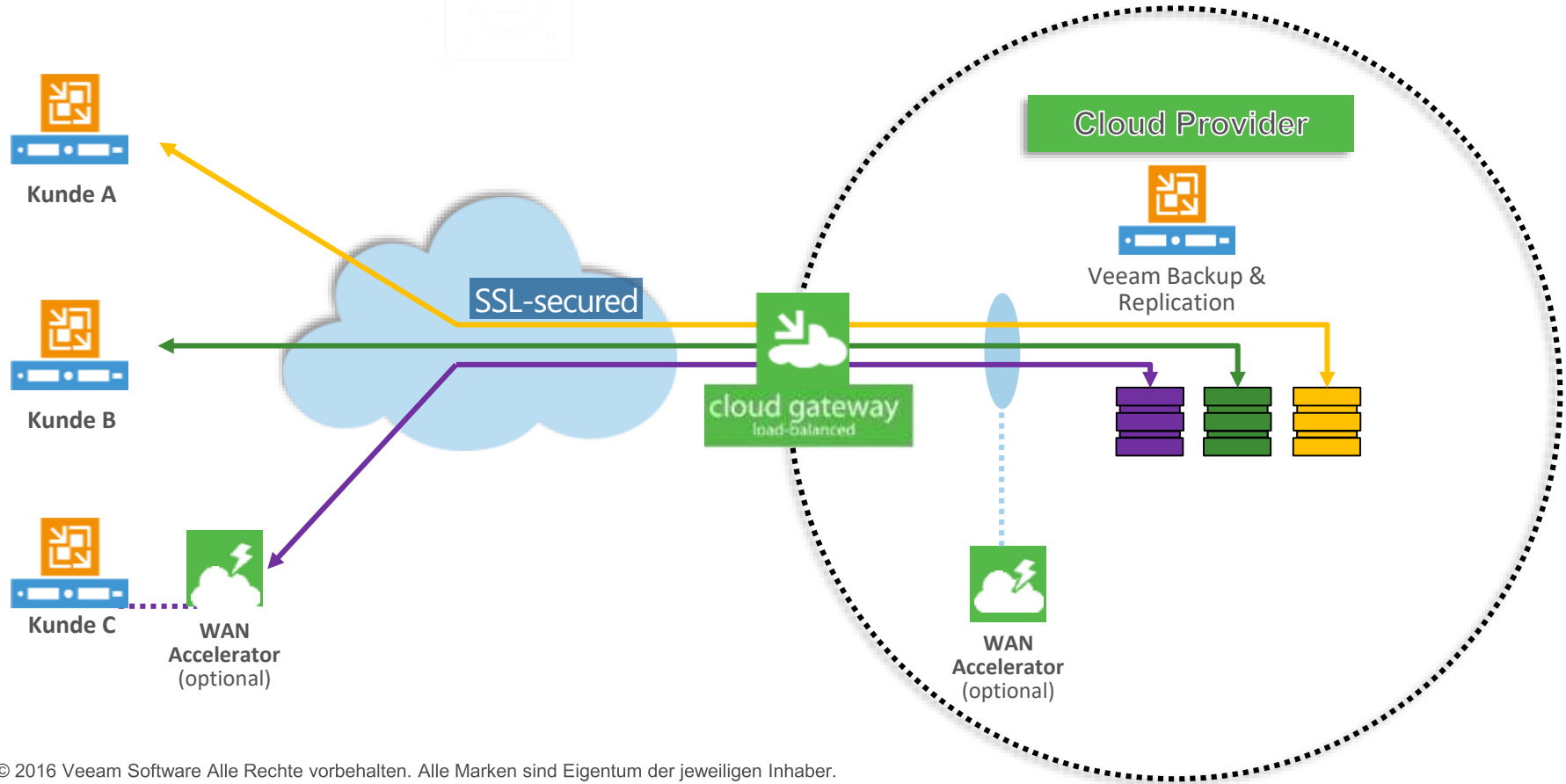
	Free	Workstation	Server
Image-basierte Sicherung von Komplettsystem, Datenträger-Ebene und Datei-Ebene	●	●	●
Integrierter Volume Snapshot und Changed Block Tracking Treiber	●	●	●
File-level, volume-level und Bare Metal Recovery (selbe oder andere Hardware)	●	●	●
Sicherung und Wiederherstellung mittels Konsolen UI oder Kommandozeile	●	●	●
Integration mit Veeam Backup & Replication	●	●	●
Support für mehrere Jobs			●
Pre-freeze/post-thaw Snapshot Skripte für Application Processing			●
Indizierung, Katalogsuche und Wiederherstellung mit dem Veeam Backup Enterprise Manager			●
24x7 technischer Support		●	●

Lizensierung

- ✓ Jährliche Subscription
- ✓ Lizensiert pro Agenten
- ✓ 24x7 technischer Support

Veeam Cloud Connect

Cloud Connect V8



SSL secured

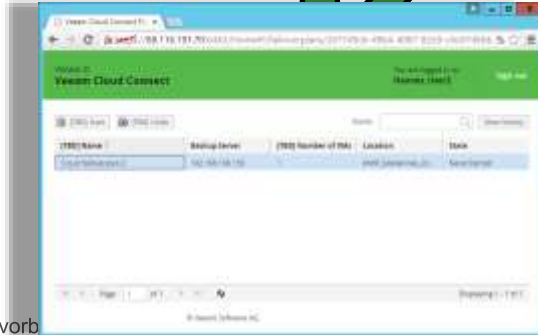


Layer 2 VPN

WAN Accelerator (optional)

hyper-v

vmware





Veeam B&R V10

Veeam B&R V10

Built-in Management for Veeam Agent *for Linux* and Veeam Agent *for Microsoft Windows*

Reduce management complexity and improve usability through the direct **integration of agent management**, enabling users to manage virtual and physical infrastructures through the Veeam Backup & Replication console.

Veeam B&R V10

NAS Backup Support for SMB and NFS Shares

Maintain Availability through the expansion of Veeam's protected data footprint with **file-level backup support** for Network Attached Storage (NAS) for SMB and NFS shares. Support includes scalable SMB/NFS backups, flexible data protection through short and long-term retention policies and out-of-place restore to easily restore SMB/NFS files to any target.

Veeam B&R V10

Scale-Out Backup Repository — Archive Tier

Save primary backup repository space and minimize costs while maintaining compliance with the addition of an **archive tier for Scale-Out Backup Repository™**. The new archive tier will deliver storage-agnostic support by enabling the archiving of backups to any storage or media, deliver backup data management by automatically moving the oldest backup files from primary storage to archive extents and **provide broad cloud object storage support**.

Veeam B&R V10

Veeam CDP (Continuous Data Protection)

Preserve critical data during a disaster and ensure the Availability of tier-1 VMs with VMware-certified continuous data protection to reduce RPOs from minutes to seconds, as well as leverage **VMware's VAIO framework** to reliably intercept and redirect VM I/O to the replica **without a need** to create standard VM snapshots.

Veeam B&R V10

Additional enterprise scalability enhancements

To save businesses valuable time and improve overall scalability, v10 will additionally feature several enterprise scalability enhancements including **role-based access control** to establish self-service backup and restore functionality for VMware workloads **based on vCenter Server** permissions and **Oracle RMAN integration**, allowing users to seamlessly stream RMAN backups into Veeam repositories and easily perform UI-driven restores from backups using a Veeam console.

Veeam B&R V10

Primary Storage Integrations Universal Storage Integration API

Extend Availability and improve recovery time and point objectives (RTPO™) through primary storage integrations with leading storage providers through a universal plug-in framework enabling select partners to build integrations with Veeam Backup & Replication. New integrated storage solutions based on the API include **IBM Spectrum Virtualize** (IBM SAN Volume Controller (SVC) and the IBM Storwize family), **Lenovo Storage V** Series and **INFINIDAT**

Veeam B&R V10

DRaaS Enhancements (for service providers)

Service providers can help tenants minimize costs and reduce recovery times during a disaster with new Disaster Recovery as a Service (DRaaS) enhancements **including vCloud Director integration** for Veeam Cloud Connect Replication and **Tape as a Service (TaaS)** for Veeam Cloud Connect Backups.

Demnächst veröffentlichte Produkte

Produkt	Geplantes Veröffentlichungsdatum*
Veeam Availability Suite 9.5	bereits verfügbar
Veeam Agent <i>for Microsoft Windows</i>	bereits verfügbar
Veeam Agent <i>for Linux</i>	bereits verfügbar
Veeam Backup <i>for Microsoft Office 365</i>	bereits verfügbar
Veeam Management Pack für System Center v8 Update 3	bereits verfügbar
Veeam Availability Orchestrator	H1 2017
Veeam Availability Console (mit Windows-Agent-Unterstützung)	H1 2017
Veeam Availability Console (mit Linux-Agent-Unterstützung)	H2 2017
Veeam Availability Suite v10	H2 2017

* Änderungen am Zeitraum vorbehalten.

Vielen Dank!



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veeam

