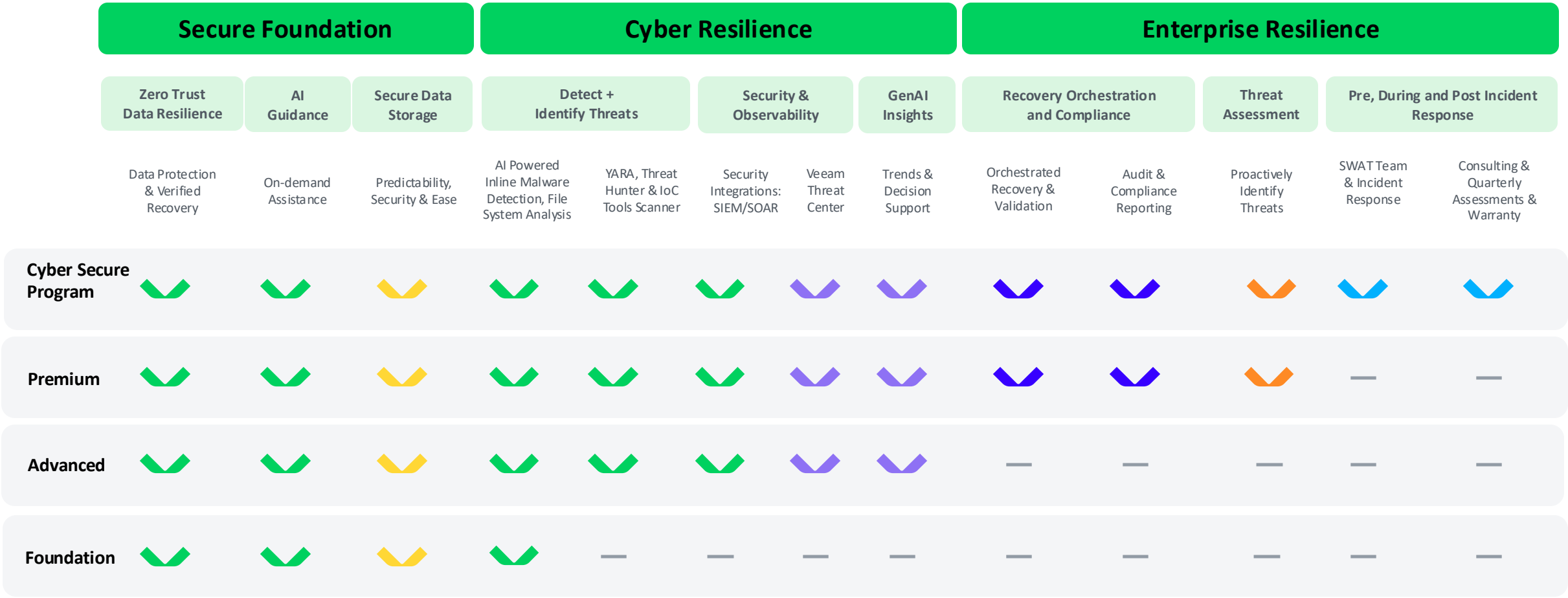
Veeam Data Platform

Resilience with Veeam Recovery Orchestrator

Razvan Ionescu
Customer Onboarding Architect

Jason Trier
Sr. Customer Onboarding Engineer,
Amer Team Lead

Veeam Data Platform



Why Veeam...

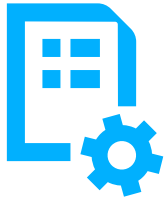
Proven recovery orchestration

Be compliant and ready for disaster with orchestrated recovery

Automate tests to highlight potential impacts to your recovery

Automated testing

Take the headache out of documentation and compliance



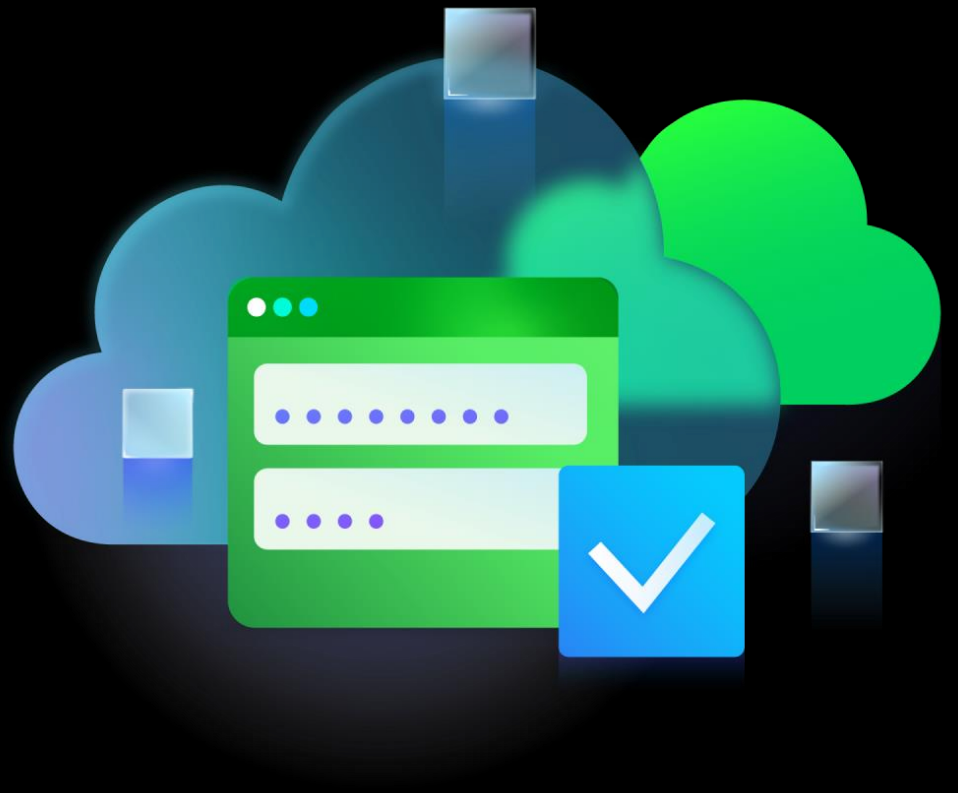
Automated documentation

Recover faster from any disaster

One-click recovery

Multi-factor authentication

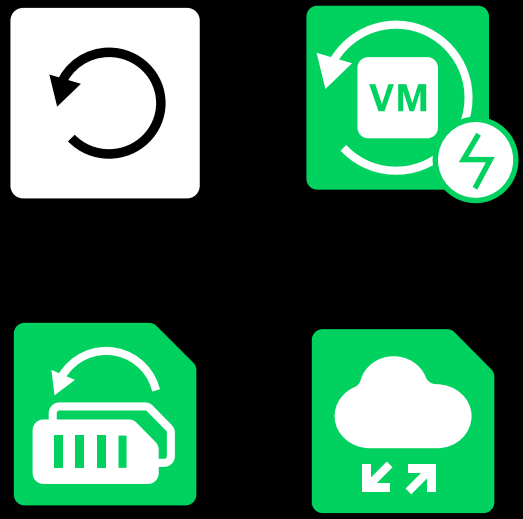
- Enable and disable globally
- View MFA status for all users
- Enforced for login to UI only - not for plan execution
- Reset MFA for any user



Supported Orchestration Methods

Recovery Methods

- Agent & Agent-less Backups
- Replication
- Continuous Data Protection
- Storage Snapshots



Veeam Orchestration Server Components

Veeam Orchestrator Server

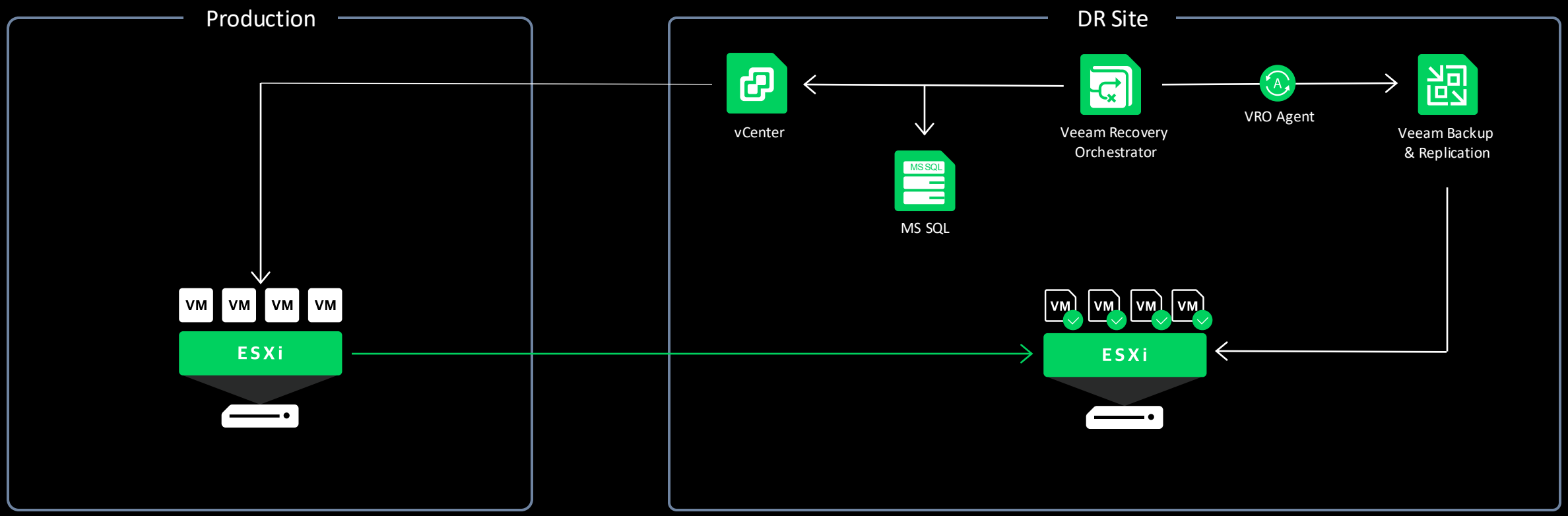
- Veeam Orchestrator Server Service and Web IU
- Veeam Backup & Replication Server (embedded)
- Veeam ONE Server (embedded)
- MS SQL Database

Sizing Veeam Recovery Orchestrator

Number of Protected Systems*	1–1500	1500–5000	5000–10000	10000–20000+
CPU	4 vCPUs – 8 vCPUs for the Orchestrator server 4 vCPUs – 8 vCPUs for the Microsoft SQL Server	10 vCPUs for the Orchestrator server 10 vCPUs for the Microsoft SQL Server	12 vCPUs for the Orchestrator server 12 vCPUs for the Microsoft SQL Server	>20 vCPUs for the Orchestrator server >20 vCPUs for the Microsoft SQL Server
Memory	12 GB for the Orchestrator server 8 GB for the Microsoft SQL Server	40 GB for the Orchestrator server 40 GB for the Microsoft SQL Server	70 GB for the Orchestrator server 70 GB for the Microsoft SQL Server	>70 GB for the Orchestrator server >70 GB for the Microsoft SQL Server
SQL Server	N/A	N/A	Disk IOPS 1000 (minimum)	Disk IOPS 2000 (minimum)
Hard Disk Space	30 GB for product installation and sufficient disk space for the Veeam ONE database (if installed locally). Use the Veeam ONE Database Calculator to size application data. 20 GB for the Microsoft SQL Server. By default, the Microsoft SQL Server database grows as follows: •~1Mb per one Readiness Check Report or Plan Execution Report for a plan that includes 10 machines. •~10Mb per one Readiness Check Report or Plan Execution Report for a plan that includes 100 machines. •~100Mb per one Readiness Check Report or Plan Execution Report for a plan that includes 1000 machines. **Note**: SSD disks are recommended to use with the Microsoft SQL Server.			

https://helpcenter.veeam.com/docs/vro/userguide/system_requirements.html?ver=70#hardware-recommendations

Server Placement Best Practices — DR

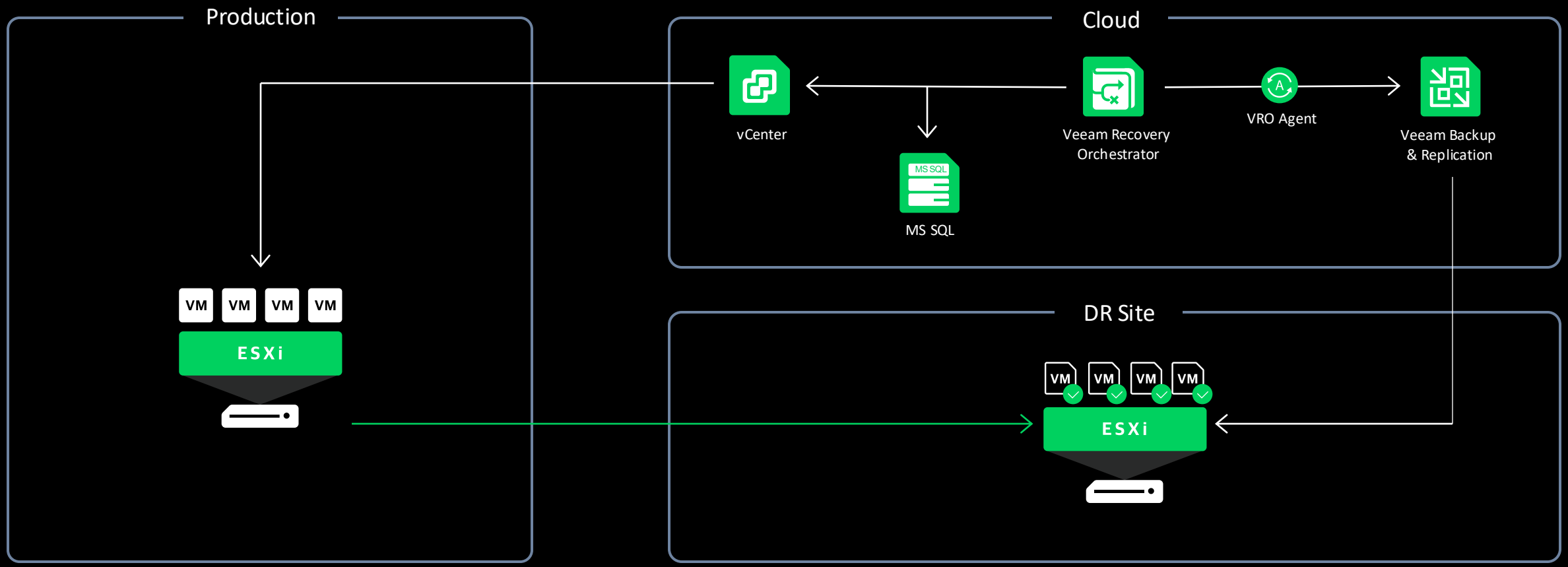


Data Recovery

Management

All management components will need to be online for Orchestration.

Server Placement Best Practices — Cloud



Data Recovery

Management

All management components will need to be online for Orchestration.

Additional Operation Costs*

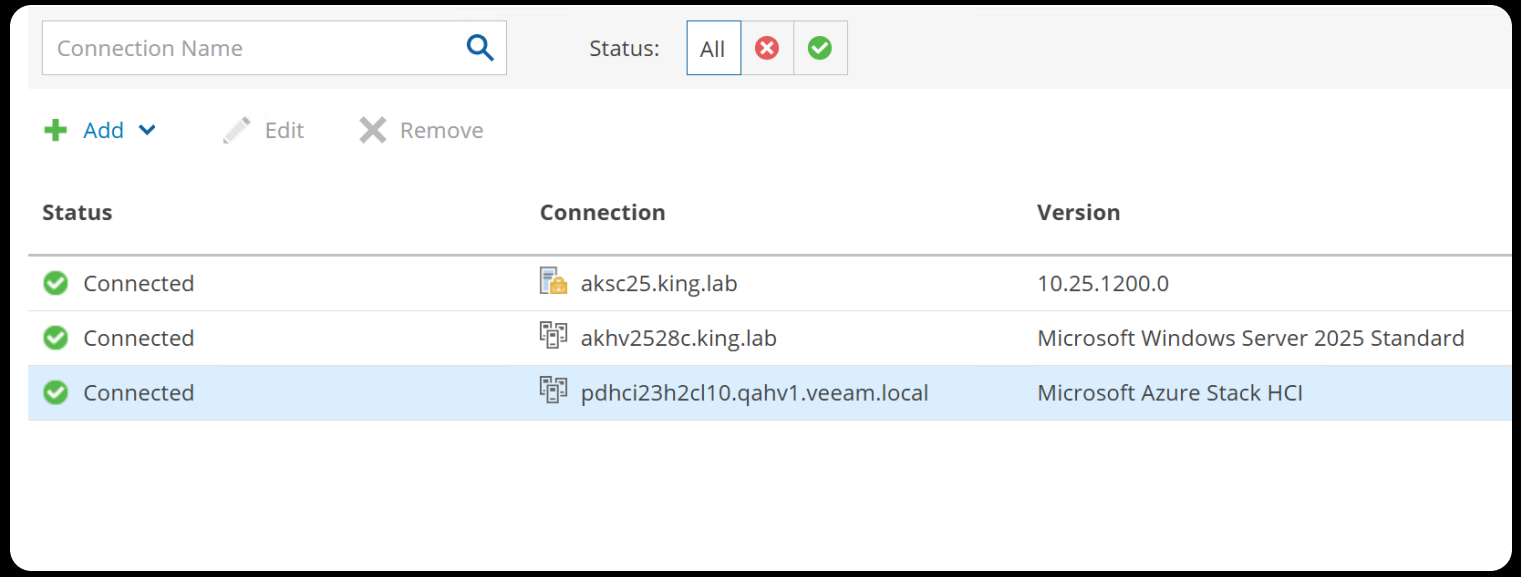
Supported Recovery Platforms

VMware

Azure Local
Hyper-V

Azure Local (was Azure Stack HCI)

- Connect direct to Azure Local cluster, or via SCVMM
- Direct-cluster connection also now supported for Hyper-V
- VRO treats Azure Local same as Hyper-V (as VBR does)



Cross-platform support matrix

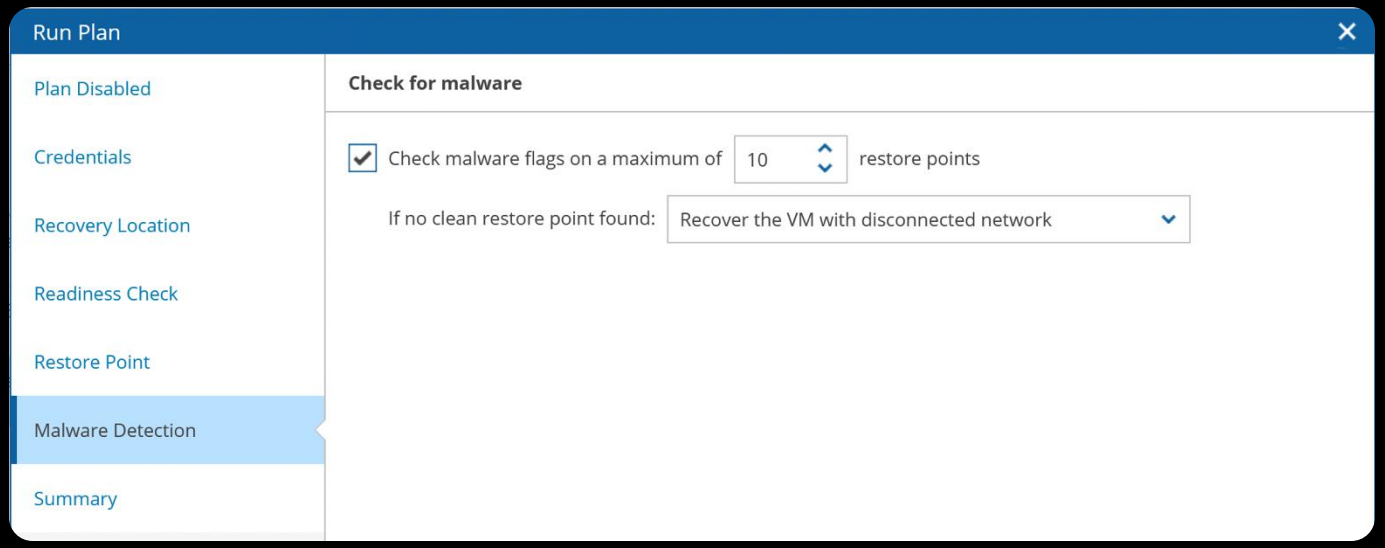
- VMware VM backups can be restored to all Microsoft platforms - on-prem hypervisors, and Azure

From: \ To:	Azure Local	Hyper-V	SCVMM	vCenter	Azure
VMware vCenter	✓	✓	✓	✓	✓
Microsoft on-prem hypervisor	✓	✓	✓	✗	✗
Veeam Agent (Windows/Linux)	✗	✗	✗	✓	✓

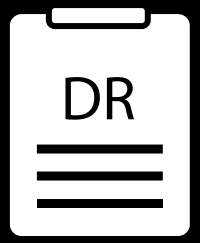
- VMware VM backups can be restored to all Microsoft platforms - on-prem hypervisors, and Azure
- Microsoft on-prem VM backups can be restored to both Microsoft on-prem hypervisors
- Veeam Agent backups can be restored to vCenter and Azure

Not Supported (yet) for Hyper-V / Azure Local

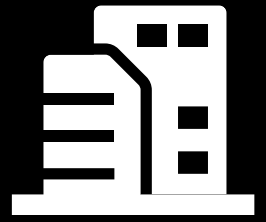
- Virtual Lab Testing
- Malware Scanning
  - Malware flag on restore point **is** checked
- In-Guest scripts
- Replicas



Important Orchestrator Features



Recovery Plans



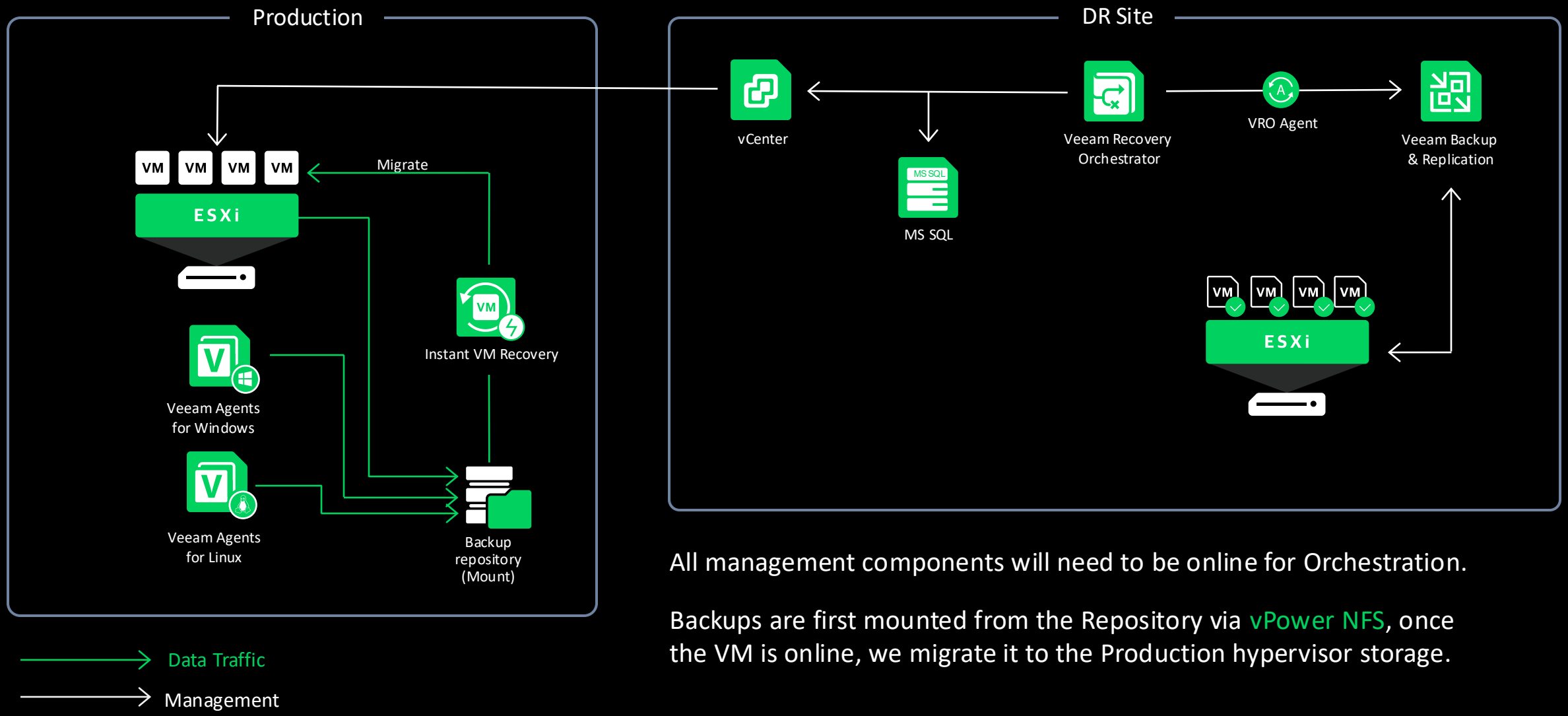
Recovery Locations

Note: Recovery Locations are not required for Replication Failover

VRO Console + Administration

Demo

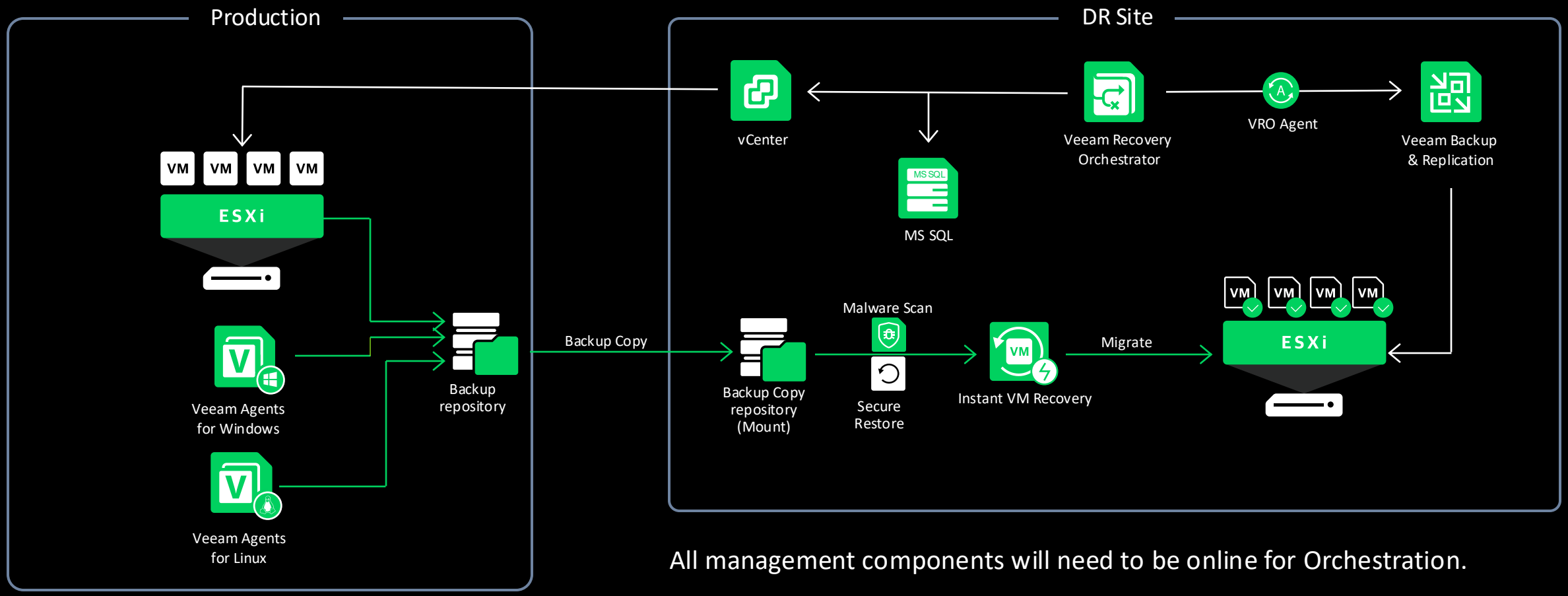
Orchestrating Restore from Backups



All management components will need to be online for Orchestration.

Backups are first mounted from the Repository via vPower NFS, once the VM is online, we migrate it to the Production hypervisor storage.

Orchestrating Restore from Backup Copies to DR



All management components will need to be online for Orchestration.

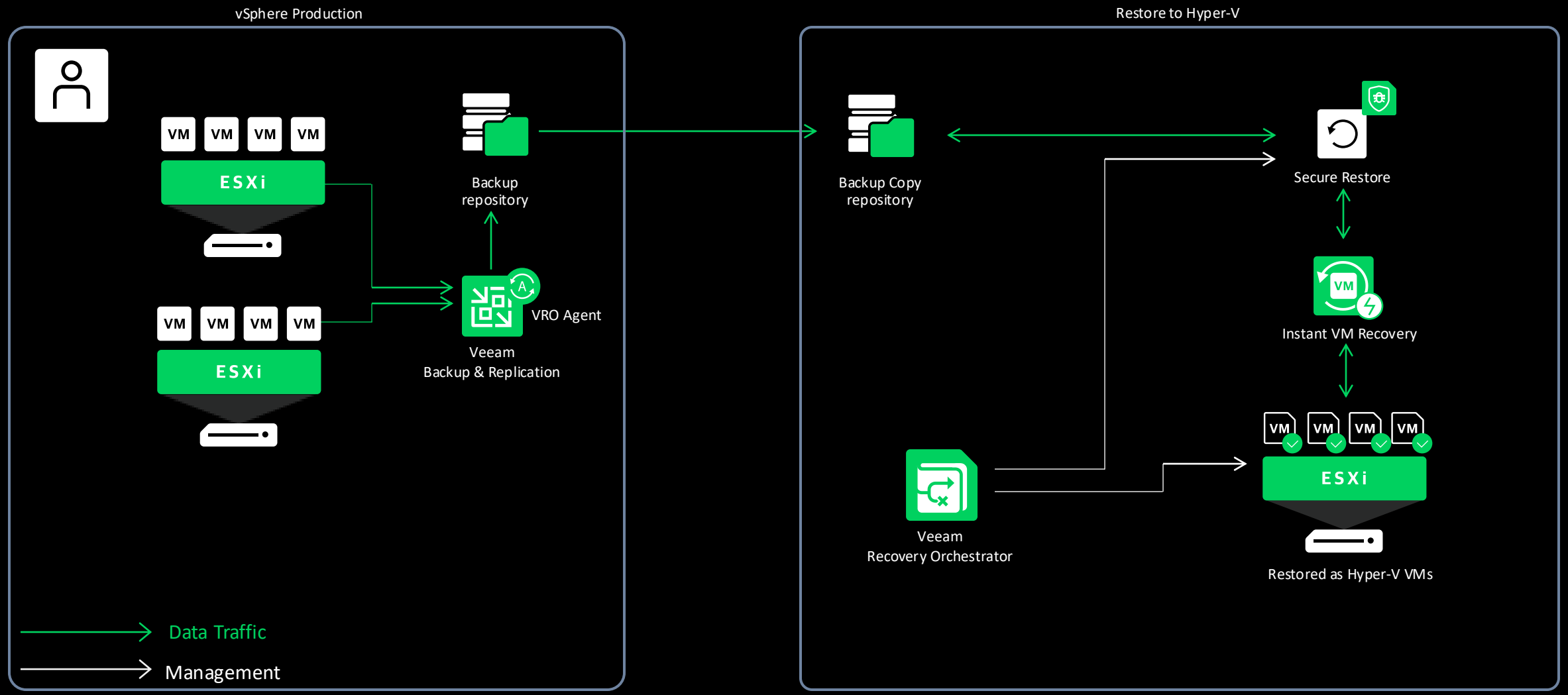
Backup Copies are first mounted from the Repository via vPower NFS, once the VM is online, we migrate it to the DR hypervisor storage.

Data Traffic

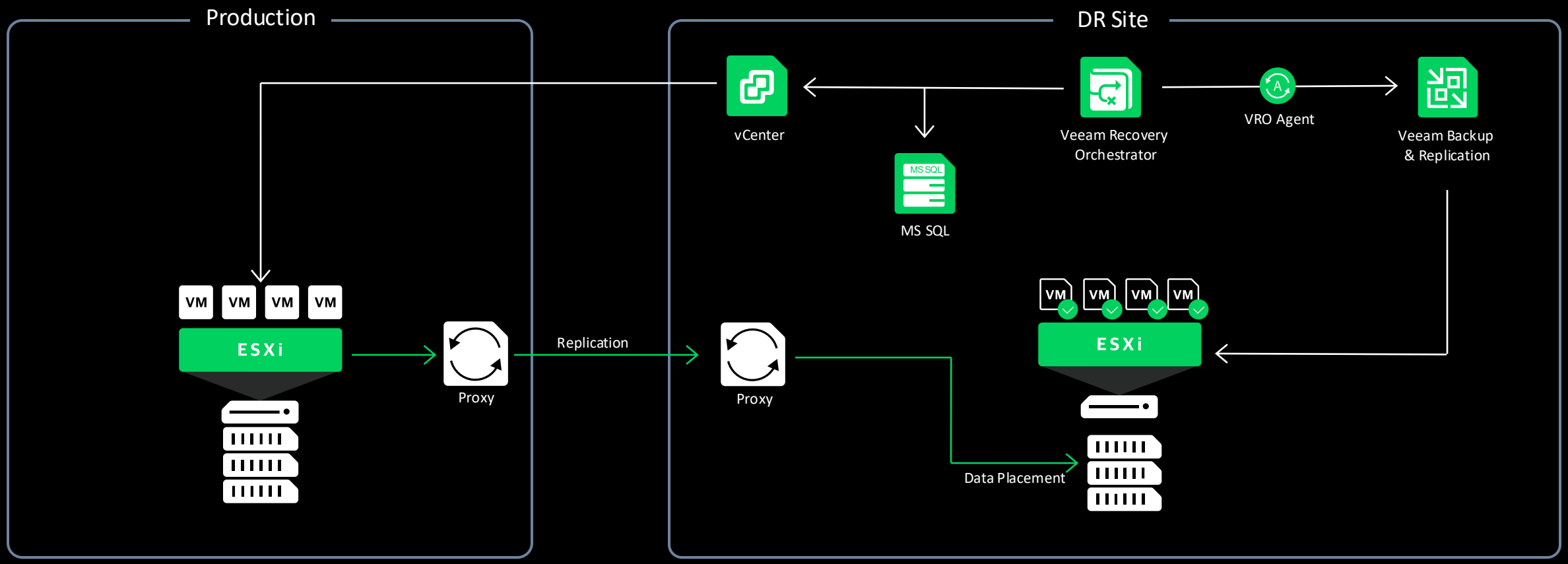
Management

Orchestrating Cross-platform Restore to Microsoft Hyper-V

Recover backups from vSphere host(s) to Hyper-V



Orchestrating Restore from Replicas + CDP

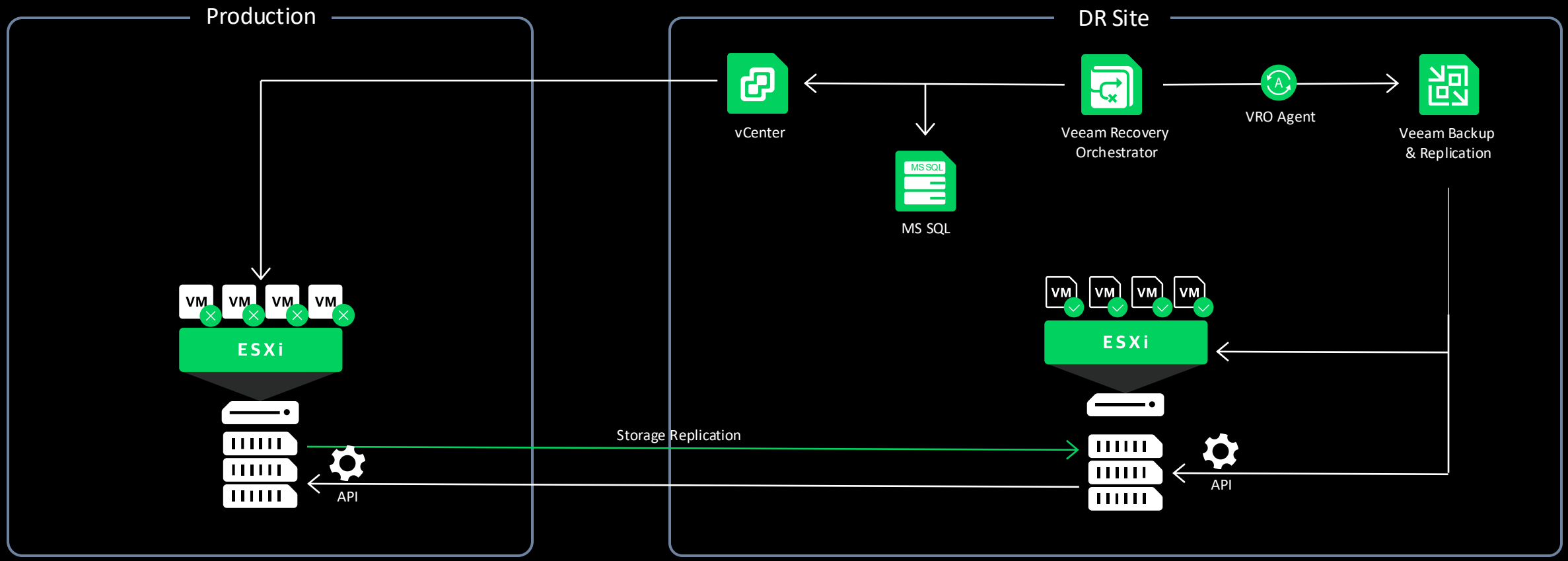


This is the only case when Veeam Backup & Replication can be offline for recovery of workloads. (This does not apply to CDP because of VAIO filters)

Data Traffic

Management

Orchestrating Storage and VM Failover

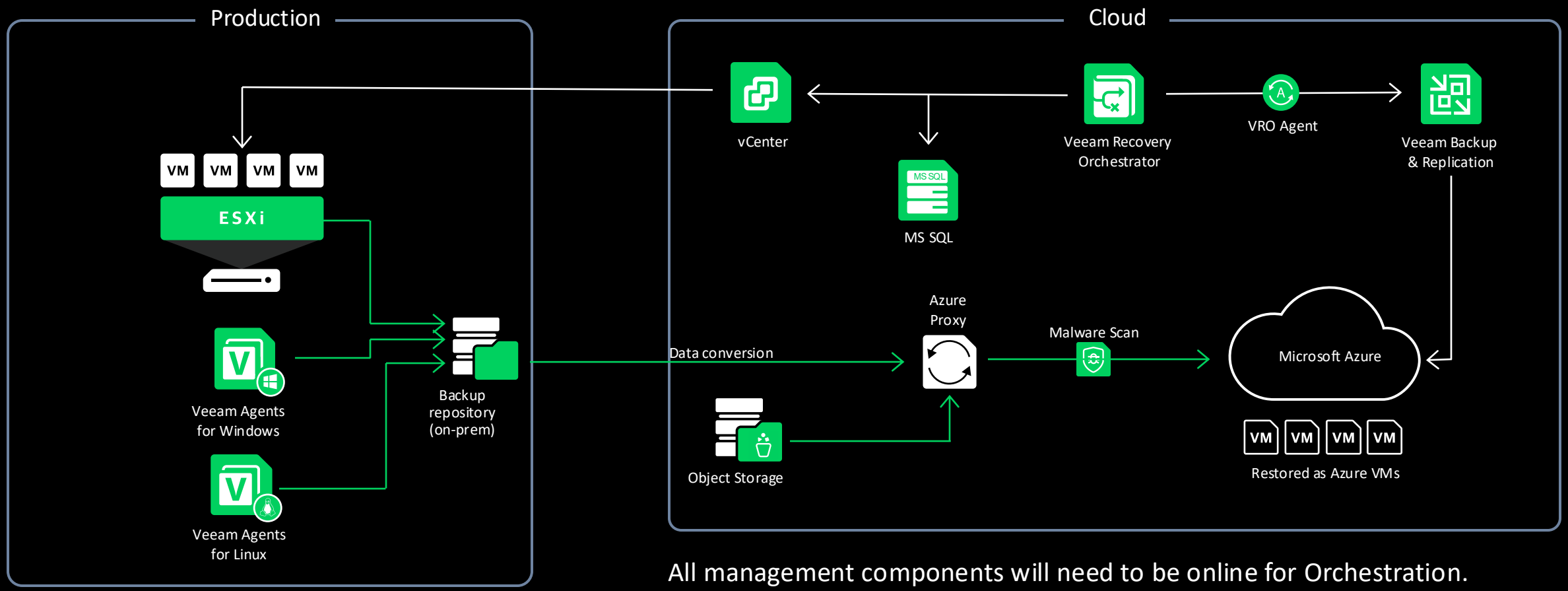


With HPE and NetApp storage integrations we can replicate and recover array volumes with Veeam Recovery Orchestrator. During a failure we bring up replicated volumes back to vSphere allowing us to power on the underlying Virtual Machines.

Data Traffic

Management

Orchestrating Restore to Microsoft Azure



All management components will need to be online for Orchestration.

Data is retrieved from the On-prem or Object repository to be converted to a VHD format to be placed into the Azure Storage account and powered on.

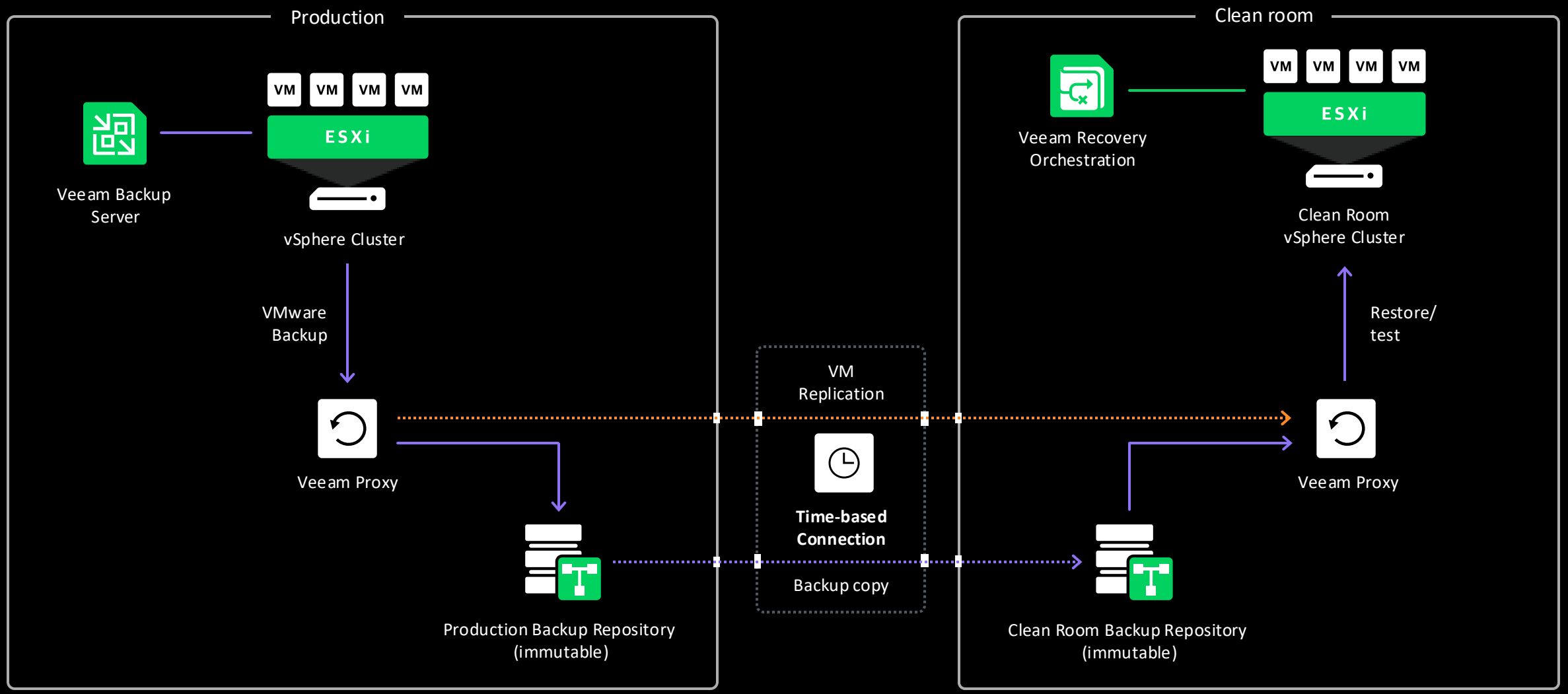
Data Traffic

Management

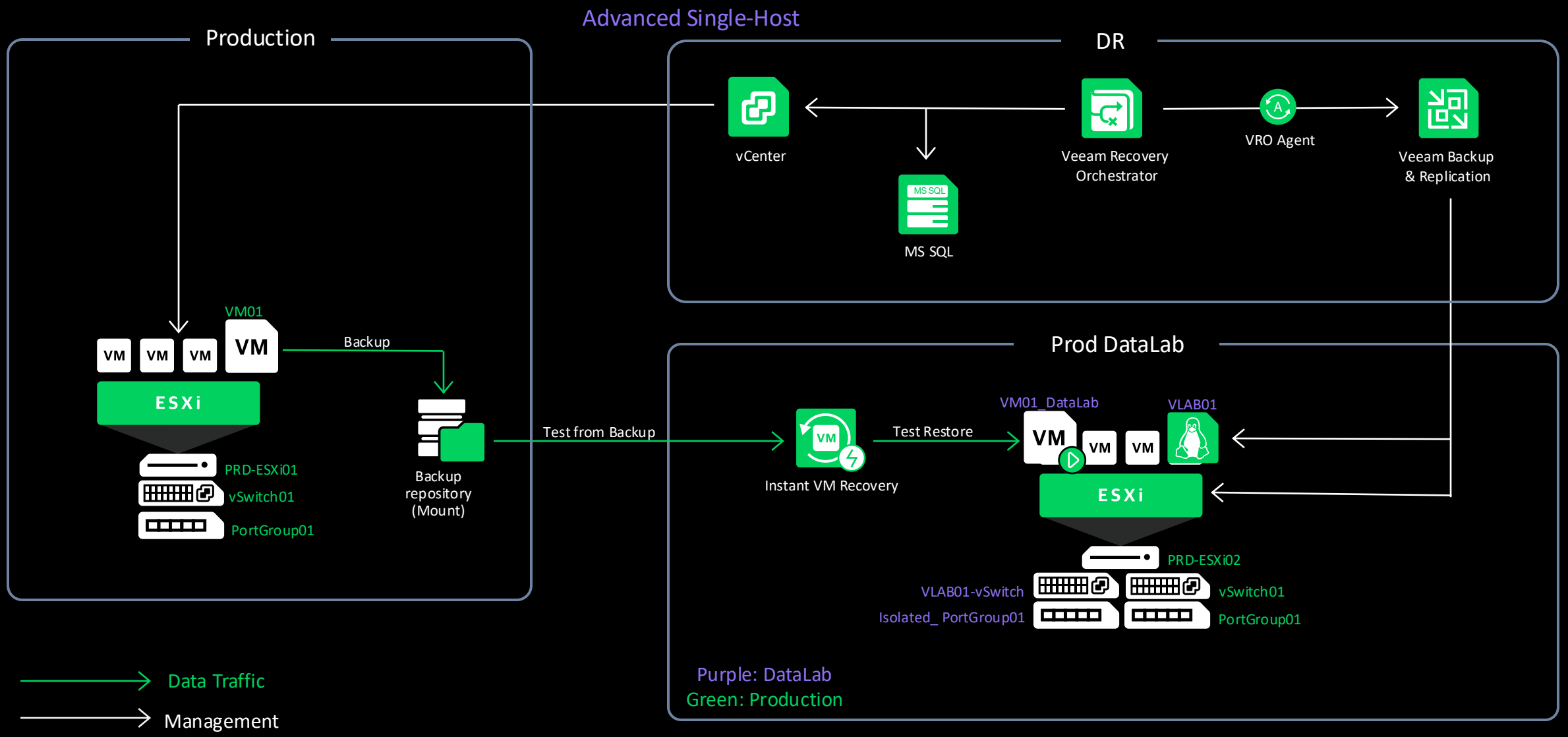
Recovery Plans + Recovery Locations

Demo

The Clean Room

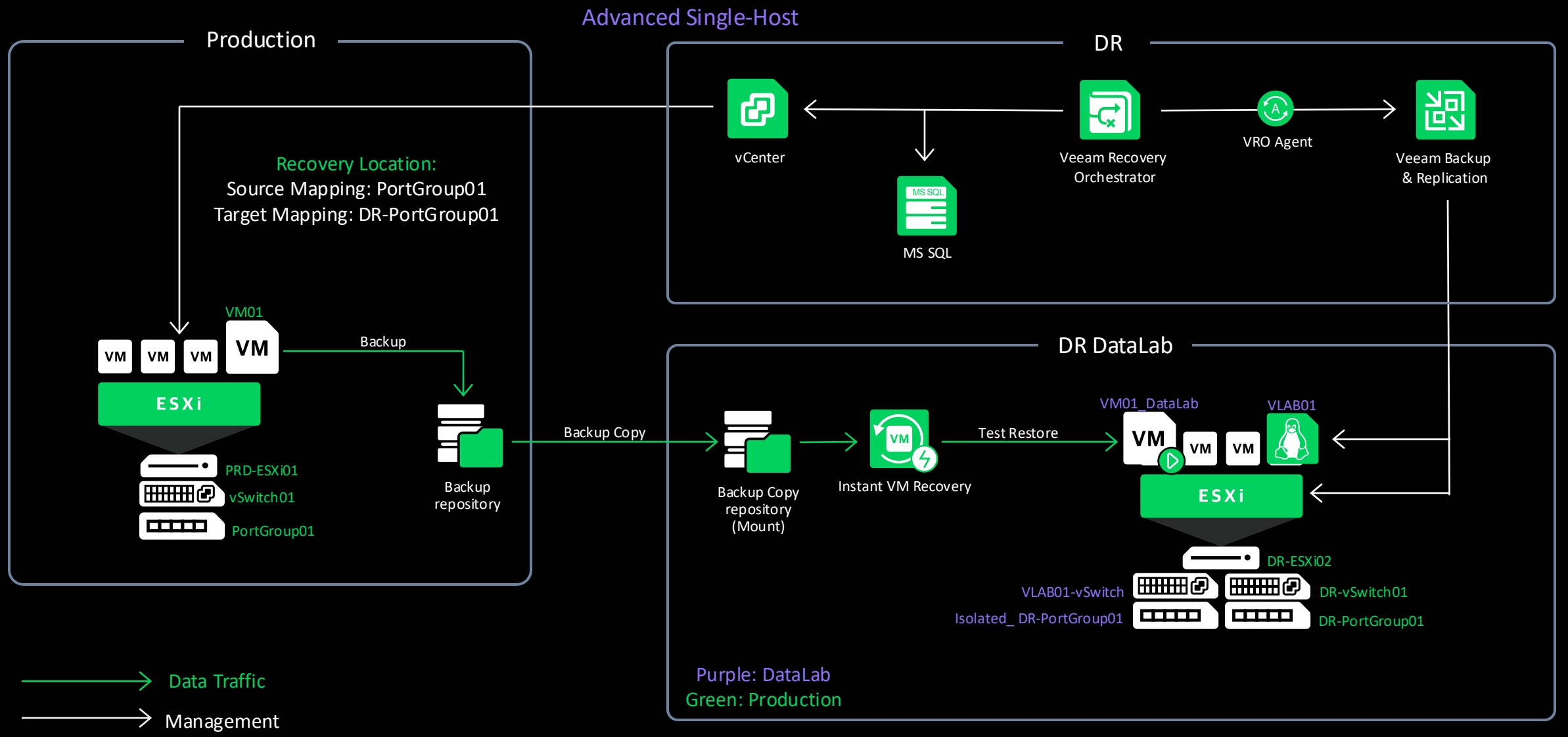


DataLabs using Virtual Labs – Backup Verification



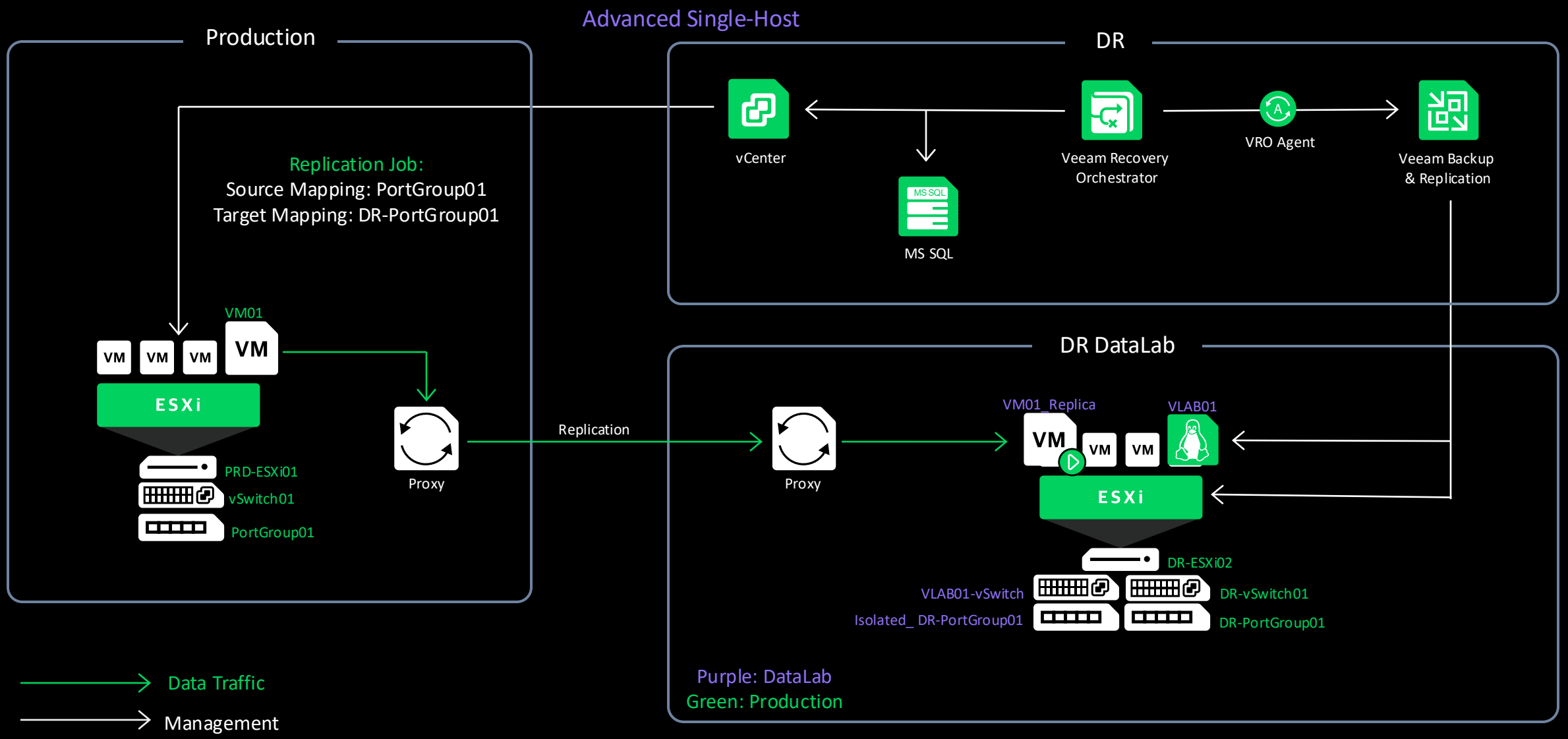
Virtual Lab Port Group Intercept:
PortGroup01 -> Isolated_PortGroup01

DataLabs using Virtual Labs – Backup Copy Verification



Virtual Lab Port Group Intercept:
DR-PortGroup01 -> Isolated_DR-PortGroup01

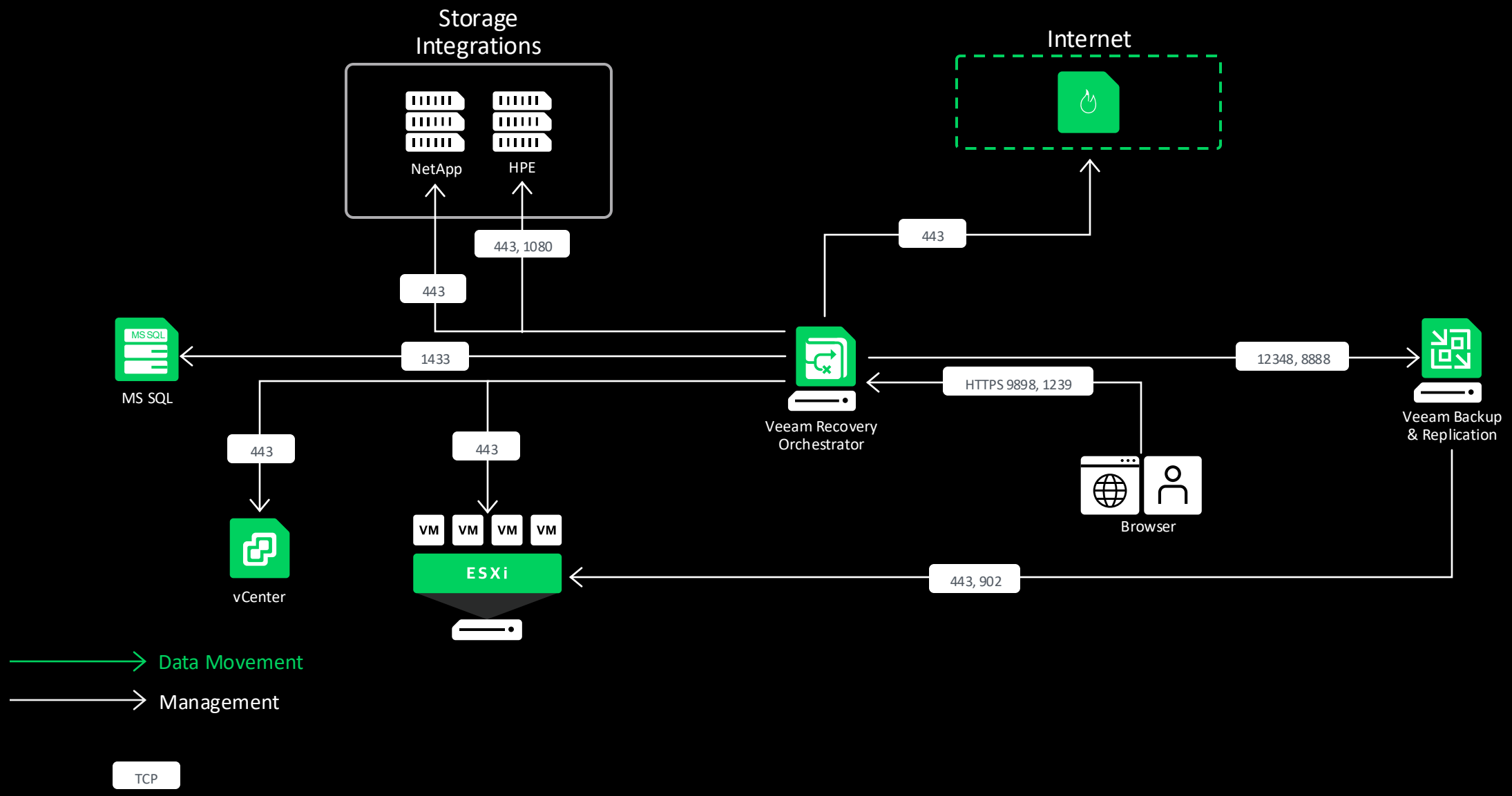
DataLabs using Virtual Labs – Replica Verification



Clean Room + DataLabs

Demo

Veeam Recovery Orchestrator Ports



Resources

Veeam University: https://www.veeam.com/support/training/veeam-university-free.html

Hands-on Labs: https://go.veeam.com/hands-on-lab-experience

VRO Heroes Den: https://community.veeam.com/groups/vro-heroes-den-120

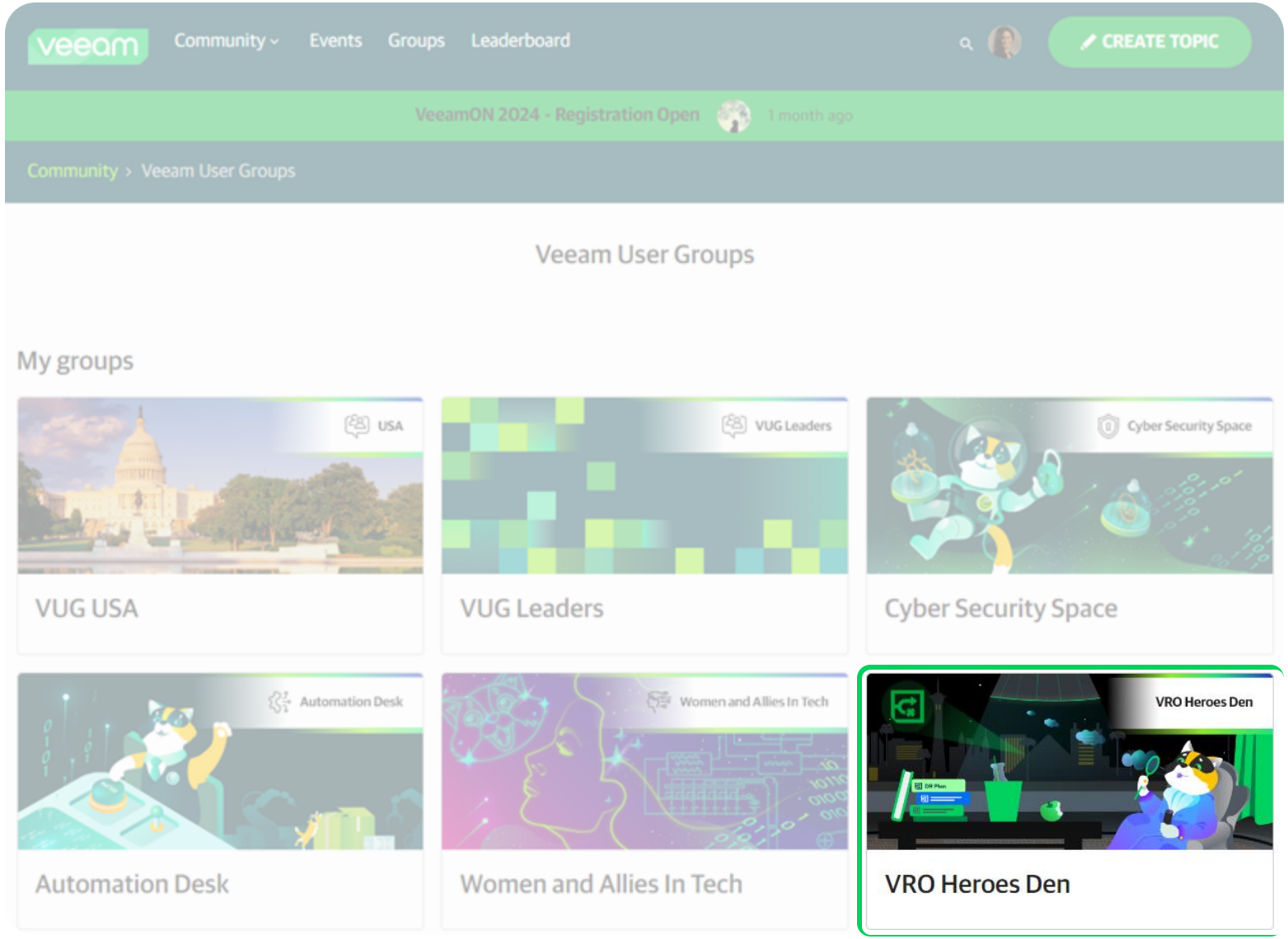
KB: https://www.veeam.com/knowledge-base.html

User Guide: https://helpcenter.veeam.com/docs/vro/userguide/deployment_planning_preparation.html

Need help? Contact us at: veeam.customersuccess.onboarding@veeam.com

VRO Heroes Champion's Den

Join the Veeam Community Hub
https://community.veeam.com/



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- Showcase your expertise within the community
- Get KUDOS for your accomplishments.

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advocacy@veeam.com

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