ZERTO VIRTUAL REPLICATION INTEROPERABILITY MATRIX

ZVR-OPM-01-14-01-16

This document lists platforms, VMware and Hyper-V environments, and features supported by Zerto Virtual Replication.

- "Zerto Virtual Replication Version 4.0Ux", below
- "Zerto Virtual Replication Version 3.5Ux", on page 5
- "Zerto Virtual Replication Version 3.1Ux", on page 8

In the following tables, a \checkmark means that the entry is supported out-of-the-box. A \checkmark * means that the entry is supported via the connection to the Zerto *CallHome* server or via a manual update coordinated with Zerto support.

Note: Some of the platforms and features in the following tables might temporarily not be supported, due to reported issues that are still unresolved. For a list of all known issues, refer to the release notes.

Zerto will support any new release of any of the platforms, management tools or hosts listed below, either with an existing release of Zerto Virtual Replication or by releasing a new version of its software, within ninety (90) days of the official VMware or Hyper-V release. Zerto assumes that minor update releases, for example vCenter Server 5.5U1a, 5.5U1b or 5.5U1c are supported if the major update, for example vCenter Server 5.5U1, is supported.

Zerto Virtual Replication Version 4.0Ux

PLATFORM/ENVIRONMENT/FEATURE	ZERT	O VIRT	UAL RE	PLICATION	ON VERSION
					4.0U4, 4.0U6
Platforms					
VMware ESX/ESXi	✓	✓	\checkmark	\checkmark	✓
Microsoft Hyper-V	✓	\checkmark	\checkmark	\checkmark	✓
Amazon Web Services (AWS)	✓	✓	\checkmark	\checkmark	✓
Management Tools					
VMware vCenter Server					
vCenter Server 2.5U6, 4.0	×	×	×	×	×
vCenter Server 4.0U1-4.0U4	✓	✓	\checkmark	✓	✓
vCenter Server 4.1-4.1U3	✓	✓	\checkmark	✓	✓
vCenter Server 5.0-5.0U3	✓	✓	✓	✓	\checkmark
vCenter Server 5.1, 5.1U1-5.1U3	✓	✓	\checkmark	\checkmark	✓
vCenter Server 5.5-5.5U3	✓	✓	\checkmark	✓	✓
vCenter Server 6.0, 6.0U1	✓	✓	✓	✓	\checkmark
VMware vCloud Director using AMQP (Zerto Virtual Replication is tested	with Rabb	oit MQ	with Er	lang/01	ΓP.)
vCloud Director 1.0, 1.0.1	×	×	×	×	×
vCloud Director 1.5, 1.5.1, 1.5.2	×	×	×	×	x
vCloud Director 5.1-5.1.3	✓	✓	✓	✓	✓
vCloud Director 5.5-5.5.3	✓	✓	✓	✓	✓
vCloud Director 5.6, 5.6.3-5.6.4	✓	✓	\checkmark	\checkmark	✓
vCloud Director 8.0	×	×	×	×	x
Microsoft SCVMM					
2012 R2: Update Rollup 1-5	✓	✓	✓	✓	✓
2012 R2: Update Rollup 6-7	×	×	✓	✓	✓
2012 R2: Update Rollup 8	×	×	×	✓	✓



PLATFORM/ENVIRONMENT/FEATURE	ZER	ΓΟ VIRT	TUAL RE	PLICATIC PLICATION	ON VERSION
	4.0	4.0U1	4.0U2	4.0U3	4.0U4, 4.0L
Hosts					
VMware Hosts					
ESX/ESXi 4.0 and all earlier versions	×	×	×	×	×
ESX/ESXi 4.0U1-4.0U3, 4.0U4 ^a	✓	✓	✓	✓	✓
ESX/ESXi 4.1-4.1U3	√	√	✓	√	√
ESXi 5.0-5.0U3	✓	√	✓	√	✓
ESXi 5.1-5.1U3	✓	√	√	√	✓
ESXi 5.5-5.5U2	✓	√	√	√	✓
ESXi 5.5U3	√ *	√ *	√ *	√	✓
ESXi 6.0	✓	✓	✓	√	√
ESXi 6.0U1	√ *	√ *	√ *	√	√
Hyper-V Hosts					
2012 R2: Update Rollup 1-5	✓	✓	✓	✓	✓
2012 R2: Update Rollup 6-7	×	×	√	√	✓
2012 R2: Update Rollup 8	×	×	×	√	√
Virtual Machines					
documentation for the lists of supported virtual machines.					VS)
**					
VMware Virtual Machine Hardware	√	√	√	√	
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10	√	√	✓	✓	✓
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware	✓ ✓ ✓	✓	√	✓ /	√
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1	✓ ✓ ✓ ✓ ✓	✓ ✓	✓ ✓	✓ ✓	
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2	✓ ✓ ✓	✓ ✓	✓ ✓	✓ ✓ ✓	✓
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 vSphere Clients	✓ ✓ ✓ ✓ ×	✓ ✓ ✓ ✓ ×	✓ ✓ ✓ ✓ ×	✓ ✓ ✓ ✓ ×	✓
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6	✓ ✓ ✓ ✓ × ✓	✓ ✓ ✓ ✓ × ✓	✓ ✓ ✓ ✓ × ✓	✓ ✓ ✓ × ✓	✓ ✓ ✓
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher			✓	√	✓ ✓ ✓
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3	✓	✓			✓ ✓ ✓ ✓ × ✓
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3 vSphere Web Client 5.1 and higher	✓	✓	×	√ x	✓ ✓ ✓ × × ✓ ×
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3 vSphere Web Client 5.1 and higher	✓	✓	×	√ x	✓ ✓ ✓ × × ✓ ×
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3 vSphere Web Client 5.1 and higher	✓	✓	×	√ x	x x x x y
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3 vSphere Web Client 5.1 and higher VMware Security VMware vShield Edge/vCloud Networking and Security (all versions) Features	✓	✓	×	√ x	x x x x y
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3 vSphere Web Client 5.1 and higher VMware Security VMware vShield Edge/vCloud Networking and Security (all versions)	✓	✓	×	√ x	x x x x y
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3 vSphere Web Client 5.1 and higher VMware Security VMware vShield Edge/vCloud Networking and Security (all versions) Features Operating Systems Supported for Re-IP	✓	✓	×	√ x	x x x x y
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3 vSphere Web Client 5.1 and higher VMware Security VMware VShield Edge/vCloud Networking and Security (all versions) Features Operating Systems Supported for Re-IP VMware Hosts using VMware Tools	✓	✓	×	× × ✓	✓ ✓ ✓ × ✓ × ✓ ✓
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3 vSphere Web Client 5.1 and higher VMware Security VMware vShield Edge/vCloud Networking and Security (all versions) Features Operating Systems Supported for Re-IP VMware Hosts using VMware Tools Windows Server 2003, 2008 and 2012 all versions	✓	✓ x ✓	✓ x ✓	✓ × ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ × ✓ ✓ ✓ ✓ ✓
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3 vSphere Web Client 5.1 and higher VMware Security VMware vShield Edge/vCloud Networking and Security (all versions) Features Operating Systems Supported for Re-IP VMware Hosts using VMware Tools Windows Server 2003, 2008 and 2012 all versions Red Hat Enterprise Linux versions 5-7.x	✓	✓ x ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ x ✓	✓ × ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	\(\square \) \(\square \)
VMware Virtual Machine Hardware Virtual machine hardware versions 7-10 Hyper-V Virtual Machine Hardware Generation 1 Generation 2 VSphere Clients vSphere Client console 2.5U6 vSphere Client console 4.0 and higher vSphere Web Client 5.0-5.0U3 vSphere Web Client 5.1 and higher VMware Security VMware vShield Edge/vCloud Networking and Security (all versions) Features Operating Systems Supported for Re-IP VMware Hosts using VMware Tools Windows Server 2003, 2008 and 2012 all versions Red Hat Enterprise Linux versions 5-7.x SUSE Linux Enterprise versions 10-11.x	✓ x ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ x ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ x ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	* *	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓



FORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION					
	4.0	4.0U1	4.0U2	4.0U3	4.0U4, 4.0	
Hyper-V Hosts using Integration Services versions higher than 3.0						
Windows Server 2003, 2008 and 2012 all versions	✓	✓	\checkmark	✓	✓	
Red Hat Enterprise Linux versions 5-6.x	✓	✓	✓	✓	✓	
SUSE Linux Enterprise versions 11 SP2 and SP3	✓	✓	✓	✓	✓	
Open SUSE 12.3	✓	✓	✓	✓	✓	
Ubuntu 12.04, 12.10, 13.04, 13.10, 14.04	✓	✓	\checkmark	✓	✓	
Ubuntu 14.10, 15.04	×	×	✓	✓	✓	
Debian versions 7.0-7.4	✓	✓	\checkmark	✓	✓	
CentOS versions 5-6.x	✓	✓	\checkmark	✓	✓	
Sphere Features						
16Gb FC HBAs	✓	✓	✓	✓	✓	
Datastore clusters	✓	✓	✓	✓	✓	
Distributed Switch QoS	✓	✓	✓	✓	✓	
Fault Tolerance	×	×	×	×	×	
High availability (HA) with/without admission control (recovery site) ^b	✓	✓	✓	✓	✓	
Host Affinity Rules and CPU Pinning	✓	\checkmark	✓	\checkmark	✓	
Linked Clones ^c	✓	✓	\checkmark	✓	✓	
Protect VMs using thin provisioning	✓	✓	✓	✓	✓	
Protected VM DRS and sDRS	✓	✓	✓	✓	✓	
Stateless ESX over FCoE	✓	✓	✓	✓	✓	
Storage IO control	✓	✓	\checkmark	✓	✓	
Storage Profiles ^d	N/A	N/A	N/A	N/A	N/A	
Storage vMotion of protected VMs	✓	✓	✓	✓	✓	
Storage vMotion of VRA recovery disks ^e	✓	✓	✓	✓	✓	
vApp support	√	✓	✓	√	✓	
vCenter Roles and permissions	√	√	✓	✓	✓	
vMotion of protected VMs (with/without shared disks for VMs)	✓	✓	✓	✓	√	
VMware Host maintenance mode	✓	✓	✓	✓	✓	
VSAN with vCenter Server 5.5	✓	✓	✓	✓	✓	
VSAN with vCenter Server 6.0, 6.0U1	×	✓	✓	✓	✓	
vSphere Flash Read Cache ^f	✓	✓	✓	✓	✓	
vSphere 6.0 new features (like the new lockdown modes of ESXi, VVOLs)	×	✓	√	✓	✓	
Cloud Director (vCD) Features						
Extended vCloud Networking and Security (vCNS) Services: Five-tuple firewall and IPSec VPN services	✓	✓	✓	✓	✓	
Third-party distributed switch support	✓	✓	✓	✓	✓	
vApp Networks ^g	✓	✓	✓	✓	✓	
· · · · · · · · · · · · · · · · · · ·					√	
vCD Public Addresses	✓	V	V	\checkmark	V	



PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERS				
	4.0	4.0U1	4.0U2	4.0U3	4.0U4, 4.0U6
Extended vCloud Networking and Security (vCNS) Services ^h : Five-tuple firewall and IPSec VPN services	√	√	√	√	√
Fast provisioning using linked clones ^c	✓	✓	✓	✓	✓
Metadata (Custom guest Properties) GUI ⁱ	✓	✓	✓	✓	✓
Org vDC Networks ^j	✓	✓	✓	✓	✓
Snapshots of protected VMs ^k	✓	✓	✓	✓	✓
Single Sign-On ^l	✓	✓	✓	✓	✓
Storage Profiles	\checkmark	\checkmark	✓	✓	✓
Storage Profiles with storage clusters as replication targets	\checkmark	✓	\checkmark	✓	✓
Hyper-V Features					
Dynamic disks	\checkmark	✓	\checkmark	\checkmark	✓
High availability (HA)	\checkmark	✓	\checkmark	\checkmark	✓
Clusters	\checkmark	✓	✓	✓	✓
Failover Clustering and Fault Tolerance	\checkmark	✓	✓	\checkmark	✓
Pass-through disks (both with a Hyper-V host or virtual machine) ^m	×	×	×	×	×
Performance and resource optimization (PRO)	×	×	×	×	×
Dynamic optimization	\checkmark	✓	\checkmark	✓	✓
Multi-Pathing	×	×	×	×	×
Anti-affinity rules	\checkmark	\checkmark	\checkmark	\checkmark	✓
Live migration	\checkmark	✓	\checkmark	✓	✓
Quick storage migration	\checkmark	\checkmark	\checkmark	\checkmark	✓
Host maintenance mode	\checkmark	\checkmark	\checkmark	\checkmark	✓
Managing virtual machines with run-as-account	\checkmark	✓	\checkmark	\checkmark	✓
Hyper-V Replica ⁿ	×	×	✓	✓	✓

a. Known issues affect user experience:

If a protected VM disk is resized, the recovery disk cannot be automatically resized and the VPG state changes to Needs Configuration. Host affinity rules are not set on the VRA or test VMs.

Lack of support for some advanced queries, resulting in more queries against the vCenter Server, slowing response time.

The VRA needs manual intervention when installed on a shared datastore and one of the hosts sharing the datastore is powered off.

- b. Test failover, failover, and move will fail if admission control does not enable starting recovered VMs.
- $\hbox{c. Collapsed upon recovery, before reverse protection.}\\$
- d. Not involved in replication.
- e. Cannot perform any recovery operations to the VRA during the storage vMotion.
- f. The recovery VM is created without virtual cache enabled.
- g. Zerto Virtual Replication does not replicate the settings of the vApp network such as NAT, Firewall, or DHCP configuration. To replicate all vApp network settings, a post-operation script must be implemented.
- h. With vCD 1.5, settings not replicated with the virtual machines.
- i. Metadata is replicated. Metadata on every vCD entity is supported as it does not interfere with replication.
- j. Treat all Org vDC networks as if they were part of the entire Organization.
- k. Only vCD VM and vApp metadata.
- I. $\,$ vCenter Server must be connected to Active Directory.
- m. A Hyper-V host with even one pass-through disk is ignored by Zerto Virtual Replication.
- n. Only for virtual machines not protected by Hyper-V Replica.



Zerto Virtual Replication Version 3.5Ux

ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION				
	3.5-3.5U3	3.5U4	3.5U5-3.5U6	3.5U7	
VMware vCenter Server					
vCenter Server 2.5U6, 4.0	×	×	×	×	
vCenter Server 4.0U1-4.0U4	✓	✓	✓	✓	
vCenter Server 4.1-4.1U3	✓	✓	✓	✓	
vCenter Server 5.0-5.0U3	✓	✓	✓	✓	
vCenter Server 5.1, 5.1U1	✓	✓	✓	✓	
vCenter Server 5.1U2, 5.1U3	✓	✓	✓	✓	
vCenter Server 5.5-5.5U2	✓	✓	✓	✓	
vCenter Server 5.5U3	✓	✓	✓	✓	
vCenter Server 6.0, 6.0U1	×	×	×	✓	
VMware Hosts					
ESX/ESXi 3.0.3U1, 3.5U5, 4.0	x	×	×	×	
ESX/ESXi 4.0U1-4.0U3, 4.0U4 ^a	✓	✓	✓	✓	
ESX/ESXi 4.1-5.0U2	✓	✓	✓	✓	
ESXi 5.0U3	✓	✓	✓	✓	
ESXi 5.1, 5.1U1	✓	✓	✓	✓	
ESXi 5.1U2	✓	✓	✓	✓	
ESXi 5.1U3	x	x	✓	✓	
ESXi 5.5, 5.5U1	✓	✓	✓	✓	
ESXi 5.5U2	×	✓	✓	✓	
ESXi 5.5U3	×	×	×	√ *	
ESXi 6.0, 6.0U1	×	×	×	√ *	
VMware Virtual Machine Hard	dware				
Virtual machine hardware versions 7-10	✓	✓	✓	✓	
VMware vCloud Director and A	AMQP				
vCloud Director 1.0, 1.0.1	×	×	×	×	
vCloud Director 1.5, 1.5.1, 1.5.2	✓	✓	✓	✓	
vCloud Director 5.1-5.1.3	✓	✓	✓	✓	
vCloud Director 5.5-5.5.3	✓	✓	✓	✓	
vCloud Director 5.6, 5.6.3-5.6.4	×	✓	✓	✓	
vCloud Director 8.0	×	×	×	×	
AMQP ^b	✓	✓	✓	✓	



ENVIRONMENT/FEATURE	ZERTO	VIRTUAL RE	PLICATION VER	SION
	3.5-3.5U3	3.5U4	3.5U5-3.5U6	3.5U7
vSphere Clients				
vSphere Client console 2.5U6	×	×	×	×
vSphere Client console 4.0 and higher	✓	\checkmark	✓	✓
vSphere Web Client 5.0-5.0U3	×	×	x	×
vSphere Web Client 5.1, 5.1U1-5.5U3	✓	✓	✓	✓
vSphere Web Client 5.5, 5.5U1, 5.5U2	✓	\checkmark	✓	✓
vSphere Web Client 6.0, 6.0U1	×	×	×	✓
VMware vShield Edge/vCloud Networking and Security (all versions)	✓	✓	✓	✓
vSphere Features				
16Gb FC HBAs	✓	✓	✓	\checkmark
Datastore clusters	✓	✓	✓	✓
Distributed Switch QoS	✓	\checkmark	✓	✓
Fault Tolerance	×	×	×	×
High availability (HA) with/without admission control (recovery site) ^c	✓	\checkmark	✓	✓
Host Affinity Rules and CPU Pinning	✓	\checkmark	✓	✓
Linked Clones ^d	✓	✓	✓	✓
Protect VMs using thin provisioning	✓	✓	✓	✓
Protected VM DRS and sDRS	✓	\checkmark	✓	✓
Stateless ESX over FCoE	✓	\checkmark	✓	✓
Storage IO control	✓	✓	✓	✓
Storage Profiles ^e	N/A	N/A	N/A	N/A
Storage vMotion of protected VMs	✓	✓	✓	✓
Storage vMotion of VRA recovery disks ^f	✓	✓	✓	✓
vApp support	✓	✓	✓	✓
vCenter Roles and permissions	✓	\checkmark	✓	✓
vMotion of protected VMs (with/without shared disks for VMs)	✓	✓	✓	✓
VMware Host maintenance mode	✓	\checkmark	✓	✓
VSAN (only with vCenter Server 5.5)	✓	✓	✓	✓
vSphere Flash Read Cache ^g	✓	✓	✓	✓
vSphere 6.0 new features (such as VVOLS)	x	×	x	✓
vCloud Director (vCD) Features (vCD	1.5 and Highe	r)		
Extended vCloud Networking and Security (vCNS) Services: Five-tuple firewall and IPSec VPN services	✓	✓	✓	✓
Third-party distributed switch support	✓	✓	✓	✓
vApp Networks	✓	✓	✓	✓
vCD Public Addresses	✓	✓	✓	✓



ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION								
	3.5-3.5U3	3.5U4	3.5U5-3.5U6	3.5U7					
vCloud Director (vCD) Features (vCD 5.1 and Higher)									
Elastic Virtual Datacenter	✓	✓	✓	✓					
Extended vCloud Networking and Security (vCNS) Services ^h : Five-tuple firewall and IPSec VPN services	✓	✓	√	✓					
Fast provisioning using linked clones ^d	✓	✓	✓	✓					
Metadata (Custom guest Properties) GUI ⁱ	✓	√	✓	✓					
Org vDC Networks ^j	✓	✓	√	✓					
Snapshots of protected VMs ^k	✓	✓	√	\checkmark					
Single Sign-On ^l	✓	✓	√	✓					
Storage Profiles (except for per-volume storage profiles)	✓	✓	✓	✓					
Storage Profiles with storage clusters as replication targets	✓	✓	✓	✓					

a. Known issues affect user experience:

If a protected VM disk is resized, the recovery disk cannot be automatically resized and the VPG state changes to Needs Configuration. Host affinity rules are not set on the VRA or test VMs.

Lack of support for some advanced queries, resulting in more queries against the vCenter Server, slowing response time.

The VRA needs manual intervention when installed on a shared datastore and one of the hosts sharing the datastore is powered off.

- b. Zerto Virtual Replication is tested with Rabbit MQ with Erlang/OTP.
- c. Test failover, failover, and move will fail if admission control does not enable starting recovered VMs.
- d. Collapsed upon recovery, before reverse protection.
- e. Not involved in replication.
- f. Cannot perform any recovery operations to the VRA during the storage vMotion.
- g. The recovery VM is created without virtual cache enabled.
- h. With vCD 1.5, settings not replicated with the virtual machines.
- i. Metadata is replicated. Metadata on every vCD entity is supported as it does not interfere with replication.
- j. Treat all Org vDC networks as if they were part of the entire Organization.
- k. Only vCD VM and vApp metadata.
- I. $\,$ vCenter Server must be connected to Active Directory.



Zerto Virtual Replication Version 3.1Ux

ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VER:				
	3.1-3.1U1	3.1U2	3.1U3-3.1U4	3.1U5-3.1U9	
VMware vCer	nter Server				
vCenter Server 2.5U6, 4.0	×	×	×	×	
vCenter Server 4.0U1-4.0U4	✓	✓	✓	✓	
vCenter Server 4.1-4.1U3	✓	✓	✓	✓	
vCenter Server 5.0-5.0U3	✓	✓	✓	✓	
vCenter Server 5.1, 5.1U1-5.5U3	✓	✓	✓	✓	
vCenter Server 5.5-5.5U3	✓	✓	✓	✓	
vCenter Server 6.0, 6.0U1	✓	✓	✓	✓	
VMware	Hosts				
ESX/ESXi 3.0.3U1, 3.5U5, 4.0	×	×	×	×	
ESX/ESXi 4.0U1-4.0U3, 4.0U4 ^a	✓	✓	✓	✓	
ESX/ESXi 4.1-5.0U2	✓	✓	✓	✓	
ESXi 5.0U3	✓	✓	✓	✓	
ESXi 5.1, 5.1U1	✓	✓	✓	✓	
ESXi 5.1U2	×	✓	✓	✓	
ESXi 5.1U3	×	×	×	×	
ESXi 5.5	✓	✓	✓	✓	
ESXi 5.5U1	×	×	×	✓	
ESXi 5.5U2, 5.5U3	×	×	×	×	
ESXi 6.0, 6.0U1	×	×	×	x	
VMware Virtual Ma	chine Hardware				
Virtual machine hardware versions 7-10	✓	✓	✓	✓	
VMware vCloud Dir	ector and AMQP				
vCloud Director 1.0, 1.0.1	×	×	×	×	
vCloud Director 1.5, 1.5.1, 1.5.2	✓	✓	✓	✓	
vCloud Director 5.1-5.1.3	✓	✓	✓	✓	
vCloud Director 5.5-5.5.2	✓	✓	✓	✓	
vCloud Director 5.6-8.0	×	×	×	×	
AMQP ^b	✓	✓	\checkmark	\checkmark	
vSphere 0	Clients				
vSphere Client console 2.5U6	×	×	×	×	
vSphere Client console 4.0-5.5U2	✓	✓	✓	✓	
vSphere Web Client 5.0-5.0U3	×	×	×	x	
vSphere Web Client 5.1, 5.1U1-5.5U3	✓	✓	✓	✓	
vSphere Web Client 5.5, 5.5U1, 5.5U2	✓	✓	✓	✓	
vSphere Web Client 6.0, 6.0U1	×	×	×	×	
VMware S	ecurity				
VMware vShield Edge/vCloud Networking and Security (all versions)	✓	√	√	✓	



ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VE				
	3.1-3.1U1	3.1U2	3.1U3-3.1U4	3.1U5-3.1U9	
vSphere Featu	ires				
16Gb FC HBAs	✓	✓	✓	✓	
Datastore clusters	✓	✓	✓	✓	
Distributed Switch QoS	✓	✓	✓	✓	
Fault Tolerance	×	×	×	×	
High availability (HA) with/without admission control (recovery site) ^c	✓	√	✓	√	
Host Affinity Rules and CPU Pinning	✓	✓	✓	✓	
Linked Clones ^d	✓	✓	✓	✓	
Protect VMs using thin provisioning	✓	✓	✓	✓	
Protected VM DRS and sDRS	✓	✓	✓	✓	
Stateless ESX over FCoE	✓	✓	✓	✓	
Storage IO control	✓	✓	✓	✓	
Storage Profiles ^e	N/A	N/A	N/A	N/A	
Storage vMotion of protected VMs	✓	✓	✓	✓	
Storage vMotion of VRA recovery disks ^f	✓	✓	✓	✓	
vApp support	✓	✓	✓	✓	
vCenter Roles and permissions	✓	✓	✓	✓	
vMotion of protected VMs (with/without shared disks for VMs)	✓	✓	✓	✓	
VMware Host maintenance mode	✓	✓	✓	✓	
VSAN (only with vCenter Server 5.5)	×	✓	✓	✓	
vSphere Flash Read Cache ^g	✓	✓	✓	✓	
vCloud Director (vCD) Features	(vCD 1.5 and	Higher)			
Extended vCloud Networking and Security (vCNS) Services: Five-tuple firewall and IPSec VPN services	✓	✓	✓	✓	
Third-party distributed switch support	✓	✓	✓	✓	
vApp Networks	✓	✓	✓	✓	
vCD Public Addresses	✓	✓	✓	✓	
vCloud Director (vCD) Featur	res (vCD 5.1-	5.5.2)			
Elastic Virtual Datacenter	✓	✓	✓	✓	
Extended vCloud Networking and Security (vCNS) Services ^h : Fivetuple firewall and IPSec VPN services	✓	√	✓	✓	
Fast provisioning using linked clones ^d	✓	✓	✓	✓	
Metadata (Custom guest Properties) GUI ⁱ	✓	✓	✓	✓	
Org vDC Networks ^j	✓	✓	✓	✓	
Snapshots of protected VMs ^k	✓	✓	✓	✓	
	√	√	√	√	
Single Sign-On Starting Profiles	· ✓	· · · · · · · · · · · · · · · · · · ·	, 	, ✓	
Storage Profiles	V	V	V	V	

a. Known issues affect user experience:

If a protected VM disk is resized, the recovery disk cannot be automatically resized and the VPG state changes to Needs Configuration. Host affinity rules are not set on the VRA or test VMs.

Lack of support for some advanced queries, resulting in more queries against the vCenter Server, slowing response time.

The VRA needs manual intervention when installed on a shared datastore and one of the hosts sharing the datastore is powered off.

- b. Zerto Virtual Replication is tested with Rabbit MQ with Erlang/OTP.
- c. Test failover, failover, and move will fail if admission control does not enable starting recovered VMs.
- d. Collapsed upon recovery, before reverse protection.
- e. Not involved in replication.
- f. Cannot perform any recovery operations to the VRA during the storage vMotion.
- g. The recovery VM is created without virtual cache enabled.
- h. With vCD 1.5, settings not replicated with the virtual machines.
- i. Metadata is replicated. Metadata on every vCD entity is supported as it does not interfere with replication.
- j. Treat all Org vDC networks as if they were part of the entire Organization.
- k. Only vCD VM and vApp metadata.
- I. vCenter Server must be connected to Active Directory.

ABOUT ZERTO

Zerto is committed to keeping enterprise and cloud IT running 24/7 by providing scalable business continuity software solutions. Through the Zerto Cloud Continuity Platform, organizations seamlessly move and protect virtualized workloads between public, private and hybrid clouds. The company's flagship product, Zerto Virtual Replication, is the standard for protection of applications in cloud and virtualized datacenters.

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For further assistance using Zerto Virtual Replication, contact Zerto support at support@zerto.com.