

# ZERTO VIRTUAL REPLICATION - INTEROPERABILITY MATRIX FOR ALL VERSIONS

ZVR-OPM-ALL Rev01 Sept2017

This document lists the platforms; **VMware ESX/ESXi**, **Microsoft Hyper-V**, **Amazon Web Services (AWS)**, **Microsoft Azure**, their management tools, hosts, and other features supported by the following versions of Zerto Virtual Replication:

- [“Zerto Virtual Replication Version 5.0Ux - Supported Platforms Matrix”](#), on page 2
- [“Zerto Virtual Replication Version 4.5Ux - Supported Platforms Matrix”](#), on page 7
- [“Zerto Virtual Replication Version 4.0Ux - Supported Platforms Matrix”](#), on page 11

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 Hyper-V, Amazon Web Services (AWS), or Microsoft Azure release.

Zerto assumes that minor update releases are supported (for example, vCenter Server 5.5U1a, 5.5U1b or 5.5U1c), if the major update is supported (for example, vCenter Server 5.5U1).

Some of the platforms and features in the following tables might not temporarily be supported due to reported issues that are still unresolved. For a list of all **known issues**, see the relevant [Release Notes](#).

## Zerto Virtual Replication Version 5.0Ux - Supported Platforms Matrix

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION				
	5.0	5.0U1	5.0U2	5.0U3	5.0U4
<b>Platforms</b>					
VMware ESX/ESXi	✓	✓	✓	✓	✓
Microsoft Hyper-V	✓	✓	✓	✓	✓
Amazon Web Services (AWS)	✓	✓	✓	✓	✓
Microsoft Azure	✓	✓	✓	✓	✓
<b>Management Tools</b>					
<b>VMware vCenter Server</b>					
vCenter Server 2.5U6, 4.0	x	x	x	x	x
vCenter Server 4.0U1-6.0U2	✓	✓	✓	✓	✓
vCenter Server 6.0U3 <sup>‡</sup> <sup>‡</sup> Only supported via connection to the Zerto CallHome server, or via a manual update as specified in this <a href="#">KB</a> .	✓	✓	✓	✓	✓
vCenter Server 6.5	x	✓	✓	✓	✓
vCenter Server 6.5 U1 <sup>‡</sup> <sup>‡</sup> Only supported via connection to the Zerto CallHome server, or via a manual update as specified in this <a href="#">KB</a> .	x	x	x	✓	✓
<b>VMware vCloud Director using AMQP (Zerto Virtual Replication is tested with Rabbit MQ with Erlang/OTP.)</b>					
vCloud Director 1.0-1.5.2	x	x	x	x	x
vCloud Director 5.1-5.6.5	✓	✓	✓	✓	✓
vCloud Director 8.0	x	x	x	x	x
vCloud Director 8.0.1, 8.0.2, 8.10.x, 8.20.x	✓	✓	✓	✓	✓
<b>Microsoft SCVMM</b>					
2012 R2: Update Rollup 1-5 (not recommended)	✓	✓	✓	✓	✓
2012 R2: Update Rollup 6-11	✓	✓	✓	✓	✓
2012 R2: Rollup 12-13 (recommended)	x	x	x	✓	✓
2012 R2: RTM	✓	✓	✓	✓	✓
<b>Hosts</b>					
<b>VMware Hosts</b>					
ESX/ESXi 4.0 and all earlier versions	x	x	x	x	x
ESX/ESXi 4.0U1-4.0U3, 4.0U4*, 4.1-6.0U1 *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.	✓	✓	✓	✓	✓
ESXi 6.0U2 <sup>‡</sup> Only supported via connection to the Zerto CallHome server, or via a manual update as specified in this <a href="#">KB</a> .	✓ <sup>‡</sup>	✓	✓	✓	✓
ESXi 6.0U3 <sup>‡</sup> Only supported via connection to the Zerto CallHome server, or via a manual update as specified in this <a href="#">KB</a> .	✓ <sup>‡</sup>	✓	✓	✓	✓
ESXi 6.5	x	✓	✓	✓	✓

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION				
	5.0	5.0U1	5.0U2	5.0U3	5.0U4
ESXi 6.5 U1 <sup>‡</sup> <sup>‡</sup> Only supported via connection to the Zerto CallHome server, or via a manual update as specified in this <a href="#">KB</a> .	x	x	x	✓	✓
<b>Hyper-V Hosts</b>					
2012 R2 and Server Core	✓	✓	✓	✓	✓
<b>Virtual Machines</b>					
Zerto Virtual Replication supports replication of any virtual machine whose operating system is supported in both the protected site and recovery site. Refer to the VMware, Microsoft Hyper-V, Amazon Web Services (AWS), and Microsoft Azure documentation for the lists of supported virtual machines.					
<b>VMware Virtual Machine Hardware</b>					
Virtual machine hardware versions 7-11, 13 <small>* Contact Zerto support for a ZVR image which supports version 13.</small>	✓*	✓*	✓	✓	✓
<b>Hyper-V Virtual Machine Hardware</b>					
Generation 1 & 2	✓	✓	✓	✓	✓
<b>Amazon Web Services (AWS)</b>					
Microsoft Windows 7, 8.1, 10	x	x	x	x	x
<b>Microsoft Azure Hardware</b>					
UEFI Firmware	x	x	x	x	x
BIOS	✓	✓	✓	✓	✓
<b>vSphere Clients</b>					
vSphere Client console 2.5U6	x	x	x	x	x
vSphere Client console 4.0 and higher	✓	✓	✓	✓	✓
vSphere Web Client 5.0-5.0U3	x	x	x	x	x
vSphere Web Client 5.1 and higher	✓	✓	✓	✓	✓
vSphere HTML5 Web Client	x	x	x	x	x
<b>VMware Security</b>					
VMware vShield Edge/vCloud Networking and Security (all versions)	✓	✓	✓	✓	✓
<b>Features</b>					
<b>Operating Systems Supported for Re-IP</b>					
<b>vSphere Hosts</b>					
Windows Server 2003, 2008, 2012, 2016 (all versions)	✓	✓	✓	✓	✓
Red Hat Enterprise Linux versions 5-7x	✓	✓	✓	✓	✓
SUSE Linux Enterprise versions 10-11.x	✓	✓	✓	✓	✓
Ubuntu versions 14.10, 15.04	✓	✓	✓	✓	✓
CentOS versions 5-7.x	✓	✓	✓	✓	✓
Oracle Linux versions 6.x - Red Hat Compatible Kernel (RHCK)	✓	✓	✓	✓	✓
Oracle Linux versions 6.x - Unbreakable Enterprise Kernel (UEK)	x	✓	✓	✓	✓
Oracle Linux versions 7.x	x	x	x	✓	✓
<b>Hyper-V Hosts</b>					

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION				
	5.0	5.0U1	5.0U2	5.0U3	5.0U4
Windows Server 2008, 2012, 2016 (all versions)	✓	✓	✓	✓	✓
Red Hat Enterprise Linux version 7.3 <small>See 5.0U1 Release Notes for additional information.</small>	x	✓	✓	✓	✓
CentOS version 7 <small>See 5.0U1 Release Notes for additional information.</small>	x	✓	✓	✓	✓
Oracle Linux version 7.x	x	x	x	✓	✓
<b>AWS</b>					
Windows Server 2003, 2008, 2012 (all versions)	✓	✓	✓	✓	✓
Red Hat Enterprise Linux 5.x - 7.x	✓	✓	✓	✓	✓
CentOS 5.x	✓	✓	✓	✓	✓
Ubuntu 12.x - 15.x	✓	✓	✓	✓	✓
Fedora 19.x - 21.x	✓	✓	✓	✓	✓
Oracle 6.x - 7.x	✓	✓	✓	✓	✓
SUSE 12.x	✓	✓	✓	✓	✓
<b>Azure</b>					
Windows 2003, 2008, 2012 (all versions)	✓	✓	✓	✓	✓
For Linux distribution, refer to Azure documentation. <small>See <a href="#">Linux on Azure-endorsed distributions</a>.</small>	✓	✓	✓	✓	✓
<b>vSphere Features</b>					
16Gb FC HBAs	✓	✓	✓	✓	✓
Datastore clusters	✓	✓	✓	✓	✓
Distributed Switch QoS	✓	✓	✓	✓	✓
Fault Tolerance	x	x	x	x	x
High availability (HA) with/without admission control (recovery site)* <small>*Test failover, failover, and move will fail if admission control does not enable starting recovered VMs.</small>	✓	✓	✓	✓	✓
Host Affinity Rules and CPU Pinning	✓	✓	✓	✓	✓
Linked Clones* <small>*Collapsed upon recovery, before reverse protection.</small>	✓	✓	✓	✓	✓
Protect VMs using thin provisioning	✓	✓	✓	✓	✓
Protected VM DRS and sDRS	✓	✓	✓	✓	✓
Stateless ESX over FCoE	✓	✓	✓	✓	✓
Storage IO control	✓	✓	✓	✓	✓
Storage Profiles* <small>*Not involved in replication.</small>	N/A	N/A	N/A	N/A	N/A
Storage vMotion of protected VMs	✓	✓	✓	✓	✓
Storage vMotion of VRA recovery disks* <small>*Cannot perform any recovery operations to the VRA during the storage vMotion.</small>	✓	✓	✓	✓	✓
vApp support <small>However, individual VMs from the vApp can still be protected.</small>	x	x	x	x	x
vCenter Roles and permissions	✓	✓	✓	✓	✓
vMotion of protected VMs (with/without shared disks for VMs)	✓	✓	✓	✓	✓

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION				
	5.0	5.0U1	5.0U2	5.0U3	5.0U4
VMware Host maintenance mode	✓	✓	✓	✓	✓
VSAN *VPGs cannot be created using preseeded disks.	✓*	✓*	✓	✓	✓
VSAN 6.2 *VPGs cannot be created using preseeded disks.	x	✓*	✓	✓	✓
VSAN 6.5 *VPGs cannot be created using preseeded disks.	x	✓*	✓	✓	✓
vSphere Flash Read Cache* *The recovery VM is created without virtual cache enabled.	✓	✓	✓	✓	✓
vSphere 6.0 new features* (e.g. new lockdown modes of ESXi) *vVols are not supported.	✓	✓	✓	✓	✓
<b>vSphere 6.5 new features</b>					
Encrypted vMotion	x	✓	✓	✓	✓
Host Secure Boot	✓	✓	✓	✓	✓
VM Secure Boot	✓	✓	✓	✓	✓
VM Encryption	x	x	x	x	x
<b>vCloud Director (vCD) Features</b>					
Extended vCloud Networking and Security (vCNS) Services: Five-tuple firewall and IPSec VPN services	✓	✓	✓	✓	✓
Third-party distributed switch support	✓	✓	✓	✓	✓
vApp Networks* *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.	✓	✓	✓	✓	✓
vCD Public Addresses	✓	✓	✓	✓	✓
Elastic Virtual Datacenter	✓	✓	✓	✓	✓
Extended vCloud Networking and Security (vCNS) Services*: Five-tuple firewall and IPSec VPN services *With vCD 1.5, settings not replicated with the virtual machines.	✓	✓	✓	✓	✓
Fast provisioning using linked clones* *Collapsed upon recovery, before reverse protection.	✓	✓	✓	✓	✓
Metadata (Custom guest Properties) GUI* *Metadata is replicated. Metadata on every vCD entity is supported as it does not interfere with replication.	✓	✓	✓	✓	✓
Org vDC Networks* *Treat all Org vDC networks as if they were part of the entire Organization.	✓	✓	✓	✓	✓
Snapshots of protected VMs* *Only vCD VM and vApp metadata.	✓	✓	✓	✓	✓
Single Sign-On* *vCenter Server must be connected to Active Directory.	✓	✓	✓	✓	✓
Storage Profiles	✓	✓	✓	✓	✓
Storage Profiles with storage clusters as replication targets	✓	✓	✓	✓	✓
<b>Hyper-V Features</b>					
Dynamic disks	✓	✓	✓	✓	✓
High availability (HA)	✓	✓	✓	✓	✓
Clusters	✓	✓	✓	✓	✓

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION				
	5.0	5.0U1	5.0U2	5.0U3	5.0U4
Failover Clustering and Fault Tolerance	✓	✓	✓	✓	✓
Pass-through disks (both with a Hyper-V host or virtual machine)* <small>*A Hyper-V host with even one pass-through disk is ignored by Zerto Virtual Replication.</small>	x	x	x	x	x
Performance and resource optimization (PRO)	x	x	x	x	x
Dynamic optimization	✓	✓	✓	✓	✓
Multi-Pathing	x	x	x	x	x
Anti-affinity rules	✓	✓	✓	✓	✓
Live migration	✓	✓	✓	✓	✓
Quick storage migration	✓	✓	✓	✓	✓
Host maintenance mode	✓	✓	✓	✓	✓
Managing virtual machines with <i>run-as-account</i>	✓	✓	✓	✓	✓
Hyper-V Replica	✓	✓	✓	✓	✓
<b>AWS Regions Supported and Tested</b> - AWS GovCloud (US) region is not supported.					
US East (N.Virginia)	✓	✓	✓	✓	✓
US West (Oregon)	✓	✓	✓	✓	✓
EU (Ireland)	✓	✓	✓	✓	✓
EU (Frankfurt)	✓	✓	✓	✓	✓
Asia Pacific (Seoul)	✓	✓	✓	✓	✓
China (Beijing)* <small>*Requires Amazon AWS account with a valid ICP license. For further information see <a href="#">AWS documentation</a>.</small>	✓	✓	✓	✓	✓
South America (Sao Paulo)	✓	✓	✓	✓	✓
Canada (Central)	x	x	✓	✓	✓
London	x	x	✓	✓	✓
Ohio	x	x	✓	✓	✓
Mumbai	x	x	✓	✓	✓
<b>AWS Regions Supported but Not Tested</b>					
US West (N.California)	✓	✓	✓	✓	✓
Asia Pacific (Singapore)	✓	✓	✓	✓	✓
Asia Pacific (Tokyo)	✓	✓	✓	✓	✓
Asia Pacific (Sydney)	✓	✓	✓	✓	✓
<b>Microsoft Azure Regions Supported</b>					
All* <small>*Azure Government regions are not supported.</small>	✓	✓	✓	✓	✓
China	x	x	x	x	x
Germany (all)	x	x	x	x	x

## Zerto Virtual Replication Version 4.5Ux - Supported Platforms Matrix

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION					
	4.5	4.5U1	4.5U2	4.5U3	4.5U4	4.5U5
<b>Platforms</b>						
VMware ESX/ESXi	✓	✓	✓	✓	✓	✓
Microsoft Hyper-V	✓	✓	✓	✓	✓	✓
Amazon Web Services (AWS)	✓	✓	✓	✓	✓	✓
<b>Management Tools</b>						
<b>VMware vCenter Server</b>						
vCenter Server 2.5U6, 4.0	✗	✗	✗	✗	✗	✗
vCenter Server 4.0U1-6.0U2	✓	✓	✓	✓	✓	✓
vCenter Server 6.0U3 <sup>‡</sup> <sup>‡</sup> Only supported via connection to the Zerto CallHome server, or via a manual update as specified in this <a href="#">KB</a> .	✓	✓	✓	✓	✓	✓
<b>VMware vCloud Director using AMQP</b> (Zerto Virtual Replication is tested with Rabbit MQ with Erlang/OTP.)						
vCloud Director 1.0-1.5.2	✗	✗	✗	✗	✗	✗
vCloud Director 5.1-5.6.5	✓	✓	✓	✓	✓	✓
vCloud Director 8.0	✗	✗	✗	✗	✗	✗
vCloud Director 8.0.1	✗	✓	✓	✓	✓	✓
vCloud Director 8.0.2	✗	✗	✗	✗	✗	✓
vCloud Director 8.10x	✗	✗	✗	✓	✓	✓
vCloud Director 8.20x <small>*Supported only if VCD 8.20 is configured to support TLS 1.0. See vCD <a href="#">documentation</a>.</small>	✗	✗	✗	✗	✗	✓*
<b>Microsoft SCVMM</b>						
2012 R2 and Server Core: Update Rollup 1-5 (not recommended)	✓	✓	✓	✓	✓	✓
2012 R2 and Server Core: Update Rollup 6-11 (recommended)	✓	✓	✓	✓	✓	✓
2012 R2 and Server Core: RTM	✓	✓	✓	✓	✓	✓
<b>Hosts</b>						
<b>VMware Hosts</b>						
ESX/ESXi 4.0 and all earlier versions	✗	✗	✗	✗	✗	✗
ESX/ESXi 4.0U1-4.0U3, 4.0U4*, 4.1-6.0U1 <small>*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.</small>	✓	✓	✓	✓	✓	✓
ESXi 6.0U2 <sup>‡</sup> Only supported via connection to the Zerto CallHome server, or via a manual update as specified in this <a href="#">KB</a> .	✓ <sup>‡</sup>	✓	✓	✓	✓	✓
ESXi 6.0U3 <sup>‡</sup> <sup>‡</sup> Only supported via connection to the Zerto CallHome server, or via a manual update as specified in this <a href="#">KB</a> .	✓	✓	✓	✓	✓	✓
<b>Hyper-V Hosts</b>						
2012 R2 and Server Core	✓	✓	✓	✓	✓	✓

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION					
	4.5	4.5U1	4.5U2	4.5U3	4.5U4	4.5U5
<b>Virtual Machines</b>						
Zerto Virtual Replication supports replication of any virtual machine whose operating system is supported in both the protected site and recovery site. Refer to the VMware, Microsoft Hyper-V, Amazon Web Services (AWS), and Microsoft Azure documentation for the lists of supported virtual machines.						
<b>VMware Virtual Machine Hardware</b>						
Virtual machine hardware versions 7-11	✓	✓	✓	✓	✓	✓
<b>Hyper-V Virtual Machine Hardware</b>						
Generation 1 & 2	✓	✓	✓	✓	✓	✓
<b>vSphere Clients</b>						
vSphere Client console 2.5U6	x	x	x	x	x	x
vSphere Client console 4.0 and higher	✓	✓	✓	✓	✓	✓
vSphere Web Client 5.0-5.0U3	x	x	x	x	x	x
vSphere Web Client 5.1 and higher	✓	✓	✓	✓	✓	✓
<b>VMware Security</b>						
VMware vShield Edge/vCloud Networking and Security (all versions)	✓	✓	✓	✓	✓	✓
<b>Features</b>						
<b>Operating Systems Supported for Re-IP</b>						
<b>vSphere Hosts</b>						
Windows Server 2003, 2008, 2012 (all versions)	✓	✓	✓	✓	✓	✓
Red Hat Enterprise Linux versions 5-7.x	✓	✓	✓	✓	✓	✓
SUSE Linux Enterprise versions 10-11.x	✓	✓	✓	✓	✓	✓
Ubuntu versions 14.10, 15.04	✓	✓	✓	✓	✓	✓
CentOS versions 5-7.x	✓	✓	✓	✓	✓	✓
Oracle Linux versions 6.x - Red Hat Compatible Kernel (RHCK)	✓	✓	✓	✓	✓	✓
Oracle Linux versions 6.x - Unbreakable Enterprise Kernel (UEK)	x	x	x	x	✓	✓
<b>Hyper-V Hosts</b>						
Windows Server 2008, 2012 (all versions)	✓	✓	✓	✓	✓	✓
Red Hat Enterprise Linux versions 5-7.x	x	x	x	x	x	x
SUSE Linux Enterprise versions 10-11.x	x	x	x	x	x	x
Ubuntu versions 14.10, 15.04	x	x	x	x	x	x
CentOS versions 5-7.x	x	x	x	x	x	x
Oracle Linux versions 6.x	x	x	x	x	x	x
<b>Amazon Web Services (AWS)</b>						
Windows Server 2008 (all versions)	✓	✓	✓	✓	✓	✓
Debian 3.2.0-4-amd64	✓	✓	✓	✓	✓	✓
<b>vSphere Features</b>						
16Gb FC HBAs	✓	✓	✓	✓	✓	✓
Datastore clusters	✓	✓	✓	✓	✓	✓



PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION					
	4.5	4.5U1	4.5U2	4.5U3	4.5U4	4.5U5
Distributed Switch QoS	✓	✓	✓	✓	✓	✓
Fault Tolerance	✗	✗	✗	✗	✗	✗
High availability (HA) with/without admission control (recovery site)* <small>*Test failover, failover, and move will fail if admission control does not enable starting recovered VMs.</small>	✓	✓	✓	✓	✓	✓
Host Affinity Rules and CPU Pinning	✓	✓	✓	✓	✓	✓
Linked Clones* <small>*Collapsed upon recovery, before reverse protection</small>	✓	✓	✓	✓	✓	✓
Protect VMs using thin provisioning	✓	✓	✓	✓	✓	✓
Protected VM DRS and sDRS	✓	✓	✓	✓	✓	✓
Stateless ESX over FCoE	✓	✓	✓	✓	✓	✓
Storage IO control	✓	✓	✓	✓	✓	✓
Storage Profiles* <small>*Not involved in replication.</small>	N/A	N/A	N/A	N/A	N/A	N/A
Storage vMotion of protected VMs	✓	✓	✓	✓	✓	✓
Storage vMotion of VRA recovery disks* <small>*Cannot perform any recovery operations to the VRA during the storage vMotion.</small>	✓	✓	✓	✓	✓	✓
vApp support (you can protect the VMs in the vApp)	✗	✗	✗	✗	✗	✗
vCenter Roles and permissions	✓	✓	✓	✓	✓	✓
vMotion of protected VMs (with/without shared disks for VMs)	✓	✓	✓	✓	✓	✓
VMware Host maintenance mode	✓	✓	✓	✓	✓	✓
VSAN	✓	✓	✓	✓	✓	✓
VSAN 6.2	✗	✗	✗	✗	✗	✗
vSphere Flash Read Cache* <small>*The recovery VM is created without virtual cache enabled.</small>	✓	✓	✓	✓	✓	✓
vSphere 6.0 new features* (like the new lockdown modes of ESXi) <small>*vVols are not supported.</small>	✓	✓	✓	✓	✓	✓
<b>vCloud Director (vCD) Features</b>						
Extended vCloud Networking and Security (vCNS) Services: Five-tuple firewall and IPSec VPN services	✓	✓	✓	✓	✓	✓
Third-party distributed switch support	✓	✓	✓	✓	✓	✓
vApp Networks* <small>*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.</small>	✓	✓	✓	✓	✓	✓
vCD Public Addresses	✓	✓	✓	✓	✓	✓
Elastic Virtual Datacenter	✓	✓	✓	✓	✓	✓
Extended vCloud Networking and Security (vCNS) Services*: Five-tuple firewall and IPSec VPN services <small>*With vCD 1.5, settings not replicated with the virtual machines.</small>	✓	✓	✓	✓	✓	✓
Fast provisioning using linked clones* <small>*Collapsed upon recovery, before reverse protection.</small>	✓	✓	✓	✓	✓	✓
Metadata (Custom guest Properties) GUI* <small>*Metadata is replicated. Metadata on every vCD entity is supported as it does not interfere with replication.</small>	✓	✓	✓	✓	✓	✓

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION					
	4.5	4.5U1	4.5U2	4.5U3	4.5U4	4.5U5
Org vDC Networks* <small>*Treat all Org vDC networks as if they were part of the entire Organization.</small>	✓	✓	✓	✓	✓	✓
Snapshots of protected VMs* <small>*Only vCD VM and vApp metadata.</small>	✓	✓	✓	✓	✓	✓
Single Sign-On <small>*vCenter Server must be connected to Active Directory.</small>	✓	✓	✓	✓	✓	✓
Storage Profiles	✓	✓	✓	✓	✓	✓
Storage Profiles with storage clusters as replication targets	✓	✓	✓	✓	✓	✓
<b>Hyper-V Features</b>						
Dynamic disks	✓	✓	✓	✓	✓	✓
High availability (HA)	✓	✓	✓	✓	✓	✓
Clusters	✓	✓	✓	✓	✓	✓
Failover Clustering and Fault Tolerance	✓	✓	✓	✓	✓	✓
Pass-through disks (both with a Hyper-V host or virtual machine)* <small>*A Hyper-V host with even one pass-through disk is ignored by Zerto Virtual Replication.</small>	x	x	x	x	x	x
Performance and resource optimization (PRO)	x	x	x	x	x	x
Dynamic optimization	✓	✓	✓	✓	✓	✓
Multi-Pathing	x	x	x	x	x	x
Anti-affinity rules	✓	✓	✓	✓	✓	✓
Live migration	✓	✓	✓	✓	✓	✓
Quick storage migration	✓	✓	✓	✓	✓	✓
Host maintenance mode	✓	✓	✓	✓	✓	✓
Managing virtual machines with <i>run-as-account</i>	✓	✓	✓	✓	✓	✓
Hyper-V Replica* <small>*Only for virtual machines <b>not</b> protected by Hyper-V Replica.</small>	✓	✓	✓	✓	✓	✓
<b>AWS Regions Supported and Tested</b>						
US East (N.Virginia)	✓	✓	✓	✓	✓	✓
US West (Oregon)	✓	✓	✓	✓	✓	✓
EU (Ireland)	✓	✓	✓	✓	✓	✓
EU (Frankfurt)	x	✓	✓	✓	✓	✓
Asia Pacific (Seoul)	x	x	✓	✓	✓	✓
China (Beijing) <small>*Requires Amazon AWS account with a valid ICP license. For further information see <a href="#">AWS documentation</a>.</small>	x	x	✓*	✓*	✓*	✓*
South America (Sao Paulo)	x	✓	✓	✓	✓	✓
<b>AWS Regions Supported but Not Tested</b>						
US West (N.California)	✓	✓	✓	✓	✓	✓
Asia Pacific (Singapore)	✓	✓	✓	✓	✓	✓
Asia Pacific (Tokyo)	✓	✓	✓	✓	✓	✓
Asia Pacific (Sydney)	✓	✓	✓	✓	✓	✓

## Zerto Virtual Replication Version 4.0Ux - Supported Platforms Matrix

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION				
	4.0	4.0U1	4.0U2	4.0U3	4.0U4, 4.0U6
<b>Platforms</b>					
VMware ESX/ESXi	✓	✓	✓	✓	✓
Microsoft Hyper-V	✓	✓	✓	✓	✓
Amazon Web Services (AWS)	✓	✓	✓	✓	✓
<b>Management Tools</b>					
<b>VMware vCenter Server</b>					
vCenter Server 2.5U6, 4.0	x	x	x	x	x
vCenter Server 4.0U1-6.0U2	✓	✓	✓	✓	✓
<b>VMware vCloud Director using AMQP</b> (Zerto Virtual Replication is tested with Rabbit MQ with Erlang/OTP.)					
vCloud Director 1.0, 1.0.1	x	x	x	x	x
vCloud Director 1.5, 1.5.1, 1.5.2	x	x	x	x	x
vCloud Director 5.1-5.6.5	✓	✓	✓	✓	✓
vCloud Director 8.0-8.0.1	x	x	x	x	x
<b>Microsoft SCVMM</b>					
2012 R2 and Server Core: Update Rollup 1-5	✓	✓	✓	✓	✓
2012 R2 and Server Core: Update Rollup 6-7 (recommended)	x	x	✓	✓	✓
2012 R2 and Server Core: Update Rollup 8-9 (recommended)	x	x	x	✓	✓
<b>Hosts</b>					
<b>VMware Hosts</b>					
ESX/ESXi 4.0 and all earlier versions	x	x	x	x	x
ESX/ESXi 4.0U1-4.0U3, 4.0U4* *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.	✓	✓	✓	✓	✓
ESX/ESXi 4.1-6.0U2‡ ‡ Only supported via connection to the Zerto CallHome server, or via a manual update as specified in this <a href="#">KB</a> .	✓	✓	✓	✓	✓
<b>Hyper-V Hosts</b>					
2012 R2 and Server Core	✓	✓	✓	✓	✓
<b>Virtual Machines</b>					
Zerto Virtual Replication supports replication of any virtual machine whose operating system is supported in both the protected site and recovery site. Refer to the VMware, Microsoft Hyper-V, and Amazon Web Services (AWS) documentation for the lists of supported virtual machines.					
<b>VMware Virtual Machine Hardware</b>					
Virtual machine hardware versions 7-11	✓	✓	✓	✓	✓
<b>Hyper-V Virtual Machine Hardware</b>					
Generation 1 & 2	✓	✓	✓	✓	✓
<b>vSphere Clients</b>					
vSphere Client console 2.5U6	x	x	x	x	x

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION				
	4.0	4.0U1	4.0U2	4.0U3	4.0U4, 4.0U6
vSphere Client console 4.0 and higher	✓	✓	✓	✓	✓
vSphere Web Client 5.0-5.0U3	x	x	x	x	x
vSphere Web Client 5.1 and higher	✓	✓	✓	✓	✓
<b>VMware Security</b>					
VMware vShield Edge/vCloud Networking and Security (all versions)	✓	✓	✓	✓	✓
<b>Features</b>					
<b>vSphere Features</b>					
16Gb FC HBAs	✓	✓	✓	✓	✓
Datastore clusters	✓	✓	✓	✓	✓
Distributed Switch QoS	✓	✓	✓	✓	✓
Fault Tolerance	x	x	x	x	x
High availability (HA) with/without admission control (recovery site)* <small>*Test failover, failover, and move will fail if admission control does not enable starting recovered VMs</small>	✓	✓	✓	✓	✓
Host Affinity Rules and CPU Pinning	✓	✓	✓	✓	✓
Linked Clones* <small>*Collapsed upon recovery, before reverse protection.</small>	✓	✓	✓	✓	✓
Protect VMs using thin provisioning	✓	✓	✓	✓	✓
Protected VM DRS and sDRS	✓	✓	✓	✓	✓
Stateless ESX over FCoE	✓	✓	✓	✓	✓
Storage IO control	✓	✓	✓	✓	✓
Storage Profiles* <small>*Not involved in replication.</small>	N/A	N/A	N/A	N/A	N/A
Storage vMotion of protected VMs	✓	✓	✓	✓	✓
Storage vMotion of VRA recovery disks* <small>*Cannot perform any recovery operations to the VRA during the storage vMotion.</small>	✓	✓	✓	✓	✓
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 6.0-6.0U2	x	✓	✓	✓	✓
VSAN 6.2	x	x	x	x	x
vSphere Flash Read Cache* <small>*The recovery VM is created without virtual cache enabled.</small>	✓	✓	✓	✓	✓
vSphere 6.0 new features* (like the new lockdown modes of ESXi) <small>*vVols are not supported</small>	x	✓	✓	✓	✓
<b>vCloud Director (vCD) Features</b>					
Extended vCloud Networking and Security (vCNS) Services: Five-tuple firewall and IPSec VPN services	✓	✓	✓	✓	✓
Third-party distributed switch support	✓	✓	✓	✓	✓
vApp Networks* <small>*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.</small>	✓	✓	✓	✓	✓
vCD Public Addresses	✓	✓	✓	✓	✓

## Zerto Virtual Replication - Interoperability Matrix for All Versions

PLATFORM/ENVIRONMENT/FEATURE	ZERTO VIRTUAL REPLICATION VERSION				
	4.0	4.0U1	4.0U2	4.0U3	4.0U4, 4.0U6
Elastic Virtual Datacenter	✓	✓	✓	✓	✓
Extended vCloud Networking and Security (vCNS) Services*: Five-tuple firewall and IPSec VPN services <small>*With vCD 1.5, settings not replicated with the virtual machines.</small>	✓	✓	✓	✓	✓
Fast provisioning using linked clones* <small>*Collapsed upon recovery, before reverse protection.</small>	✓	✓	✓	✓	✓
Metadata (Custom guest Properties) GUI* <small>*Metadata is replicated. Metadata on every vCD entity is supported as it does not interfere with replication.</small>	✓	✓	✓	✓	✓
Org vDC Networks* <small>*Treat all Org vDC networks as if they were part of the entire Organization.</small>	✓	✓	✓	✓	✓
Single Sign-On* <small>*vCenter Server must be connected to Active Directory.</small>	✓	✓	✓	✓	✓
Storage Profiles	✓	✓	✓	✓	✓
Storage Profiles with storage clusters as replication targets	✓	✓	✓	✓	✓
<b>Hyper-V Features</b>					
Dynamic disks	✓	✓	✓	✓	✓
High availability (HA)	✓	✓	✓	✓	✓
Clusters	✓	✓	✓	✓	✓
Failover Clustering and Fault Tolerance	✓	✓	✓	✓	✓
Pass-through disks (both with a Hyper-V host or virtual machine)* <small>*A Hyper-V host with even one pass-through disk is ignored by Zerto Virtual Replication.</small>	x	x	x	x	x
Performance and resource optimization (PRO)	x	x	x	x	x
Dynamic optimization	✓	✓	✓	✓	✓
Multi-Pathing	x	x	x	x	x
Anti-affinity rules	✓	✓	✓	✓	✓
Live migration	✓	✓	✓	✓	✓
Quick storage migration	✓	✓	✓	✓	✓
Host maintenance mode	✓	✓	✓	✓	✓
Managing virtual machines with <i>run-as-account</i>	✓	✓	✓	✓	✓
Hyper-V Replica* <small>*Only for virtual machines <b>not</b> protected by Hyper-V Replica.</small>	x	x	✓*	✓*	✓*

## Zerto Virtual Replication Version 4.0Ux - Supported Platforms Matrix

### 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.

[www.zerto.com](http://www.zerto.com)

For further assistance using Zerto Virtual Replication, contact [@Zerto Support](https://twitter.com/ZertoSupport).