

# **Zerto Cross-Hypervisor Replication**

Zerto Virtual Replication introduced an industry first with support for Microsoft Hyper-V and VMware vSphere, which enables cross-hypervisor replication and recovery. With automatic, on-the-fly conversion of the Virtual Machines (VMs), you no longer have to match hypervisors between your datacenters. This allows you to utilize the hypervisor of your choosing depending on your workload, cost, performance and availability, without being locked in by technical limitations.

Zerto Virtual Replication enables you to future proof your IT strategy by not being tied into a specific hypervisor, storage vendor or cloud platform for disaster recovery and workload mobility. The same license can be used irrespective of the underlying infrastructure, allowing you to utilize different hypervisors and not lose any investment made in your disaster recovery solution.

This game changing ability allows you to consider utilizing multiple hypervisors in ways that simply weren't possible before.

	Feature	Description	By ena replica	
	Hypervisor-based Replication	BC/DR for VMware vSphere & Microsoft Hyper-V hypervisors	any con and Mi depend	
	Storage Agnostic Replication	Replicate from anything to anything removing lock-in & enabling transformation	your we	
8	Public, Private or Hybrid Cloud	Take the first step to the cloud and utilise cost- effective storage for disaster recovery	Replica Micros Azure t licensir	
$\mathbf{z}$	Continuous Data Protection	Re-wind and recover to any point-in-time within the last 30 days	Replica satellit	
VM	Granular, VM-level Protection	Granular VM & file-level protection with no snapshots and no slowdown	VMwai	
2	One-to-Many Replication	Simultaneously replicate VMs to multiple target sites with individual SLAs	Migrate to Micr betwee	
	Protect Applications	Recover applications, not VMs, with multi-VM consistency groupings	hyperv and pro	
	Aggressive Service Levels	Realize RPOs of seconds & RTOs of minutes, even in the cloud	Test the hypervenetwork production validate any ma	
{O}	Full Automation & Orchestration	Automated failover, failback & non-disruptive, isolated testing		
	Simple Installation	Installation in minutes with no downtime or major change	Consist control underly the san	
	One Complete Solution	For replication and recovery, on-premises or in the cloud, managed through a single, simple GUI		

By enabling hypervisor-agnostic replication and recovery Zerto allows any combination of VMware vSphere and Microsoft Hyper-V hypervisors, depending on the requirements of your workloads and data centers.

Replicate from VMware vSphere to Microsoft Hyper-V and Microsoft Azure to utilize existing Microsoft licensing in a disaster recovery site

Replicate multiple Microsoft Hyper-V satellite offices into a centralized VMware datacenter or public cloud.

Migrate VMs from VMware vSphere to Microsoft Hyper-V then protect between Microsoft Hyper-V hypervisors for a complete migration and protection solution.

Test the failover of VMs between hypervisors and clouds in an isolated network with no shutdown in production or break in replication to validate the conversion process and any manual steps required.

Consistent management and control of BC/DR irrespective of the underlying hypervisor or cloud using the same simple HTML5 interface.

#### MULTI-HYPERVISOR ARCHITECTURE

With cross-hypervisor VM conversion there are requirements for disk types, network adapters, OS, VM version and guest tools that need to be taken into consideration during the conversion process. The following features enable cross-hypervisor replication:

- 1. Continuous block-level replication of changes between source and target hypervisor disk formats.
- 2. Maintaining or changing IP, MAC Address and Port Group settings per virtual NIC.
- 3. Automatic conversion of VM disk, Virtual NIC and VM hardware versions between hypervisors.
- 4. Automatic failover and failback configuration between VMware vSphere and Microsoft Hyper-V.
- 5. Customization of default settings used for the conversion of VM settings.

## VMWARE VSPHERE TO MICROSOFT HYPER-V CONVERSION

Description	VSphere Setting	Target Hyper-V Setting
Hypervisor Version	vSphere 4.0 onwards	Hyper-V Server 2012 R2
VM Hardware Version	Version 7 onwards	Gen 1 or Gen 2 VM
VM Firmware	BIOS	Gen 1 VM
	UEFI	Gen 2 VM
Disk and Controllers	Any SCSI Type	SCIS boot disk 0:0 converted to IDE
	RDMs	Converted to VHD/VHDX only
	SCSI controllers	VM using up to 4 SCSI controllers recovered as VM with 1
Network Adaptors	Any NIC Type	Synthetic for support Guest OS
Guest OS	32 bit	Gen 1 VM only
	64 bit	Gen 1 of Gen 2 dependent on Hyper-V Support
Guest Tools	VMware Tools	Host integration tools included in Guest OS Server 2012 onwards, manual install for other OS

## MICROSOFT HYPER-V TO VMWARE VSPHERE CONVERSION

Description	VSphere Setting	Target Hyper-V Setting
Hypervisor Version	Hyper-V Server 2012 R2	vSphere 4.0 onwards
VM Firmware	Gen 1 VM	BIOS with highest VM hardware version supported
	Gen 2 VM	UEFI VM on hardware Version 8 onwards
	UEFI Secure Boot	Not supported
Disk and Controllers	IDE	Converted to SCSI on boot disk 0:0
	Any SCSI Type	LSI Logic SAS SCSI Controller and Disk
	Pass-through disks	Not supported
Network Adaptors	Any NIC Type	E1000 NIC
	32 bit or 64 bit	Highest VM Hardware version supported
Guest Tools	Host Integration Tools	VMware tools manually installed

#### **About Zerto**

Businesses need to be available to their customers, 24/7/365. Zerto provides Resilience for Evolving IT™ by ensuring enterprises and their customers always have access to business-critical applications without any IT interruption, downtime or delay. Zerto's award-winning Cloud Continuity Platform is the simplest, most reliable BC/DR software solution built to protect applications on any virtualized IT environment — be it public, private or hybrid cloud. Zerto's proactive approach to recovery gives companies the confidence they need to withstand any disaster, easily incorporate new technology, and quickly adapt to accommodate evolving IT and business priorities. www.zerto.com