

# Zerto Cross-Hypervisor Replication

Zerto's IT Resilience Platform™ converges disaster recovery, backup, and workload mobility whether on-premises or to, from, and between hybrid and multi-cloud platforms. The platform is built on a foundation of continuous data protection (CDP) with built-in orchestration and automation, providing IT leaders with simplicity, enterprise scale, and agile data protection to save time, resource, and costs. Analytics, with intelligent dashboards and live reports, provides complete visibility across multi-site and multi-cloud environments to give you the confidence to know business service levels and compliance needs are met.

Zerto 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 must 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.

The Zerto IT Resilience Platform™ 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.

**Cross-Hypervisor DR**  
Protect and recover applications between different hypervisors.

**Cross-Hypervisor Mobility**  
Migrate workloads between different hypervisors

## 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. Orchestrated & automated failover and failback configuration between VMware vSphere and Microsoft Hyper-V.
5. Customization of default settings used for the conversion of VM settings.

## Benefits

### Native and Agentless Continuous Data Protection

Agentless protection natively integrates into existing platforms. Continuous data replication has absolutely no impact to the performance of the production environment. Easy, non-disruptive installation can be implemented in any environment.

### Journal-Based Recovery

Every generated change is almost immediately replicated to a journal and recovery checkpoints are created automatically every few seconds. This allows you to rewind and recover files, VMs, applications, and even entire sites to how they were seconds ago with unmatched granularity

### Full Application Stack Protection

Protect and recover entire application stacks with guaranteed consistency through Virtual Protection Groups. Consistency is maintained across multiple virtual machines (VMs) no matter where they are running in your infrastructure.

## VMware VSphere to Microsoft Hyper-V Conversion

Description	VSphere Setting	Target Hyper-V Setting
Hypervisor Version	All Zerto supported versions	All Zerto supported versions
VM Hardware Version	Version 7 onwards	Gen 1 or Gen 2 VM
VM Firmware	BIOS UEFI	Gen 1 VM Gen 2 VM
Disk and Controllers	Any SCSI Type RDMs SCSI controllers	SCIS boot disk 0:0 converted to IDE Converted to VHD/VHDX only 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 64 bit	Gen 1 VM only Gen 1 of Gen 2 dependent on Hyper-V Support
Guest Tools	VMware Tools	Host integration tools included in Guest OS, manual install for other OS

## Microsoft Hyper-V To VMware VSphere Conversion

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



### About Zerto

Zerto helps customers accelerate IT transformation by eliminating the risk and complexity of modernization and cloud adoption. By replacing multiple legacy solutions with a single IT Resilience Platform, Zerto is changing the way disaster recovery, data protection and cloud are managed. With enterprise scale, Zerto's software platform delivers continuous availability for an always-on customer experience while simplifying workload mobility to protect, recover and move applications freely across hybrid and multi-clouds. [www.zerto.com](http://www.zerto.com)

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