**Zerto Initial Setup/Quick Start**

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 PlatformTM, Zerto is changing the way disaster

recovery, retention and cloud are managed. This is done by providing enterprise-class disaster recovery and business

continuity software for virtualized infrastructure and cloud environments.

In on-premise environments, Zerto Virtual Replication is installed with virtual machines to be protected and recovered.

In public cloud environments, Zerto Cloud Appliance (ZCA) is installed in the public cloud site that is to be used for recovery.

The installation includes the following:

■ Zerto Virtual Manager (ZVM): A Windows service that manages everything required for the replication between the

protection and recovery sites, except for the actual replication of data. The ZVM interacts with the hypervisor

management user interface, such as vCenter Server or Microsoft SCVMM, to get the inventory of VMs, disks, networks,

hosts, etc. and then the Zerto User Interface manages this protection. The ZVM also monitors changes in the hypervisor

environment and responds accordingly. For example, a VMware vMotion operation, or Microsoft Live Migration of a

protected VM from one host to another is intercepted by the ZVM and the Zerto User Interface is updated accordingly.

■ For the maximum number of virtual machines, either being protected or recovered to that site, see Zerto Scale and

Benchmarking Guidelines.

■ Virtual Replication Appliance\* (VRA): A virtual machine installed on each hypervisor hosting virtual machines to be

protected or recovered, to manage the replication of data from protected virtual machines to the recovery site.

■ For the maximum number of volumes, either being protected or recovered to that site, see Zerto Scale and

Benchmarking Guidelines.

Note: \*In vSphere installations, OVF to enable installing Virtual Replication Appliances.

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■ Virtual Backup Appliance (VBA): A Windows service that manages File Level Recovery operations within Zerto Virtual

Replication.

■ Zerto User Interface: Recovery using Zerto Virtual Replication is managed in a browser or, in VMware vSphere Web Client

or Client console.

When Zerto Virtual Replication is installed to work with an on-premise hypervisor it also comprises the following component:

■ Data Streaming Service (DSS): Installed on the VRA machine, and runs in the same process as the VRA. It is responsible

for all the retention data path operations.

Zerto Virtual Replication also supports both the protected and recovery sites being managed by a single vCenter Server, to

handle small branch offices. When the protected and recovery sites are the same site, only one installation of Zerto Virtual

Replication is required.

Requirements for Each Site

Click to open and review prerequisites and requirements: VMware vSphere environments

Routable Networks

The Zerto Virtual Replication architecture supports the following network configurations:

■ In on-premise environments:

■ Flat LAN networks

■ VLAN networks, including private VLANs and stretched VLANs

■ WAN emulation

■ VPN IPsec

■ In Cloud environments:

■ The instance (virtual machine) on which the Zerto Cloud Appliance is installed must use a subnet that is accessible

from all Zerto Virtual Managers that may be connected to this instance.

The Zerto Virtual Replication architecture does not support NAT (Network Address Translation) firewalls.

Minimum Bandwidth

■ The connectivity between sites must have the bandwidth capacity to handle the data to be replicated between the sites.

The minimum dedicated bandwidth must be at least 5 Mb/sec.

The Zerto User Interface

■ Zerto recommends using Chrome, Firefox, Microsoft Edge, or later versions of Internet Explorer.

■ Microsoft Internet Explorer 10 and all versions below, are not supported.

■ The minimum recommended screen resolution is 1024\*768.

Open Firewall Ports

Zerto Virtual Manager requires the following ports to be open in the protected and recovery site firewalls:

PORT DESCRIPTION

22a During Virtual Replication Appliance (VRA) installation on ESXi 4.x and 5.x hosts for communication between the

Zerto Virtual Manager (ZVM) and the ESXi hosts IPs.

443 During VRA installation on ESX/ESXi hosts for communication between the ZVM and the ESX/ESXi hosts IPs.

4005 Log collection between the ZVM and VRAs on the same site.

4006 TCP communication between the ZVM and VRAs and the VBA on the same site.

4009 TCP communication between the ZVM and site VRAs to handle checkpoints.

9080 HTTP communication between the ZVM and Zerto internal APIs.

9081b TCP communication between ZVMsc

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If a proxy server is used at the site, specify the IP address of the Zerto Virtual Manager in the exception list in the Proxy Server

settings.

Recommended Installation Best Practices

Zerto recommends the following best practices:

■ Install Zerto Virtual Replication on a dedicated virtual machine with a dedicated administrator account and with VMware

high availability (HA) enabled, and no other applications installed on this machine, and especially not on the machine

running the vCenter Server service. If other applications are installed, the Zerto Virtual Manager service must receive

enough resources and HA must remain enabled.

■ Install a VRA on every host in a cluster so that if protected virtual machines are moved from one host to another, there is

always a VRA to protect the moved virtual machines.

■ Install VRAs using static IP addresses and not DHCP.

■ Prepare an administrator account for the machine where Zerto Virtual Replication is installed.

■ You must exclude both the Zerto Virtual Replication folder and %ProgramData%\Zerto\Data\zvm\_db.mdf from

antivirus scanning. Failure to do so may lead to the Zerto Virtual Replication folder being incorrectly identified as a threat

and in some circumstances corrupt the Zerto Virtual Replication folder.

■ Synchronize the clocks on the machines where Zerto Virtual Replication is installed using NTP.

Installation

The Zerto Virtual Replication installation deploys the Zerto Virtual Manager and copies the installation software for the Virtual

Replication Appliance.

A complete installation includes installing Zerto Virtual Replication on the protected and peer, recovery, sites.

Note: When both these sites are managed by a single vCenter Server, Zerto Virtual Replication is installed on only one site. In

this case, Zerto recommends installing Zerto Virtual Replication in the main site where protected machines will be recovered.

You can install Zerto Virtual Replication using the defaults provided by Zerto or perform a custom install, in which you can

define the ports that will be used by Zerto Virtual Replication.

Performing an Express Installation

You can install Zerto Virtual Replication using the defaults provided by Zerto. Site information and information to connect to

vCloud Director can be provided, if required, after the installation in the Zerto User Interface.

Note: You cannot install Zerto Virtual Replication on the same machine where another version of Zerto Virtual Replication has

been installed, for example, if the Zerto Virtual Replication for Microsoft Hyper-V version has been installed on the machine.

To perform an express install of Zerto Virtual Replication:

1. Run Zerto Virtual Replication Installer.exe.

Note: If the required version of Microsoft .NET Framework is not installed, you are prompted to install the required version

of .NET Framework, which is included as part of the Zerto Virtual Replication installation package. After .NET is installed

the machine automatically restarts and the Zerto Virtual Replication installation begins.

9180 Communication between the VBA and VRA.

9669 HTTPS communication between the Zerto User Interface and a ZVM, and for invoking Zerto RESTful APIs.

a. If the ESX/ESXi hosts are given names, make sure that the Zerto Virtual Manager can resolve these names.

b. The default port set during the Zerto Virtual Replication installation. When pairing the ZVM to a Zerto Cloud Connector, this value must not be changed.

c. When the same vCenter Server is used for protection and recovery, Zerto Virtual Replication is installed on one site only and this port is ignored.

PORT DESCRIPTION

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2. Follow the wizard through the installation until the Choose Installation Type dialog and select the Express installation

option.

3. Click NEXT.

The vCenter Server Connectivity dialog is displayed.

4. Specify the following:

IP / Host Name: The IP address or host name of the machine where the vCenter Server runs.

Username: The user name of a user with administrator level privileges in the vCenter Server. The name can be entered

using either of the following formats:

username

domain\username

Password: A valid password for the given user name.

Site Name: A name to identify the site.

5. Click NEXT.

The Validation dialog is displayed.

The installation performs checks to make sure that the installation can proceed successfully.

6. After the checks complete successfully, click RUN and continue to the end of the installation.

7. If you intend to manage disaster recovery from this machine, open the Zerto User Interface at the end of the installation,

logging in with the user name and password for the vCenter Server connected to the Zerto Virtual Manager.

8. Set any antivirus software running on the machine not to scan the folder where Zerto Virtual Replication is installed.

9. Repeat the procedure to install Zerto Virtual Replication on the peer site.

Registering the Zerto Virtual Replication License

Access the Zerto User Interface from a browser as follows:

1. In a browser, enter the following URL:

https://zvm\_IP:9669

where zvm\_IP is the IP address of the Zerto Virtual Manager for the site you want to manage.

2. Login using the user name and password for the vCenter Server connected to the Zerto Virtual Manager.

On the very first access to the Zerto User Interface, you must either register your use of Zerto Virtual Replication, by entering

the license key supplied by Zerto or pair to a site where a license has already been entered.

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After entering a valid license, the DASHBOARD tab is displayed with a summary of the site. Before you can start protecting

virtual machines in this site, you must configure Zerto Virtual Manager at each site by installing Virtual Replication Appliances

on the hosts in the site and pair the protected and recovery sites, as described in the following sections.

Note: Complete the configuration of one site at a time.