What's New in Zerto Virtual Replication 2.0?

Zerto Virtual Replication (ZVR) 2.0 takes Zerto’s award-winning, hypervisor-based replication technology to the next level, providing enterprises with a scalable, robust and automated solution for their data protection needs across different sites and application types. With the newly added multi-site replication, enterprises can now protect not just their main data centers, but also remote offices and other locations. With a hardware-agnostic solution, replication can be done from many sites to one shared infrastructure delivering secure multi-tenancy. ZVR 2.0 builds upon the previous release to continue to deliver true, cost-effective BC/DR for virtualized mission-critical applications.

For enterprises deploying private clouds or considering hybrid clouds, ZVR 2.0 delivers a new level of secure multi-tenancy, automation and management specifically designed for cloud deployments. ZVR 2.0 is the first data protection solution that deeply integrates with VMware vCloud Director, enabling replication from a VMware vSphere environment to a VMware vCloud environment and vice versa. ZVR 2.0 is fully aware of vCloud and vSphere entities, like vApps and Organization Networks, automating the creation and management of these entities on recovery.

Enterprises of all sizes are interested in moving their tier-1 applications to the cloud for the flexibility, agility and increased efficiencies; however, a key barrier is BC/DR. Customers want to ensure their tier-1 applications are completely protected and will suffer minimal downtime in the event of a disaster. ZVR 2.0 BC/DR for the cloud meets very aggressive service levels, including RPOs of seconds and RTOs of minutes. ZVR 2.0 installs seamlessly in any environment, delivering an effective BC/DR solution for public, private or hybrid clouds.

Key new features of ZVR 2.0 include:

**Multi-site Replication, Protection and Migration**

With multi-site replication, customers are able to protect not only the main datacenters, but also remote offices, smaller data centers and other locations. One BC/DR solution can be implemented across the entire IT infrastructure, simplifying management and reducing costs while delivering a consistent recovery process with aggressive SLAs.

Zerto Virtual Replication 2.0 replicates between multiple sites, delivering one BC/DR solution across the entire environment. Whether there are 3 sites or 300 sites, ensure the consistent application of corporate BC/DR policies with one solution.
With VM Boot Order, VMs are built in an order that makes sense and ensures enterprise-class application availability. Once end-users have access to the application at the target site, VM boot order delivers the application behavior end-users expect.

- **Multi-site replication** - Enables the protection of not just the data and applications in the main data center, but also the data and applications at remote offices. Workloads can be replicated from any site to any site, and automatically recovered within minutes.

- **Multi-version support** - ZVR 2.0 enables replication and recovery between different versions of vSphere, enabling staged upgrade of multiple sites without breaking application protection.

- **Secure multi-tenancy** - ZVR 2.0 secure multi-tenancy means that only a single infrastructure (vCenter, clusters, etc.) is needed at each site, enabling separation of services without requiring multiple infrastructure instances.

- **Limit the visibility into the infrastructure** - With infrastructure masking, IT administrators can limit access to various parts of the infrastructure ensuring control and information is not unnecessarily shared.

**Extended Protection and Recovery**

ZVR 2.0 extends protection of production applications to more than just immediate disaster recovery, enabling longer retention of data and offsite cloning. ZVR 2.0 can be integrated with remote site backup technologies to eliminate the need for backup windows in the production environment.

- **Offsite cloning and backup** - Create a copy of VMs on the replication site for testing, backups or development, providing increased flexibility and availability with no impact to the production environment.

- **Extended continuous data protection** - The point-in-time journal can now store up to 5 days of data, providing more options for failover, especially when there is a corruption to consider.

- **Immediate, full data protection with pre-seeding** - Pre-seed the replica at the target site with a data store, file or VMDK file, eliminating the need for an initial synchronization, significantly reducing the network impact.

**Improved Application Aware Replication**

For mission critical business operations, the application needs to be protected, not just the data. ZVR 2.0 fully protects applications, even as the environment changes, ensuring BC/DR policies are consistently applied.
Deeper Virtual Awareness
In order to deliver true cloud BC/DR, the solution needs to be completely aware of the virtual environment. It should automatically update its policies, consistency groups and IP addresses as the environment changes. ZVR 2.0 augments awareness to the virtual environment. Any updates made in VMware vSphere or VMware vCloud Director are automatically made to ZVR 2.0, keeping management simple and centralized.

- **Automatic updates of vApps** - As a vApp is updated or changed, ZVR 2.0 will update the Virtual Protection Group (VPG) to ensure BC/DR policies are applied consistently. Management is simple and centralized.

- **Update of VMDK size** - Detect changes made to the protected VMDK size and automatically update the replica without manual intervention ensuring continuous protection of mission critical applications and data.

- **Automatically detect and configure IP addresses** - IP addresses of the protected VMs will automatically be detected and imported into Zerto, ensuring the most accurate configuration of corporate BC/DR policies.

- **Improved DRS** - Integrate DRS into ZVR 2.0 to maximize the utilization of VMware features. ZVR 2.0 will use host affinity during recovery and allows DRS operations after recovery. This can be used in VMware vSphere or VMware vCloud Director environments.

Enhanced Reporting and Management
IT needs to effectively demonstrate support and manage internal and external compliance initiatives. ZVR 2.0 enables IT to easily monitor and manage BC/DR processes, ensuring compliance with IT and business objectives.

- **Centralized, multi-site management** - Effectively and simply manage BC/DR processes with one installation of ZVR 2.0 with complete visibility into BC/DR processes across departments.

- **Audit reports** - Simplify root cause analysis with a fully documented account of all environment updates.

- **Runbooks and RTO reports** - Successfully meet internal and external compliance initiatives for BC/DR requirements with fully documented results of BC/DR testing including actual RTO achieved. Reports are available at the application-level, providing the granularity of an enterprise-class solution.

VMware vCloud Director Integration
ZVR 2.0 is the only data protection solution that deeply integrates with VMware vCloud Director (vCloud). With ZVR 2.0, replication between different vCloud environments and between vSphere and vCloud environments is possible, while getting the consistent application of BC/DR policies. ZVR 2.0 has the intelligence to identify and convert “like” entities between the different hypervisors and deliver consistent protection.

VMware’s vCloud Director was designed for building and managing clouds, enabling the creation of separate virtual data centers and correlates them with departments or applications. With vCloud, it easily aligns IT entities with business initiatives to increase business value. ZVR 2.0 fully integrates into vCloud extending the alignment of business and IT to BC/DR processes, enabling protection of applications in their native vCloud form, and migrating and recovering them in other vCloud or vSphere environments.
When failing over to a VMware vCloud environment, Zerto Virtual Replication 2.0—will automatically build the vApp, so the end-user can see their application in the vCloud.

- **vCloud automated replication and recovery** - ZVR 2.0 integrates with vCloud enabling the selection of any vApp for replication to an Org VDC in another vCloud. Failover, recovery and testing are fully automated, creating a new vApp on the target with a single click of a button.

- **vApp support** - Effectively protect applications deployed as vApp, defining different SLA policies for different applications, and recover them on different target locations. Any VM that is added to a vApp is automatically protected with the same policy.

- **Org VDC and Org Networks support** - ZVR 2.0 is aware of all vCloud entities, enabling defining specific Org VDC and Org Networks as source and targets for recovery.

- **Replicate from vSphere to vCloud and back** - With ZVR 2.0, any workload running in a vSphere environment can be recovered in a vCloud environment automatically, while configuring any necessary networking. ZVR 2.0 supports reverse replication between vCloud and vSphere.

- **Centralized management** - Integration into VMware vCloud Director delivers simple, centralized management and consistency in the environment with just one place to go for all virtualization actions. One view of the environment makes it easy to determine the impact of changes on other applications or departments; there is no need to coordinate outputs from multiple management applications.

Summary

Zerto Virtual Replication 2.0 expands the capabilities for virtual-aware BC/DR and provides enterprises with the features they need for a complete solution across their entire environment. Customers can leverage one BC/DR platform for their main data centers as well as their remote offices for centralized management of all replication and recovery operations. For more information, please visit www.zerto.com.