

Automated Test DR with EnsureDR and Carbonite Availability

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Most businesses today heavily rely on their IT infrastructures for maintaining their internal processes and the relationships with customers and partners. To ensure the continuity of the business, virtualization and replication technologies are widely used.

The suite of Carbonite Availability failover and recovery products goes beyond one-way virtualization to provide true any-to-any platform recovery and protect the production servers. Most critical resources are usually replicated to a remote site so that in case of a disaster such as outage, fire, nature event or any other scenario, they are able to service requests from a Disaster Recovery site with minimal data lost and down time.

Even though Carbonite Availability products are extremely dependable, you want to be absolutely sure that, in the event of a malfunctioning of a single server or an entire datacenter, the replicated resources are ready to service the business requests: servers can start, applications can run properly, data are not corrupted, and so on.

To make sure that the DR and replication solutions will work as expected, the IT staff performs DR tests every few months (at best) and simulates the workload startup on the DR site. In this test they discover most of the issues that could prevent a smooth transition from production to DR.

This tests are manual and in most cases they take time to prepare, run and fix discovered issues. Also this tests are being held twice a year at best and sometime doesn't happen at all. That puts the DR solution at risk since you cannot be sure that your DR site will work as planned.

EnsureDR was built as a complimentary solution for Carbonite Availability, it helps make sure that the servers that are replicated to a Disaster Recovery site with Carbonite Availability will work in any actual disaster scenario. EnsureDR automatically tests the replicated servers in the DR site in an isolated environment. By reading the report that is periodically sent to their mailboxes, the IT staff members can easily detect and proactively solve problems that could prevent an actual DR process to fully succeed.

Moreover, should an actual disaster occur, EnsureDR is able to perform an actual fail over to the DR site, with the same settings configured for test failover.

About Carbonite Availability from Carbonite

Carbonite Availability for Windows is the first real-time high availability and disaster recovery solution to offer options for physical, virtual, and cloud servers. **Carbonite** Availability allows you to fine-tune your recovery and efficiency targets with flexible RTO and RPO.

No matter the size of your business, you can take advantage of full-scale protection at an affordable price. Because it's platform, storage, and hardware independent, **Carbonite** Availability reduces your overall operating costs by optimizing existing infrastructure and scaling with whatever you build in the future.

EnsureDR: the complete solution that makes sure your DR environment is always ready

The possibility of a major failure in the production site should always be considered, and potential loss estimated. If you implemented a DR site, you want also to be sure that it is actually able to work as expected in the event of a disaster

EnsureDR features a simple console with wizard-driven initial configuration that lets you select the server to test, specify test, email and schedule settings, and start interactively the test session if needed.

Scenarios

EnsureDR typical scenario is comprised of a main (production) site that contains physical or virtual servers that are critical for the business, and a DR site those servers are replicated to. The purpose of EnsureDR is to ensure that the replicated resources are consistent and always ready in the event an actual disaster occurs.

When scheduling an EnsureDR job it will take care of the following activities:

- 1) Connects one or more replica VMs to a dedicated, isolated network (the “bubble”). This ensures that tests don't impact the production network in any way
- 2) Starts the VMs in a specified order
- 3) Performs a selected set of checks on the running VMs
- 4) Optionally takes a snapshot of the VMs that passed the test
- 5) Stops the VMs and cleans up the environment
- 6) Generates and sends to a defined list of email addresses a report with detailed results

In the simplest scenario, the same set of tests is performed on each VM selected for DR test. An advanced configuration is available to specify granular test settings on each VM.

Report

The report generated by EnsureDR includes a summary result of the test and, for each VM tested, the result of each test performed, with details of the detected issues (if any).



Replication and virtualization technologies

EnsureDR is designed to run with Double-Take Availability, and supports both VMware ESX and Microsoft Hyper-V as virtualization platform. Whichever is your production environment (physical, ESX-based or Hyper-V-based) you can replicate it to a remote site and be assured that your DR resources are always consistent.

Application-level test

EnsureDR can perform many different kind of test, including application-level tests. You can easily check if the replica VM can start, can communicate with other network resources, if critical Windows or application services can start, and also run a custom command to check any kind of setting or event.

RPO and RTO

When organizations plan and create a DR solution they set up front RPO (Recovery Point Objective) and RTO (Recovery Time Objective). This means that they plan how much data they can afford to lose and how much time they can wait for the DR site to be ready. EnsureDR estimates the RTO each time it runs DR test and helps you predict what will be the RTA (Recovery Time Actual).

Actual failover

When needed, EnsureDR is able to orchestrate the live failover of your resources. If your last test DR was successful, you can be confident that the actual DR will work as expected, including the boot order of the virtual machines that was chosen during setup.

Carbonite Availability and EnsureDR

With Carbonite Availability and EndureDR together, any adverse event that can affect production site and resources can be faced with a planned, known and reliable process, and even the stricter SLAs can be fulfilled without effort.

EnsureDR

EnsureDR® is disaster-recovery, industry-leading software to secure high availability and allow businesses to verify and automate their Disaster Recovery site

EnsureDR empowers businesses to expand their DR usage, scale-up the current DR infrastructure with confidence, redefine availability, and simplify the fail-over procedure. The result is a highly accessible, resilient, on-demand infrastructure that provides the ideal foundation for any DR environment.