Cheatography

Backup & Disaster Recovery (BDR) Cheat Sheet

by [deleted] via cheatography.com/2754/cs/7643/

Introduction - Three Popular Backup Methods

There are multiple ways in which data can be backed up. Following are three popular methods, along with a description of their strengths and weaknesses:

By Jay McCall
http://www.bsminfo.com/doc/bdr-protect-your-customers-from-down-time-and-disasters-0001?sectionCode=Articles&templateCode=S-ingle&user=20&source=nl:44956

1. Image (Physical) Backup

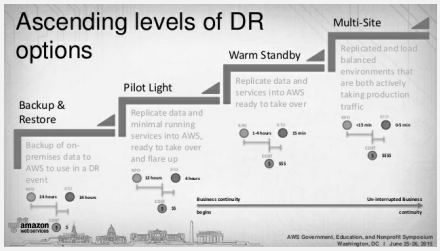
This method takes a snapshot of everything on a computer or server at a certain point in time. “It includes files, databases, applications, settings, and even the operating system,” says Jess Couto, VP of U.S. channel sales and marketing at Carbonite. “This approach enables ‘bare metal recovery,’ which means you can take a computer or server with no operating system or data on it (i.e., a piece of bare metal) and restore the image to exactly how your system was before a disaster.”

While local physical image backups are often appropriate for performing restorations from major server crashes, their size makes them inefficient for recovering from off-site locations, such as co-location facilities or the cloud. Also, image restores are overkill for scenarios where someone inadvertently deleted a file, for example. For these scenarios, VM (virtual machine) backups or file-based backups are preferred.

2. File-Level Backup

This type of backup gives users granular control during the backup and recovery process. “For example, the user could just target the ‘My Documents’ folder and the contents of that folder is all that would be included in the backup,” says Matt Urmston, chief evangelist/director of product management at StorageCraft. “This lessens the amount of storage required, and it enables recovery from just about anywhere.” The downside of relying on this method alone is that if a user experiences a complete system crash, the operating system and applications will have to be reinstalled, which can be a time-consuming process..

Disaster Recovery



3. Virtual Machine (VM) Backup

VM backup combines many of the benefits of physical image backups and file-level backups by using specialized software, called a hypervisor, to emulate a server’s CPU, memory, hard disk, network, and other hardware resources completely. “A viable BDR software can virtualize a customer’s system in a matter of seconds,” says Eric Torres, manager of channel development at Datto. “Using the VMDK [virtual machine disk] file format, for example, eliminates any worries about formatting/converting. Additionally, users can mount a VM image, quickly drill down to the file level, and restore a specific file.”.

BDR Pitfalls To Avoid

The most important BDR basics to keep top of mind is that just because a BDR solution doesn’t generate an error report doesn’t guarantee it is working as advertised. “Test, test, test,” says StorageCraft’s Urmston. “A lot of solutions providers fall into a false sense of security when it comes to BDR. As good as your BDR solution may be, there is always something that could go wrong. Testing your disaster recovery [DR] plan on a quarterly basis is something that should be built into your service-level agreement.” LogicNow’s Harless concurs and adds, “Also, remember to document your DR plans, plus any passwords, encryption keys, and other system information; you may need it during a data recovery.”.