

# 15 Backup and Recovery Tips for 2015

## Data Sheet: Backup and Disaster Recovery

Protecting critical data and applications against disasters and data loss, shortening backup windows, keeping pace with growing data volumes, achieving lightning fast recoveries and making backup processes more efficient are key goals for 2015. To help you achieve these and more, we've compiled 15 backup and recovery tips for 2015.

### #1 - Determine backup policies and procedures.

The most obvious tip is that backing up your data is not a one-time event; it is a critical part of conducting business life. Have procedures in place so that your data, applications and systems are safely backed up and ready to be recovered. Determine backup frequency by data type, application and database etc. since not all data and systems are created equal.

### #2 - Test. Test. Test.

The only thing worse than not backing up your data is not *properly* backing up your data. Imagine that a disaster strikes and all your business data is completely destroyed. If you go to recover your data and find out that your backups are corrupted, the wrong files are backed up, or some other terrible scenario has occurred, what will you do? Test your backups to make sure that your data is properly backed up and can be restored. Don't wait until a disaster happens.

### #3 - Deploy data deduplication to keep pace with growing data volumes.

Data deduplication dramatically reduces the amount of storage required for backups and in turn reduces storage costs. Data deduplication can take place at the source, target or appliance. Deduplication that takes place at the source enables greater scalability by spreading processor usage out across all clients running backups, enabling your backup server to process more concurrent backups. In addition, client deduplication minimizes network data transfers as only unique data blocks (deduplicated data) are transferred over the network to the backup server. Deduplication at the target takes place after backup data has arrived at the backup server and just before data is stored to disk. Target deduplication does not impact source systems any more than a typical backup would. The appliance deduplication method is a hardware-driven process. Deduplication takes place on the deduplication appliance (can be in-line or post-process deduplication). 3rd-party deduplication devices handle all aspects of deduplication. One of the benefits of Symantec's Backup and Recovery solutions is that we give you flexible deduplication. You can choose the best method for your environment.

### #4 - Ensure you're running application aware virtual machine backups.

Crash consistent backups do not quiesce applications and databases which leaves room for data corruption and/or lost data. Protecting your vms in an application aware manner will ensure that there are no unfinished database transactions or incomplete application files during data copying operations. The result is that all data residing on the virtual machine is protected and will be accessible upon a restore.

### #5 - Best practices for protecting virtual machines.

Stop protecting VMs as if they were physical machines. This slows down backups and hogs resources. By deploying a solution designed and built for VMs such as NetBackup and Backup Exec, you benefit from faster backup performance with less overall storage consumption while being able to recover what you want, when you want it. Solutions designed for VMs include the following must have features; VMware VADP integration, VMware changed block tracking support, VMware block optimization support and Microsoft's VSS API integration.

**#6 - Stop running two backups for granular recovery.**

There are many solutions available today that provide recovery agility through a single pass backup. For example, with Backup Exec and NetBackup you can recover anything from a single email, email box or the entire information store all from a single pass backup of your Microsoft Exchange Server. Forget multiple pass backups and save time, resources and storage.

**#7 - Quickly and easily migrate existing physical systems to virtual machines.**

Don't get burdened with converting physical machines to virtual machines. With the migration accelerator, also known as physical to virtual conversions (P2V), you can do this with the simple click of a button. This will save you time and reduce complexity.

**#8 - Choose a backup vendor that can support all forms of recovery.**

The #1 reason to backup is to recover. Don't get caught out when it comes to recovery. Ensure you can recover what you need, when you need it without complex, time consuming restore processes. Look for a product that includes granular recovery, file and folder recovery, entire application, database, virtual machine and server recovery.

**#9 - Stop scripting snapshots.**

Using scripts to orchestrate snapshots for data protection is crude, complex, and unreliable. Use a backup solution that can orchestrate snapshots for you without scripts. For example, with NetBackup Replication Director, snapshots can be easily integrated with your data protection strategy. Snapshots are cataloged for file and object level restores, and further replication can be performed to make sure you're prepared for a disaster.

**#10 - Pick the right storage media.**

If you are using tape media, ensure you are aware of its average life span. Not all manufactures are the same. Some experts say consider replacing it after approximately 100 operations because tape media degrades over time. Removable hard disc media normally needs to be replaced when it is 5 years old, which is the average life of a hard disc. Either media type should be replaced when backup write or verify errors are reported.

Best practices dictate selecting the right type of media for particular operations: high speed disk for near term operations, with tape and removable disk suitable for off-site storage and archiving. If you do need to replace media, this might be a good time to consider options. Cloud-based storage and archiving, for example, can provide many benefits including reduced storage hardware management and flexible pricing options.

**#11 - Keep one or more backup copies off-site.**

Unfortunately disasters do happen. That's why it is so important to keep one or more backup copies offsite. Imagine if you experience a site-wide disaster and your backup is stored onsite. Don't risk losing your data or your job. Ensure you have at least one copy in a second location just in case that disaster strikes.

**#12 - Encrypt your backups.**

Production data and backup data is susceptible to threats. Guard against your critical data getting in the wrong hands should it become lost or stolen. Always encrypt your backups.

### **#13 - Troubleshooting data backup error log messages.**

There is always the chance that you may discover there was a problem with your backup. Knowing how to read your data backup error log messages can help you save time fixing common backup problems.

### **#14 - Deploy a single solution for physical and virtual.**

A single solution for both physical and virtual machines eliminates managing two or more backup solutions, paying for two backup programs, running multiple backup jobs, and backing up duplicate data across physical and virtual. Overall it lowers costs and simplifies backup tasks.

### **#15 - Keep backups healthy.**

One of the ways to keep your backups healthy is to run a verify job. A verify job checks that data can be read or restored from the backup media. You can run a verify job on-demand or scheduled it to run at the same time as the backup or after the backup job completes. Both Backup Exec and NetBackup include this feature as a default.

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### **More Information**

#### ***To speak with a Product Specialist in the U.S.***

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