CHEAT SHEET – HYPER-V BACKUP

BackupAssist™
Windows® Backup Made Easy!

Cost-effective backup of Hyper-V Host & Guests

Type of protection	Method	Capabilities	Licensing / Price (USD)
Essential Protection	Image the host	✓ Bare metal restore ✓ Hardware independent restore ✓ Individual VM restore ✓ Granular restore of files & folders on Guests ✓ VM migration to different host	BackupAssist $249 BackupAssist VM Granular Restore Console Add-on $249
Enhanced Protection	Exchange Mailbox	✓ Brick-level protection for Exchange ✓ Email backup to PST ✓ Email archiving to PST	BackupAssist Exchange Mailbox Add-on $129
	Rsync – Internet backup	✓ Offsite backup via Internet ✓ Files & VSS aware applications (Exchange 2003/7, SQL 2005/8)	BackupAssist for Rsync $129
	SQL	✓ Point in time backup & restoration of SQL databases (SQL 2000/5/8)	BackupAssist SQL Add-on $129
Centralized Monitoring	CMC	✓ Monitor multiple installations from centralized location	Free for Gold resellers & BackupCare subscribers

Note: These instructions have been written for and tested against SBS 2003 and SBS 2008

Host Prerequisites

- Windows Server 2008 comes with Hyper-V Beta. Install KB950050 to get it up to RTM.
- Add Windows Server Backup feature.
- Use FAST disks to avoid VSS timeout problems.
- Keep partition sizes less than 2TB.

Guest Guidelines

- Use fixed VHD disks – i.e. allocate all disk space up front for better performance.
- In the guests, use Basic disks, not dynamic disks – otherwise online VSS backups won't work.
- Avoid using Hyper-V snapshots as these slow performance and make emergency migrations more difficult.
- Turn on the Backup integration service for each Hyper-V guest, as explained here: http://www.backupassist.com/blog/support/hyper-v-backup-using-windows-server-backup/.

Common Restore Tasks

- Full bare-metal restore of host machine: http://www.wbadmin.info/articles/howto-bare-metal-restores-windows-server-2008-backup.html.

- Individual VM restore to the same Host machine: http://www.backupassist.com/blog/support/granular-individual-vm-restore-of-hyper-v-virtual-machine-from-backup/.
- Migrating a VM to a different Host machine: http://www.backupassist.com/blog/support/granular-individual-vm-restore-of-hyper-v-virtual-machine-from-backup/.
- Restoring a machine into a new Hyper-V virtual machine from a NAS backup: http://www.backupassist.com/blog/support/how-to-restore-a-server-2008-image-backup-to-a-new-hyper-v-vm-from-nas/.
- Granular restore of files and folders on Guest VM: http://www.youtube.com/watch?v=pXCVSqS67xE.
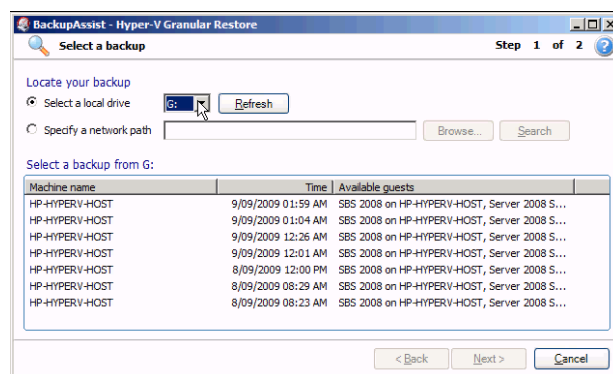
Tips for success

- Enable VSS persistent shadow copies to enable fast incremental backups: http://www.backupassist.com/blog/support/hyper-v-and-windows-server-backup-getting-it-to-run-fast/.
- Record the details of the setup of each VM. This comes in very handy in emergency migration scenarios.

The BackupAssist VM Granular Restore Console

The BackupAssist VM Granular Restore Console allows users to restore files on a Guest from the backup of the Host.

Normally, it's not possible to do this because the Guest's file system is locked within a VHD. However, the BackupAssist VM Granular Restore Console overcomes this, and allows you to restore from any available backup (no matter how old) and any available Guest.
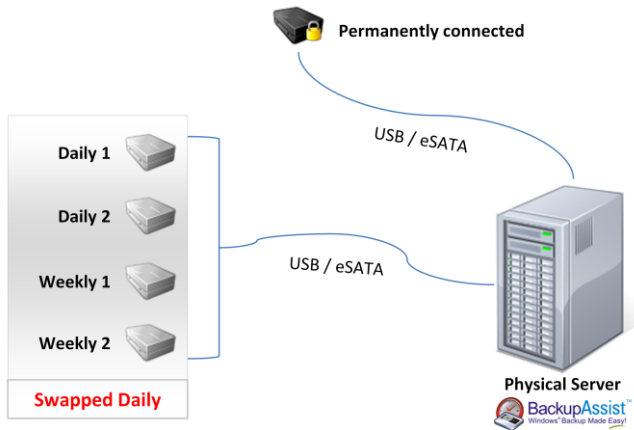
This means you can provide essential protection for your Hyper-V Host and Guests by performing one backup – imaging your Host – without needing to image your Guests.
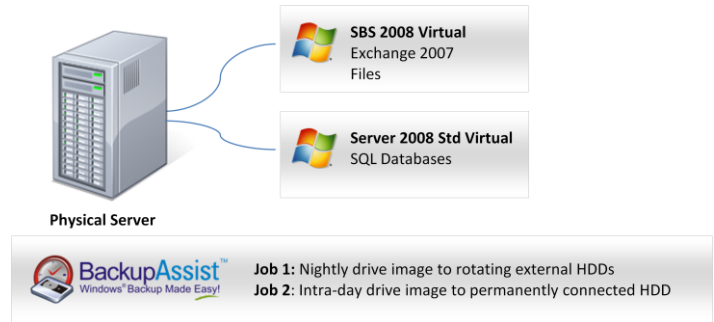
Essential Protection – Image the Host

Backup the Host machine using BackupAssist (utilizing Windows Server Backup).
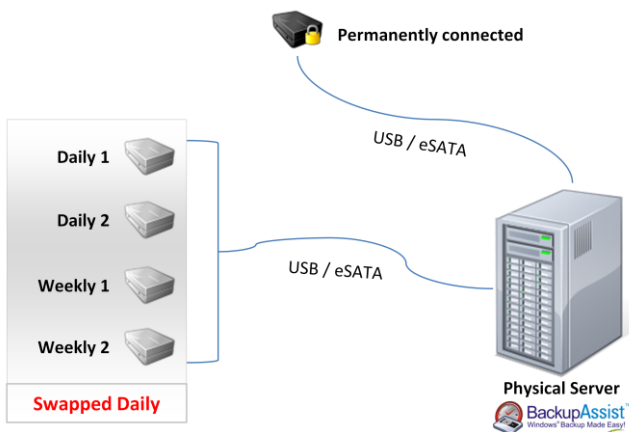
Client's View
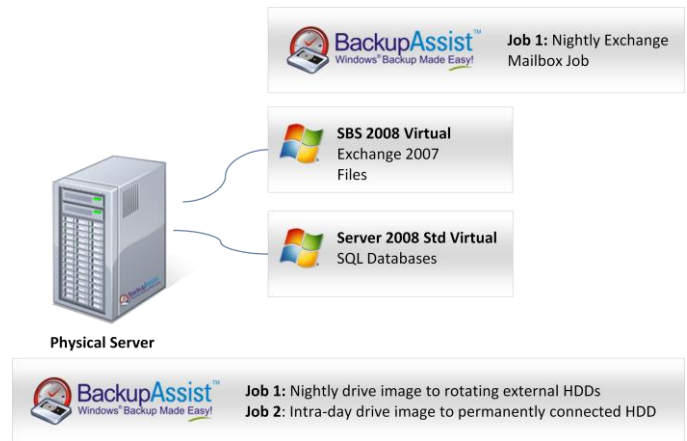
Administrator's View

Enhanced Protection – Exchange Mailboxes

Backup the Host machine using BackupAssist (utilizing Windows Server Backup). Additionally, backup Exchange Mailboxes on Guest machine.
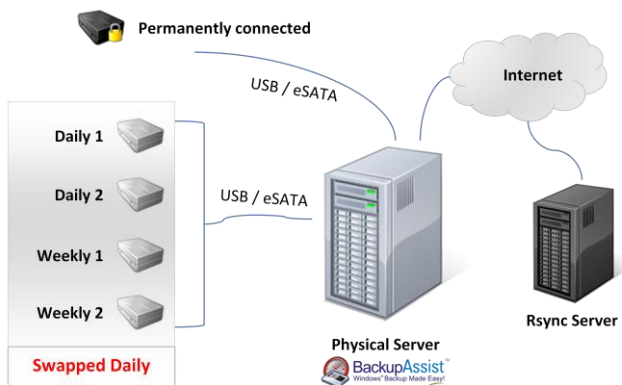
Client's View

Administrator's View

Enhanced Protection – Rsync

Backup the Host machine using BackupAssist (utilizing Windows Server Backup). Additionally, backup files and VSS applications via Rsync on Guest machine.

Client's View

Administrator's View