



5 New ways to use SureBackup

Creative ways to use native functionality to deliver additional tools for virtualized environments

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Agenda

- Overview of SureBackup
 - Veeam Backup and Replication v5
 - vPower suite of functionality
- New ways that SureBackup can add value to virtualized environments
 - No additional cost
 - Storage savings
 - Reduce risk
 - More closely resemble live workloads
- Raffle
 - VMware vSphere 4.1 HA and DRS Technical deep dive
 - Time Management for System Administrators

What is SureBackup?

- New feature of Veeam Backup and Replication v5 with vPower

100% Reliability



SureBackup™

Best RTOs



InstantRestore™

Best RPOs



SmartCDP™

vPower™

Virtualization-Powered Data Protection™

5 Patents Pending!

VMware vSphere

vPower is the patent-pending technology in Veeam Backup & Replication that enables SureBackup, InstantRestore and SmartCDP.

Why have a feature like SureBackup?

```
NTLDR is missing
Press Ctrl+Alt+Del to restart
```

```
A problem has been detected and windows has been shut down to prevent damage
to your computer.
```

```
DRIVER_IRQL_NOT_LESS_OR_EQUAL
```

```
if this is the first time you've seen this stop error screen,
restart your computer. If this screen appears again, follow
these steps:
```

```
check to make sure any new hardware or software is properly installed.
If this is a new installation, ask your hardware or software manufacturer
for any windows updates you might need.
```

```
if problems continue, disable or remove any newly installed hardware
or software. Disable BIOS memory options such as caching or shadowing.
If you need to use safe mode to remove or disable components, restart
your computer, press F8 to select Advanced startup options, and then
select safe mode.
```

```
Technical information:
```

```
*** STOP: 0x000000D1 (0x00000000,0x00000002,0x00000000,0xFCBAC2A4)
```

```
*** CRASHDD.SYS - Address FCBAC2A4 base at FCBAC000, DateStamp 26bb6f3c
```

```
Beginning dump of physical memory
Dumping physical memory to disk: 100
Physical memory dump complete.
Contact your system administrator or technical support group for further
assistance.
```

- High uptime may hide issues with running virtual machines.

How could that happen?

- Backups until this point had processed a backup as is, which may be inoperable.
 - Issues such as registry issues, pending blue screen of death, mal-configured page file or other issues may not be manifested on next boot.
 - A standard backup would only take these situations, as-is in the backup pass

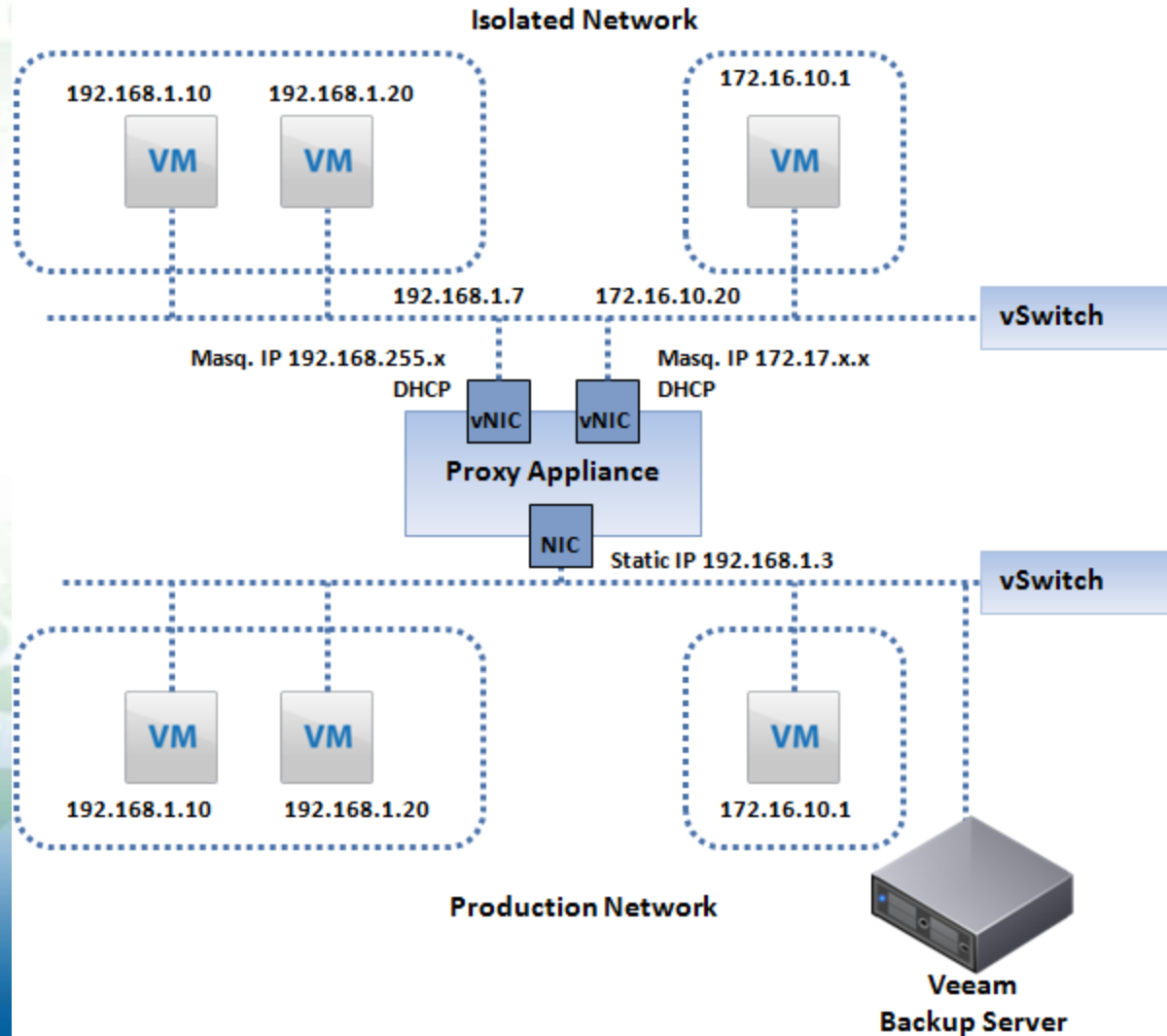
Primary purpose of SureBackup

- Recovery verification ensures that a backup virtual machine is indeed recoverable.
- File-level recovery may not be enough.
- This is done through loading the backup file in a read-only fashion as a bootable virtual machine.

But there is more!

- SureBackup can be configured for specific tests to ensure more than just being bootable
 - Ping success
 - VM heartbeat received
 - Active configuration via script
 - Automation options
- Storage savings by not allocating additional space as you would in a clone or new VM build.

Virtual lab



Interactive demo

- How to launch the backup file in the virtual lab configuration.

Name	State	Last result	Next run	Application group	Virtual lab	Linked jobs
SureBackup Job 1	Ready		<Not scheduled>	SureBackup/Virtual...	SureBackup/Virtual...	RWW-JOB6

SureBackup Job 1 Session 1/19/2011 9:26:10 AM

VM status:

Name	Status	Heartbeat	Ping	Script
DHNWDC3-2	Stated	Success	Success	Disabled

Session log:

Date/Time	Message
1/19/2011 9:26:20 AM	Getting virtual lab configuration
1/19/2011 9:27:27 AM	Starting virtual lab routing engine
1/19/2011 9:27:41 AM	DHNWDC3-2: Publishing
1/19/2011 9:27:41 AM	DHNWDC3-2: Publishing (Backup creation point: 1/19/2011 9:04:13 AM, type: full)
1/19/2011 9:27:51 AM	DHNWDC3-2: Updating configuration
1/19/2011 9:27:59 AM	DHNWDC3-2: Registering
1/19/2011 9:34:23 AM	DHNWDC3-2: Powering on (IP address: 172.27.3.3, network: 172.27.0.0, mask: 255.255.0.0, gateway: 172.16.0.144)
1/19/2011 9:34:26 AM	DHNWDC3-2: Heartbeat test
1/19/2011 9:34:26 AM	DHNWDC3-2: Pinging
1/19/2011 9:36:26 AM	DHNWDC3-2: Application initialization

Stop Session Close

1st New way to use SureBackup

- Security penetration testing
 - Configuring the backup as a virtual machine accessible for penetration testing.
 - Too many times penetration testing will cause adverse impact on live systems.
 - We may not know if a vulnerability exists unless we truly attempt to exploit.
 - False data injections and performance implications

2nd New way to use SureBackup

- Database modeling or mining operations
 - Number of times when data modeling or read-only access may cause unwanted extra read on production systems
 - Many large databases may have the occasional need for a one-time large job that may impact production

3rd New way to use SureBackup

- Refine automation
 - Changes to PowerCLI causing any pain?
 - <http://searchservervirtualization.techtarget.com/news/1525824/VMware-users-vexed-by-quiet-changes-in-PowerCLI-41>
 - Environment scripting for complicated scenarios may be hard to test
 - Further, can we really test the whole way down? Now we can.

4th New way to use SureBackup

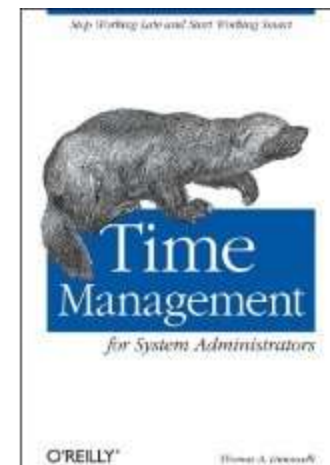
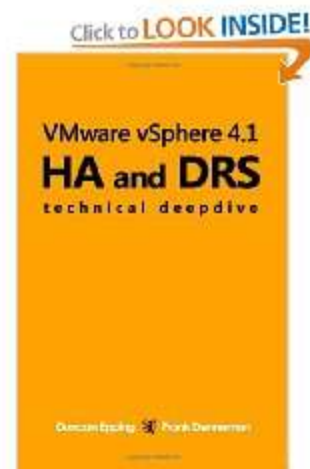
- Testing large Group Policy Objects (GPOs)
 - Group Policy in many organizations is treated just like any other tier 1 application
 - How is it tested? Further, how accurate is the test environment to the live production configuration?

5th New way to use SureBackup

- Test a multi-tier application upgrade
 - Too many times, systems are so interconnected with each other.
 - Major updates or version upgrades can be hard to test.
 - SureBackup allows a fully representative sandbox of the running configuration to be made available

SWAG! Free Stuff!

- First 5 people win a book, compliments of Veeam.
 - Question sent on webcast, response via chat.
 - First respondent gets a choice between HA and DRS deep dive and Time Management for System Administrators.
 - 4 HA/DRS books
 - 1 Time book



Questions / Comments?

- Thank you for your time!
- More information:
 - <http://www.twitter.com/veeam>
 - <http://www.veeam.com>
 - <http://www.veeam.com/blog>
 - Release Notes
http://www.veeam.com/veeam_backup_5_0_1_release_notes_rn.pdf
 - User Guide
http://www.veeam.com/veeam_backup_5_0_1_user_guide_pg.pdf