

## Symantec NetBackup Blueprints Blueprint for SharePoint Server

Symantec Backup and Recovery Technical Services

#### Symantec NetBackup Blueprints Preface/disclaimer





This NetBackup Blueprint presentation includes example diagrams that contain objects that represent applications and platforms from other companies such as Microsoft and VMware. These diagrams may or may not match or resemble actual implementations found in end user environments. Any likeness or similarity to actual end user environments is completely by coincidence.

The goal of the diagrams included in this blueprint presentation is not to recommend specific ways in which to implement applications and platforms from other companies such as Microsoft and VMware; the purpose of these diagrams is to illustrate NetBackup best practices only.

For guidelines and best practices on installing and configuring applications and platforms from other companies, please refer to best practice documentation and other resources provided by those companies.





These **Blueprints** are designed to show customer challenges and how NetBackup solves those.

- Each Blueprint consists of:
  - Pain Points: Explain the current challenges a customer faces.
  - Whiteboards & Example Diagrams: Describe the implementation of NetBackup solution.
  - Best Practices: Present NetBackup best practices to avoid common pitfalls
- Use these Blueprints to present the NetBackup best practice implementation example





#### **Pain Points**



#### **NetBackup Blueprints: SharePoint Server** Today's Challenges



- SharePoint is Getting More Complex to Manage/Protect
  - Multiple servers with different roles
  - Customizations
  - Complex configurations
  - Logical architecture doesn't translate into physical components
- SharePoint Data Growth
  - Ever-increasing volume of documents in SharePoint repositories
  - SharePoint backups taking longer
- Native SharePoint Tools Insufficient
  - SharePoint's native backup tools are inadequate for handling the complexity of SharePoint data growth







#### NetBackup Blueprints: SharePoint Server NetBackup Agent capabilities (1)



- Automatic discovery of farm components
- Easy backup and restore of entire databases
- Simultaneous backup of all DB items in a farm, or selected databases as desired
- Granular Recovery
  - Sites, sub-sites, lists, list items, documents
  - \*Redirect granular restore to disk or restore to original location
- Full Disaster Recovery (SP + Windows Agent)
- Online backup
- NetBackup supports full and differential-incremental (non-GRT) backups of SharePoint





- Allows to administer the backup and recovery of multiple SharePoint server installations from a central location
- SharePoint Server backups are saved directly to a wide variety of storage devices that NetBackup supports.
- Administrators can set up schedules for automatic, unattended backups for local or remote clients across the network.
- When a backup uses GRT, users can restore individual lists, site collections, sub-sites items and documents sets directly from any full database backup of a Web application.
  - Note: In NetBackup 7.6, GRT is not supported with SharePoint 2013. This functionality will be added in a future release.



#### **NetBackup Blueprints: SharePoint Server** Supported SharePoint versions



- SharePoint Server 2013
- SharePoint Server 2010 sp1, sp2
- SharePoint Server 2007 Sp1,sp2,sp3

Notes:

- GRT is not yet supported with SharePoint 2013.
- SharePoint 2013 sp1 is not yet supported with the current NetBackup version. This functionality will be added in a future release.
- NetBackup 7.5 GA or later is required for SQL Server 2012. "Always On/Availability Groups" are not supported at this time.
- For the latest list of supported configurations, refer to Database Agent Compatibility list. http://www.symantec.com/docs/TECH126904





Whiteboards and Example Diagrams



#### **Example Diagram: SharePoint Server** SharePoint deployments







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#### **Example Diagram: Microsoft SharePoint** Behind the scenes: content database





See the article <u>http://technet.microsoft.com/en-us/library/cc678868.aspx</u> for more information



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- Verify the operating system and platform compatibility Review the NetBackup 7.x Database Agent Compatibility List: <u>http://www.symantec.com/docs/TECH126904</u>
- Verify the NetBackup server and client requirements for NetBackup for SharePoint.
  - The NetBackup client software is installed on all SharePoint servers
  - In a VMware environment, the NetBackup client software must be installed on the virtual machines that are part of a SharePoint farm.
- The media server and NetBackup for SharePoint clients must be at the same NetBackup version.
- Add the applicable license key(s) to NetBackup the master server.



#### Whiteboards: SharePoint Server Pre-requisites for SharePoint server software



- SharePoint server software must be installed and operational.
- Appropriate version of Microsoft .NET Framework must be installed on the SharePoint servers.
- All front-end server web sites must be uniformly identified in IIS: with either host headers or IP addresses, but not both. An environment that mixes both across multiple front-end servers, is not supported.
- To prevent restore failures, the IIS Default Application Pool identity must be a valid SharePoint user ID.
- The SharePoint user should be an administrator user account.





- ✓ NetBackup Client is installed on all servers in the SharePoint farm, even on SQL backend and is of the same version.
- ✓ The NetBackup Client service is being started by a Domain Account
- The domain account in Step 2 has the following privileges and permissions:
  - "Replace a process level token" and "Debug Programs" (Administrator Tools -Local Security Policy - Local Policies - User Rights Assignment) for all servers in the SharePoint farm, backend SQL included.
  - Local Administrator rights on all servers in the SharePoint farm.
  - Within SharePoint Central Administrator, the Domain Account is specified as a SharePoint Administrator
  - The System Administrator role on the SQL Server for the SharePoint databases.





- ✓ At a minimum, you must have .NET Framework 3.5 installed on all members of the SharePoint Farm.
- ✓ Under Host Properties ->Clients on the Master server, under the Windows Client -> SharePoint section, make sure that the Domain Account from step 2 is specified there, with the syntax as follows: DOMAIN\Username (not just the Username). Do this for every member of the SharePoint farm!
- ✓ In the policy, the client selection is a Front End Web server for the SharePoint portal. The backup selection for your first policy should be: "Microsoft SharePoint Resources:\"
- ✓ Ensure that the Storage Unit is compatible for GRT.



#### **Example Diagram: SharePoint Server Backup Overview-Farm Discovery**



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#### **Example Diagram: SharePoint Server Backup Overview-Job Initiated**







#### **Example Diagram: SharePoint Server** GRT process for SharePoint policies





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- SharePoint using Remote Blob Store for content is not supported with GRT
- SharePoint databases which are encrypted and/or compressed on the SQL Server are not supported with GRT
- SQL 2012 Reporting Services are not supported in NetBackup 7.6.
- Refer to following article to know more about backup and restore limitations:

http://www.symantec.com/docs/HOWT072290



#### Whiteboards: SharePoint Server Configuration notes (1)



- Configure the logon account for the NetBackup Client Service
  - The NetBackup Client Service must log on with an account that has local administrator and SharePoint farm administrator privileges
- Configure the logon account for the NetBackup Legacy Network Service
  - The NetBackup Legacy Network Service must log on with an account that has local administrator and SharePoint farm administrator privileges.
- Configuring local security privileges for the SharePoint Servers
  - On each SharePoint server in the farm you must assign certain local security privileges



#### Whiteboards: SharePoint Server Configuration notes (2)



- SharePoint policy type
  - NFS client must be installed on SharePoint server (For GRT use only).
  - Initial GRT backup must go to a disk storage unit, may later be duplicated to any other STU, including tape
  - Currently supported for BasicDisk, AdvancedDisk, PDDO, MSDP
- VMware policy type (NetBackup 7.5 and above)
  - NetBackup client must be installed on SharePoint VM
  - All SharePoint data must be in VMDK files
  - Initial backup may go to disk or tape
  - Image must be on disk in order to perform a live browse.
- GRT operates on full backups only incremental backups will be ignored
- Image must be on disk storage unit during GRT recovery
- NFS server must be installed on Windows media server used for GRT backups.





- The NetBackup Client Service must log on with an account that has local administrator and SharePoint farm administrator privileges.
- The NetBackup Legacy Network Service must log on with an account that has local administrator and SharePoint farm administrator privileges.
- On each SharePoint server in the farm you must assign certain local security privileges. These privileges are necessary since the NetBackup for SharePoint Agent logs on as the SharePoint user when it accesses data.
- In the SharePoint client host properties you configure settings for the SharePoint clients you selected. Configure the host properties for all servers in the SharePoint farm.



#### Walkthrough: SharePoint Server Configuring SharePoint client host properties







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#### Walkthrough: SharePoint Server Policy options



🔳 Attributes 🔀 Schedules	🖲 Clients 🛛 🖳 Backup Selections 🗎	The policy type must be "MS-SharePoint"	1
Policy type:	MS-SharePoint	😥 qu into effect á	10:46:38 PM 🗧
Destination		Follow NFS	
Data classification:	<no classification="" data=""></no>	Cross mount points	
Policy storage:	🖃 LAB-NBU_BasicDisk 💌	Compression	
Policy volume pool:	NetBackup 🗾	Collect disaster recovery information for:	
Take checkpoints every:	0 minutes	Collect true image restore information	
Limit jobs per policy:	-	Allow multiple data streams	Select this ontion
Job priority:	0 (Higher number is greater priority)	Disable client-side deduplication     Enable granular recovery	to use GRT.
		Keyword phrase:	
Snapshot Client and Replication	Director	Enable indexing for search (Must also be enabled for the schedule and client)	
Perform block level increment	ntal backups	Indexing Server:	
<ul> <li>Use Replication Director</li> <li>Perform snapshot backups</li> </ul>	Options	Enable optimized backup of Windows deduplicated	d volumes
🔲 Retain snapshot for Insta	ant Recovery or SLP management	Microsoft Exchange Attributes	
Hyper-V server:		Exchange DAG or Exchange 2007 replication (LCR or	CCR)
Perform off-host backup Use:	<b>_</b>	Database backup source:	<b>_</b>
Machine:		Preferred server list (Exchange DAC	à only)
		ОК	Cancel Help



#### Walkthrough: SharePoint Server Backup selection



	Browse	)
Address lab-sp.testlab.pvt:Microsoft Sha	arePoint Resources:/	
<ul> <li>□ → Iab-sp.testlab.pvt</li> <li>□ → Microsoft SharePoint Resc</li> <li>□ → InfoPath Forms Servic</li> <li>□ → Microsoft SharePoint I</li> <li>□ → Microsoft SharePoint I</li> <li>□ → Services</li> <li>□ → Services</li> <li>□ → Shared Services</li> <li>□ → WSS_Administration</li> </ul>	Filename         Image: Second Secon	Size Type 0 File 0 File Folder Folder Folder Folder
< 111 >	<	>

Create an **MS-SharePoint** policy for each individual web application or create a policy with the Microsoft SharePoint Resources: \AllWebs directive



#### Whiteboards: SharePoint Server Scheduling notes



- SharePoint index components (WSS Help Search/Index Files and Shared Services/Shared Search Index/Index Files) cannot be backed up using differential incremental schedules; they may only be backed up in full. It might therefore be necessary to create a separate policy with no differential schedules to back up just the index components.
- Policies that are GRT-enabled may only contain full backup schedules. For some environments it may be useful to create separate non-GRT policies that back up SharePoint components using a mixture of full and incremental backups. The resulting backup images cannot be used to recover individual SharePoint objects, but they will be useful for disaster recovery, and the incremental backup schedules will run much faster than a full backup.



#### Walkthrough: SharePoint Accelerator Complete backups in MINUTES with GRT





After an initial FULL backup of the SharePoint farm on VMware servers with the accelerator option specified, subsequent backups can be highly optimized.





#### Walkthrough: SharePoint Server Accelerator policy – Attributes tab



FUILCY LYDE:	27.14	
	VMware	
- Destination	-	
D <u>a</u> ta classification:	No data classification>	Lease mount points
Policy storage:	🥃 stu-abingdon 👻	
		Collect disaster receiver information for
Policy <u>v</u> olume pool:	NetBackup	Rara Matal Restore
		Collect true mana restore information
Take checkpoints every:	0 📩 minutes	Check the "Lise
Limit jobs per policy:		Allow multiple data streams     Allow for the data streams
lob prioritur		
oob phony.		
Media Ow <u>n</u> er:	Any	Use accelerator
		Keyword phrase:
		Enable indexing for search (Must also be enabled for the schedule and client)
		Indexing Server:
Snapshot Client		· · · · · · · · · · · · · · · · · · ·
Snapshot Client Perform block level increme	ntal backups	Enable optimized backup of Windows deduplicated volumes
Snapshot Client Perform block level increme Perform snapshot backups	ntal backups Options	Enable optimized backup of Windows deduplicated volumes
Snapshot Client Perform block level increme Perform snapshot backups Retain snapshot for Inst	ntal backups Options ant Recovery or SLP management	Enable optimized backup of Windows deduplicated volumes     Microsoft Exchange Attributes
Snapshot Client Perform block level increme Perform snapshot backups Retain snapshot for Inst Hyper-V server.	ntal backups Options ant Recovery or SLP management	Enable optimized backup of Windows deduplicated volumes     Microsoft Exchange Attributes     Exchange 2010 DAG or Exchange 2007 replication (LCR or CCR)
Snapshot Client ✓ Perform block level increme Perform snapshot backups ✓ Retain snapshot for Insl ✓ Hyper-V server. ✓ Perform off-host backup	ntal backups Options ant Recovery or SLP management	
Snapshot Client Perform block level increme Perform snapshot backups Retain snapshot for Insl Hyper-V server: Perform off-host backup Use:	ntal backups Options ant Recovery or SLP management	Enable optimized backup of Windows deduplicated volumes     Microsoft Exchange Attributes     Exchange 2010 DAG or Exchange 2007 replication (LCR or CCR)     Database backup source:





hange Policy - tessbl15vm2-accelerator-pddo			×
🛅 Attributes   🔁 Schedules   🖷 Clients   🔂 B	ackup Selections 🔄 VMware		
VMware backup host:       Backup Media Server         Optimizations       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from VM backup         Image: Comparison of the server from VM backup       Image: Comparison of the server from	Primary VM identifier: VM hostname Orphaned snapshot handling: Remove NetBackup	•	Application Protection Enable Exchange Recovery Iruncate logs Enable SQL Server Recovery Iruncate logs Enable SharePoint Recovery
Transport modes NetBackup tries each selected transport in order fr san : Use san to move virtual disk data hotadd : Use virtual disk files from NetBackup nbd : Do not encrypt the virtual disk data for over-the nbdssl : Encrypt the virtual disk data for over-the	erver er-the-network transfers e-network transfers	Move Up Move Down	On the Vmware tab of the policy, select the "Enable SharePoint Recovery" checkbox.



#### Whiteboards: SharePoint Server SharePoint Accelerator Preliminary Results





More than 700GB data with multiple VMDKs





#### Whiteboards: Protecting SharePoint in VMware Requirements and Prerequisites



- Systems
  - VMware ESx 4.0 and 5.0
  - SharePoint Server 2007 and later (x64)
  - Supported Windows platforms(Windows 2008, 2008R2, 2012 (7.5.0.5 onwards) and 2012 R2 (7.6.0.3 onwards))
  - SharePoint using database back-end SQL Server 2005 and above
- Requirements
  - NetBackup 7.5 and above (agent installed in guest OS)
  - Client for NFS is required for browse on restore client
  - Granular proxy has to be configured for Federated Farm configurations.
  - VMware backup must exist on supported disk formats (BasicDisk, Advanced Disk, PureDisk)
  - If SQL Server back-end is a VM then farm recovery is possible from VM image(s)
- Dependencies : VMware Tools , VMware or Symantec VSS Provider



#### Whiteboards: Protecting SharePoint in VMware Policy Configuration



Policy ype needs to	Policy type: Destination	Go into effect at:     10/ 8/2011     6:19:16 PM       Follow NFS       Cross mount points
e 'Mware	Image:	<ul> <li>Compression</li> <li>Encyption</li> <li>Collect disaster recovery information for:         <ul> <li>Bare Metal Restore</li> <li>Collect true image restore information</li> <li>with move detection</li> <li>Allow multiple data streams</li> <li>Disable client-side deduplication</li> <li>Enable granular recovery</li> <li>Use accelerator</li> <li>Keyword phrase:</li> <li>Indexing (Indexing will work only if it is also enabled for 'Schedules')</li> <li>Indexing Server:</li> </ul> </li> </ul>
	Snapshot Client:         Perform block level incremental backups         Perform snapshot backups         Retain snapshots for Instant Recovery         Hyper-V server:         Perform off-host backup         Lise:         Machine:	Microsoft Exchange Attributes Exchange 2010 DAG or Exchange 2007 replication (LCR or CCR) Database backup source: Preferred server list (Exchange 2010 DAG only)



#### Whiteboards: Protecting SharePoint in VMware Policy Configuration



add New Policy - SharePoint_YM	
Attributes Schedules Clients Backup Selections VMware          Virtual machine selection:         Select manually         Select gutomatically through query         NetBackup host to perform automatic virtual machine selection         fable         Query Builder         Join:       Field:         Operator:       Value(s):         Query (Basic Mode)         Query         Very         WMWARE	Use the Query Builder to create a rule(s) that selects the virtual machine(s) you want to back up. For more details on the Query Builder, see the NetBackup for Vmware Administrator's Guide.
Advanced Edit Remove	
Test the query to view results. VMs selected for backup may vary with any change in the virtual environment.       Iest Query         Reuse VM selection query results for       8         Hours       Image: Additional and the selection query results for	
UK Cancel Help	



#### Whiteboards: Protecting SharePoint in VMware Policy Configuration



d New Policy - SharePoint_YM         I Attributes         The Schedules         I Clients         I Attributes	×
VMware backup host:       Backup Media Se         Optimizations       Primary VM identifier:         ✓ Enable file recovery from VM backup       Orphaned snapshot handling:         ✓ Enable block-level incremental backup       Orphaned snapshot handling:         ✓ Exclude deleted blocks       Remove NBU         ✓ Exclude swaping and paging files       Transport Modes         Select the transport mode(s) you want to use by checking the checkbox and use the move up and move down buttons to reorder the selected transport modes	Application Protection  Enable Exchange Recovery  Iruncate logs Enable SQL Server Recovery  Enable SharePoint Recovery
✓ san- Use san to move virtual disk data       Move Up         ✓ hotadd- Use virtual disk files from NetBackup server       Move Up         ✓ nbd- Do not encrypt the virtual disk data for over-the-network transfers       Move Down         ✓ nbdssl- Encrypt the virtual disk data for over-the-network transfers       Move Down	This option enables recovery of the SharePoint databases or individual objects from the virtual machine backups.



#### Whiteboards: Protecting SharePoint in VMware Limitations



- VMware incremental backups of SharePoint Server are not supported with this version of NetBackup. However, the use of Accelerator may increase the speed of full backups.
- Consistency checks of the SharePoint Server are not performed with VMware backups.
- SQL Servers cannot be clustered.
- SharePoint Server databases are not cataloged and backed up if they exist on the following:
  - RDM, Mount point volumes, Virtual hard disks (VHDs),
  - GPT (GUID partition table) disks, Virtual Machine Disk (vmdk) volumes that are marked as independent.





- Administer restores from the NetBackup master server or the SharePoint front-end server.
- When you select for restore some but not all Content databases for a Web application, the Web application is not unprovisioned. After you restore the selected Content databases, those databases are reattached.
- Even if SharePoint components exist on multiple computers, all the backups are cataloged under the same SharePoint server name.
- Once you select that server name, all available backup images for your SharePoint environment are displayed.





- When you redirect a restore to a file system, list items are restored and appear as 0-KB files. Attachments to list items are restored in their entirety.
- When you perform a granular recovery of documents, pictures, or list items the state of these items in the workflow is not preserved





#### In the BAR GUI, Click File > Specify NetBackup Machines and Policy Type

Specify NetBackup Machines and Policy Type	×
Server to use for backups and restores:	
nbu.testlab.pvt	Edit Server List
Source client for restores (or virtual client for backups):	The source client is the
sp.testlab.pvt	end client
Destination client for restores:	
sp.testlab.pvt	
Policy type for restores:	Select the policy type as MS-SharePoint
MS-SharePoint	
OK Cancel	Help



#### Walkthrough: SharePoint Server GRT view of SharePoint server 2010



<mark>s</mark> Ba	Backup, Archive, and Restore - NetBackup - [Restore: Server: nbu.testlab.pvt Source Client: sp.testlab.pvt Destination Client: sp.testlab.pvt]						
j F	ile Edit View Actions Window Help						
<b>_</b>	Select for Backup 🛛 💐 Select for Restore 🔹 🦙 View Status 🗌 🕻	) 💥 🛷					
F	NetBackup History						
- -	2014 2013 Feb Apr						
2	12 23						
2							
3 3							
<b>3</b>							
<b>h</b>							
8	All Folders	Contents of 'Microsoft SharePoint Resources: Microsoft SharePoi	nt Foundation Web Ann	lication	\SharePr	int - 80)Content-DB 1 (DC	
	⊡ 🔽 📖 sp.testlab.pvt	Name	Time Backed Up	A	Size	Time Modified	
	🗄 🕅 🚼 Microsoft SharePoint Resources	AllItems.aspx	2/12/2014 2:06:42 AM		3370	1/5/2013 2:39:00 AM	
	🖃 📿 🕞 Microsoft SharePoint Foundation Web Application	DispForm.aspx	2/12/2014 2:06:42 AM		13743	1/5/2013 2:39:00 AM	
	🖻 🖉 🕘 SharePoint - 80	EditForm.aspx	2/12/2014 2:06:42 AM		13743	1/5/2013 2:39:00 AM	
	- Content-DB 1 (DCSQL\WSS_Content)	Get Started with Microsoft SharePoint Foundation!-0001	2/12/2014 2:06:42 AM		572		
	🖻 🖓 🛃 WSS_Content		2/12/2014 2:06:42 AM		13743	1/5/2013 2:39:00 AM	
						-1-1	
	I AnalyticsReports						
	🕂 🖳 🛄 FormServerTemplates						
	🐨 🗌 🛄 TaxonomyHiddenList						
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	🗄 🗖 🧰 SiteAssets						
	🗄 🗖 🧰 SitePages						
	🕀 🗖 📄 Style Library						
	⊞						
	🕀 🗖 🕞 Shared Services						
	🗄 🖳 🕞 WSS_Administration						
						*	



#### Walkthrough: SharePoint Server Restore view of SharePoint server 2013



<b>3</b> 3	Backup, A	chive, and Restore ·	- NetBackup -	Restore: Server: lab-nbu	.testlab.pvt	Source Clien	nt: lab-sp.tes	tlab.p
File	Edit View Actions Window Help							
🔜 Se	lect for Backup 📋 💐 Select for Restore 🛛 🔻 🕅 View Status	12 💐 🔗						
	Restore: Server: lab-nbu.testlab.pvt	Source Client: lab-	sp.testlab.pvt	Destination Client: lab	-sp.testlab.pv	t		<b>x</b>
冊	NetBackup History : For time range 12/31/1969 4:00:00 PM to 2,	5/2015 12:57:22 AM						
-	2014 2013							<u> </u>
	Feb Dec 5 20							
<del>ا</del> للا								=
	• •							
	2							
	3							
1.2	AU 7 11		<u> </u>	10000 A.1. 1.1. 1.1. 1.1.			A.D. 001 (0) 7	
¥6	All Folders	Contents of 'Microsoft	SharePoint Reso	urces:\WSS_Administration\W	ebApplication\C	ontent-DB 1 (L/	AB-SQL/ShareF	<sup>2</sup> oint
	⊡ Ibb-sp.testlab.pvt	Name			Time Back	ked Up 🛛 🗛	At   Siz	<u>e   T</u>
	Microsoft SharePoint Resources	SharePoint_Adm	inContent_93379	052-d584-4162-8ce8-77b4f673	2934 2/5/2014 1	12:28:22 AM -	-shr 33748810	27
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	📖 🔲 🛃 SharePoint_AdminContent_93379b							



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#### Walkthrough: SharePoint Server Restore options



SharePoint		
Bring restored databases online	e and reconnect previous database links	
Preserve existing IIS Website a	nd application pool	
Restore existing items from Granu	Ilar Recovery Technology backups	
If versioning is enabled on the res	store destination	
C Add as a new version		
Skip if the item exists		
C <u>R</u> estore over existing items		
If versioning is not enabled on the	e restore destination	
Skip if the item exists		
<ul> <li>Skip if the item exists</li> <li>Restore over existing items</li> </ul>		
<ul> <li>Skip if the item exists</li> <li>Restore over existing items</li> <li>Restore only the most recent</li> </ul>	version of the item	
<ul> <li>Skip if the item exists</li> <li>Restore over existing items</li> <li>Restore only the most recent</li> <li>Include security information</li> </ul>	version of the item	
<ul> <li>Skip if the item exists</li> <li>Restore over existing items</li> <li>Restore only the most recent</li> <li>Include security information</li> </ul>	version of the item	
<ul> <li>Skip if the item exists</li> <li>Restore over existing items</li> <li>Restore only the most recent</li> <li>Include security information</li> </ul>	version of the item	
<ul> <li>Skip if the item exists</li> <li>Restore over existing items</li> <li>Restore only the most recent</li> <li>Include security information</li> <li>SharePoint redirection</li> <li>Regirect SharePoint Resourt</li> </ul>	version of the item	
<ul> <li>Skip if the item exists</li> <li>Restore over existing items</li> <li>Restore only the most recent</li> <li>Include security information</li> <li>SharePoint redirection</li> <li>Regirect SharePoint Resour</li> <li>Web application</li> </ul>	version of the item Toes C Alternate S <u>Q</u> L instance	
<ul> <li>Skip if the item exists</li> <li>Restore over existing items</li> <li>Restore only the most recent</li> <li>Include security information</li> <li>SharePoint redirection</li> <li>Redirect SharePoint Resour</li> <li>Web application</li> </ul>	rces C Alternate S <u>Q</u> L instance	
<ul> <li>Skip if the item exists</li> <li>Restore over existing items</li> <li>Restore only the most recent</li> <li>Include security information</li> <li>SharePoint redirection</li> <li>Regirect SharePoint Resour</li> <li>Web application</li> <li>URL</li> </ul>	version of the item rces C Alternate S <u>Q</u> L instance http://	

For more details about these restore options, view the article: http://www.sy mantec.com/do cs/HOWT085656



# Notes on redirecting a restore

How to Use

Advantages



Life Preservers

Whiteboards and Diagrams

- A Web application restore can be redirected within the same farm or to a different farm. For more details, see the following article: http://www.symantec.com/docs/HOWT072319
- You can redirect a SharePoint Web application content database to an alternate SQL instance to take advantage of SharePoint data recovery from an unattached content database. http://www.symantec.com/docs/HOWT085665
- You can redirect individual SharePoint (2007 and 2010) items to a file path. These items include the restore of SharePoint document sets, documents, and pictures.

http://www.symantec.com/docs/HOWT085631



Whiteboards: Share Configuring restores fo	ePoint Server or a farm with multiple servers	<b>Syman</b>
On the master server ,select Servers> Distributed Applic For more information, see	ct NetBackup Management > Host Proper cation Restore Mapping. <u>http://www.symantec.com/docs</u>	ties > Master /HOWT085583
	Master Server Properties: lab-nbu.testlab.pvt	x
<ul> <li>Properties</li> <li>Global Attributes</li> <li>Winversal Settings</li> </ul>	Distributed Application Restore Mapping Authorize SharePoint or Exchange application hosts to initiate restores for distribu	Defaults
Retention Periods Data Classification Fibre Transport Servers Bandwidth General Server OPort Ranges Media Timeouts Client Attributes Distributed Application Restore Map Firewall Logging	Application Host       Component Host         Iab-sp       Iab-sql         Add mapping       X         Application host:	Add Change Remove
The appli The comp image.	cation host is SharePoint Central Administration serve ponent host is the client that needs access to the back	r. up
Symantec NetBackup Blueprints		Symantec.







- Schedule backup jobs when activity on SharePoint servers is low
- For physical SharePoint servers, consider using client-side Deduplication
- For non-GRT backups, use daily differential or incremental backups in addition to periodic full backups
- Upgrade your NetBackup infrastructure to the latest available version
- Use a disk maintenance utility to keep SharePoint disk defragmentation low
- Change the recovery mode for the SQL databases to Simple
  - This only needs to be changed if you're going to be running incremental backups
- Restore all Shared Service Provider components together.(For SharePoint 2007)





- Disable or uninstall QLogic SANSurfer software. It may conflict with the portmapper for Client for NFS.
- In the Local Security Settings, the Users group must have User Rights Assignment "Allow log on locally". If not, the following error occurs:1385 -- Logon failure: the user has not been granted the requested logon type at this computer.
- Backups of the SharePoint web applications that use GRT and that contain a larger number of content databases (100+) may timeout. In this situation, increase the default "Client read timeout" setting to 900 seconds. Refer to the following technote:

http://www.symantec.com/docs/TECH141274

• Technical Support may want *nbfsd logs* from the media server. Use the Verbose setting carefully as the nbfsd log can grow very large.



#### Best Practices: SharePoint Server Top support technotes



• NetBackup 7.6 for Microsoft SharePoint Server Administrator's Guide

http://www.symantec.com/docs/DOC6480

• NetBackup 7.6 Troubleshooting Guide

http://www.symantec.com/docs/DOC6470

• Configuration Checklist for SharePoint Agent for NetBackup

http://www.symantec.com/docs/TECH148598

• About NetBackup for SharePoint debug logging

http://www.symantec.com/docs/HOWT072298

• Disaster recovery procedures

http://www.symantec.com/docs/TECH163248

http://www.symantec.com/docs/HOWT065772



### NetBackup Blueprints SharePoint Server FAQs (1)



- Does SharePoint support GRT to Puredisk?
   The support of SharePoint GRT backups using PureDisk (Either PDDO and PDDE) is supported with NetBackup 7.0.1 with an EEB. See the following tech note for details: <a href="http://www.symantec.com/business/support/index?page=content&id=TECH141274">http://www.symantec.com/business/support/index?page=content&id=TECH141274</a>
- Can I backup to tape and then copy to disk for GRT? GRT must be on disk for backup and recovery It is possible to do a GRT enabled backup to disk, transfer to tape for longer term storage and then transfer back to disk when you need to do a granular recovery but the original backup must be done to disk.
- Can I recover specific versions of a document (if versioning is enabled)?
   Yes
- Is a standby server necessary when restoring items?
- No. A staging farm is not required which is a major advantage over Microsoft DPM.



## NetBackup Blueprints SharePoint Server FAQs (2)



- Licensing
  - If SharePoint is deployed on a single, standalone machine, only 1 license is required.
  - For a multi-server farm:
    - 1 license covers all front-end web servers (including load-balanced web servers)
    - 1 license is needed for each SQL Server
    - 1 license is needed for each Index Server
    - Do not exceed 1 license per machine (e.g., a machine that is both a front-end server and an index server requires only 1 license)
- Sharepoint Agent will backup the MS-SQL Logs of the config/content database but will NOT truncate the logs? Yes. For more information on this, view the following article:

http://www.symantec.com/docs/TECH78039



## Thank You!

Symantec Backup and Recovery Technical Services

