

SharePoint® Backup and  
Recovery  
along with  
Best practices for My Sites

Daniel Glenn, MCTS

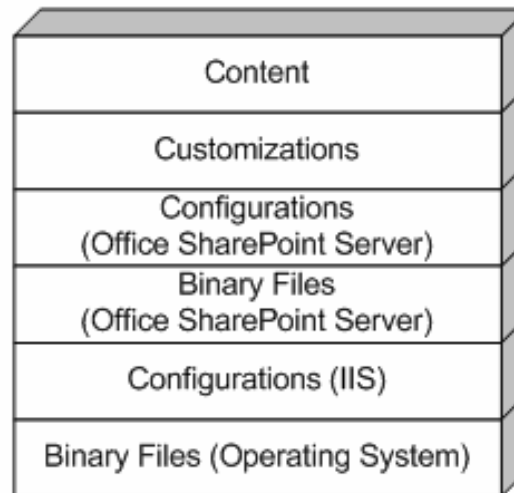
# What is data protection and recovery?

Protecting and recovering data is the general business need that underlies the following specific business needs:

- Keeping and being able to review more than one version of an item or site.
- Recovering accidentally deleted items or sites.
- Archiving data for legal, regulatory, or business reasons.
- Disaster recovery--Restoring systems in the event of unexpected hardware or software failure.

# What to Backup

An Office SharePoint Server system includes the following components farm:



Your backup and recovery strategy should address each of these components on the servers in your system.

# What to Backup

- Binary Files: OS, SharePoint, Antivirus  
Windows, '12 Hive', Packages, GAC
- Configurations: IIS, SharePoint  
Inetpub, Metabase,
- Customizations: Master Pages, Web Part  
Central Admin DB, Content DB
- Content:  
Content DB

# Configuration Settings

- IIS
  - Application pool settings, including service accounts
  - HTTP compression settings
  - Time-out settings
  - Custom Internet Server Application Programming Interface (ISAPI) filters
  - Computer domain membership
  - Internet Protocol security (IPsec) settings
  - Network Load Balancing settings
  - Host header entries
  - Secure Sockets Layer (SSL) certificates
  - Dedicated IP address settings

# Configuration Settings

- SharePoint
  - Application pool settings, including service accounts (all accounts that run as Web applications, including the crawler account and the search account).
  - Alternate access mapping settings.
  - Farm-level search settings.
  - External service connection settings.
  - Workflow management settings.
  - E-mail settings.
  - A/V settings.
  - Usage analysis processing settings.
  - Etc.

# Customizations

- Master pages, page layouts and cascading style sheets. (in content databases)
- Web Parts, site or list definitions, custom columns, new content types, custom fields, custom actions, workflows.
- Third party solutions and their associated binary files and registry keys, such as IFilters.
- Changes to standard XML files.
- Custom site definitions. (webtemp.xml)

# Methods

- Microsoft System Center Data Protection Manager 2007 (DPM)
- Farm backup (Central Administration)
- SQL Server
- STSADM
- Recycle bins
- Windows Backup
- SharePoint Designer backup
- MSIT site delete capture tool

# Choosing a Data Protection Solution

Data protection tool	Types of recoverable objects						
	Farm	Search	Web application	Content database	Site collection	Site	List item/ document
Microsoft System Center Data Protection Manager (DPM)	Yes	Yes	Yes	Yes <sup>1</sup>		Yes	Yes
SharePoint farm backup and recovery	Yes	Yes	Yes	Yes			
VSS Writer	Yes	Yes	Yes	Yes		Yes	
SQL Server				Yes	Yes <sup>2</sup>		
Stsadm site collection backup and recovery					Yes <sup>3</sup>		
SharePoint Recycle Bins							Yes
SharePoint versioning							
Stsadm import and export						Yes	
SharePoint Designer backup						Yes	
MSIT Site Delete Capture tool						Yes	

# Choosing a Data Protection Solution (cont)

Data protection tool	Backup type		
	Full	Differential	Incremental
Microsoft System Center Data Protection Manager (DPM)			Yes
SharePoint farm backup and recovery	Yes	Yes	
VSS Writer	Yes	Yes	
SQL Server	Yes	Yes	
Stsadm site collection backup and recovery	Yes	Yes	
SharePoint Recycle Bins	N/A		
SharePoint versioning	N/A		
Stsadm import and export	Yes		
SharePoint Designer backup	Yes		
MSIT Site Delete Capture tool	Yes		

# Microsoft System Center Data Protection Manager 2007

System Center Data Protection Manager 2007 enables disk-based and tape-based data protection and recovery for servers in and across Active Directory domains. DPM performs replication, synchronization, and recovery point creation to provide reliable protection and rapid recovery of data both by system administrators and by end-users.

- Take farm-level backups of a running farm
- DPM farm-level backups can be used to recover an entire farm, including the configuration database and the Central Administration content database.

# Microsoft System Center Data Protection Manager 2007

- Benefits of this tool:
  - Provides the ability to back up and restore at the farm, database, site, or content item level. When recovering a site or content item, DPM requires the use of a single server recovery farm.
  - Can back up the configuration database and Central Administration content database, but restoring is only supported as part of a farm-level recovery.
  - Can be used to schedule backups.
  - Can back up Search.
  - Can back up directly to tape, or from file to tape.

# Microsoft System Center Data Protection Manager 2007

- Benefits of this tool (cont):
  - Provides the ability to back up and restore directories that contain customizations.
  - Can be used to back up and recover the server system state, including IIS configuration settings.
  - Requires less processing on the server because writes are done at the data block level.
  
- Disadvantages of this tool:
  - If DPM has not already been purchased for your environment, you may require additional funding and equipment.
  - Protecting search requires some additional scripting.

# Central Administration

Backup and Restore method accessed via the Operations tab on the Central Administration site

- Benefits of this tool:
  - Provides the ability to back up and restore at the farm level or Web application level.
  - Provides restorable backups for Search.
  - Easy-to-use recovery tool.

# Central Administration (cont)

- Disadvantages of this tool:
  - Does not provide scheduling functionality.
  - Does not provide automatic deletion of old backup files.
  - Cannot back up directly to tape. Backup location must be a UNC path.
  - Cannot restore the configuration database and the Central Administration content database.
  - Does not back up configuration changes or custom solution files in Inetpub or Office 12 hive
  - Does not back up any customizations made to the Web.config file
  - Does not back up alternate access mappings (AAM).
  - Does not back up Internet Information Services (IIS) settings.

# SQL Server

- Benefits of this tool:
  - Existing SQL Server disaster recovery strategies can be re-used.
  - Full and differential backups can be configured with added verification.
  - Provides a full-fidelity data backup.
  - Can be faster than Office SharePoint Server backups.
  - Can use to help restore specific content items using a recovery farm.

# SQL Server

- Disadvantages of this tool:
  - Does not include front-end Web server custom solutions.
  - Restoring the configuration database and Central Administration content database is not supported.
  - Does not back up Internet Information Services (IIS) settings set outside of Office SharePoint Server
  - Should not be used to back up the Search database, because it cannot be synchronized with the Search index.
  - You must manually reattach your databases to the Web applications after a recovery.

# STSADM

**-o backup, -restore**

•Benefits of this tool:

- Can be used with Windows Task Scheduler to schedule backups.
- Provides restorable backups for Search.
- Provides the ability to back up and restore at the farm level, Web application level, or site-collection level. Stsadm full backups can be used to restore an entire farm or to restore parts of a farm: Web application, Shared Services Provider, or content database.

# STSADM

## **-o backup, -restore**

### •Disadvantages of this tool:

- Does not provide automatic deletion of old backup files.
- Cannot back up directly to tape. Backup location must be a UNC path.
- Cannot restore the configuration database and the Central Administration content database.
- Does not back up any custom solution files in the Inetpub or Office 12 hive
- Does not back up any customizations made to the Web.config file
- Does not back up alternate access mappings (AAM).
- Does not back up Internet Information Services (IIS) settings
- Site collection backups affect performance, and can cause access errors. They are not designed to be used when the server is under active load.

# STSADM

**-o export, -o import**

- You can use the Stsadm export and import operations to archive and re-insert a site or subsite.

- Although using the export operation saves data for you, it does not produce a full-fidelity backup. The export operation can include content and security settings only. It does not include customizations and settings such as workflow, alerts, features, solutions, or Recycle Bin state.

# STSADM Backup Script


A simple way to use STSADM for keeping regular backups is to utilize a script and Windows Task Scheduler.

## **Scenario:**

Daily backups that are only kept for a week on HDD. The server's contents are backed up onto tape each night.

- Create a script for each day that overwrites the last backup for that day (S,M,T,W,R,F,S)

Why reinvent the wheel?

Address  <http://www.informit.com/store/product.aspx?isbn=0672329476>

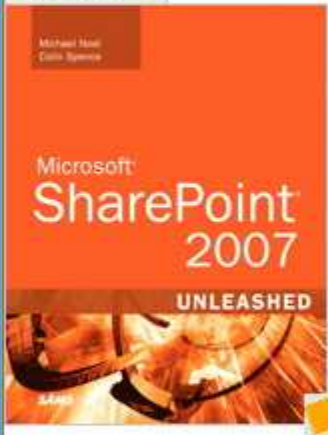
# informIT

[Topics](#) | [Store](#) | [Authors](#) | [Safari](#)

[Home](#) > [Store](#) > [Operating Systems, Server](#) > [Microsoft Windows Server](#) >

## Microsoft SharePoint 2007 Unleashed

 Search 



By Michael Noel, Colin Spence

Published Apr 12, 2007 by Sams.

[More Info](#)

List Price: \$59.99

Your Price: **\$53.99** Ships for free! Save more by [becoming a member](#).

[Add To My Wish List](#)

Already own this? [Receive a coupon or access to bonus material when you register it.](#)

[Description](#)

[Downloads](#)

[Sample Content](#)

### Downloads

 You must be logged in to view this information.

### Downloads

[Download the SharePoint backup script](#)

Freely available from  
Sams Publishing on the  
[Microsoft SharePoint 2007  
Unleashed web page.](#)

<http://www.informit.com/store/product.aspx?isbn=0672329476>

# Recycle Bin

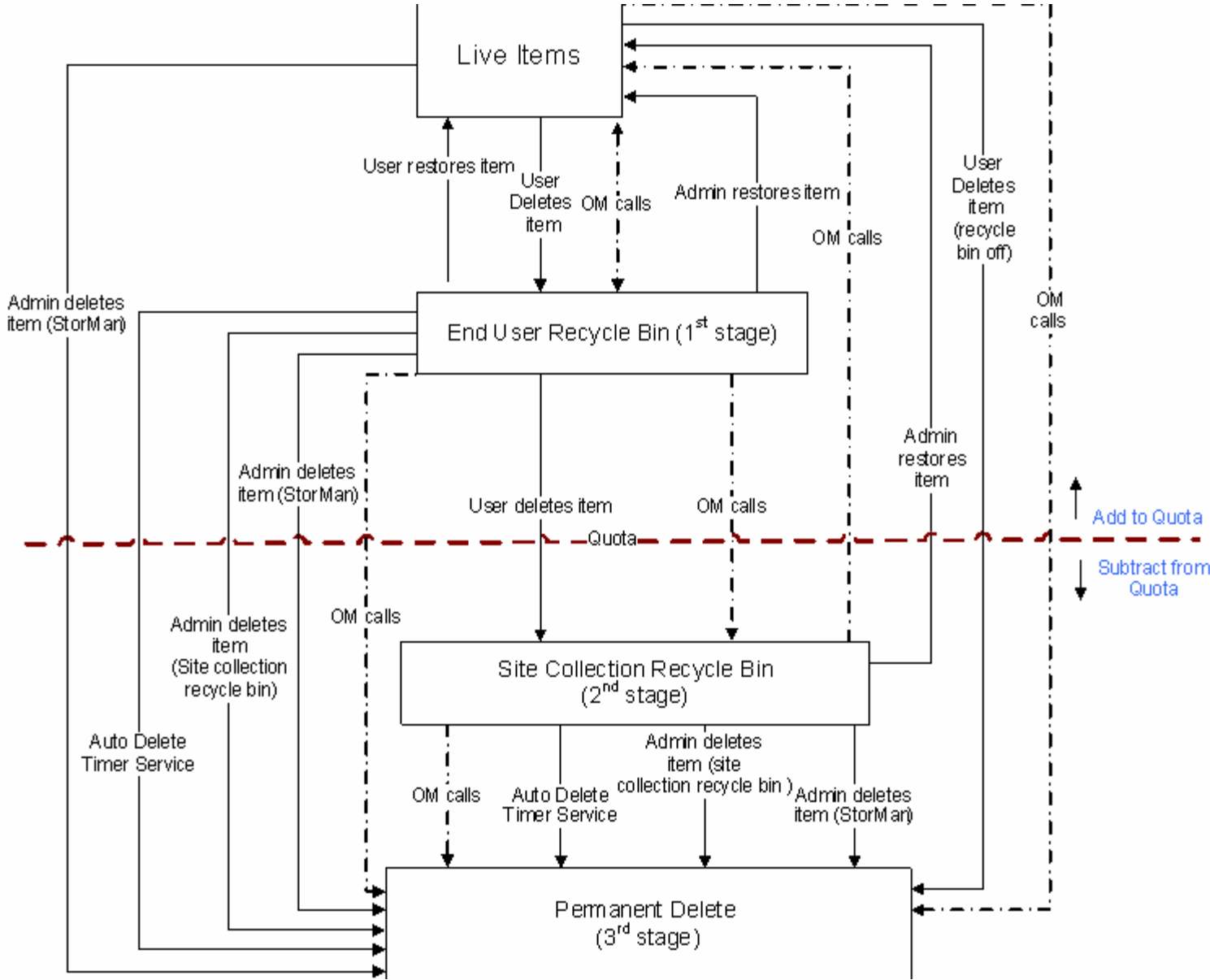
## – **Facts about the first-stage Recycle Bin:**

- Items located in the first-stage Recycle Bin count toward the site quota.
- End users must have Contribute, Design, or Full Control permissions on a site to perform delete and recovery operations.
- By default, items are sorted in descending order by date deleted.

## – **Facts about the second-stage Recycle Bin:**

- You can specify the amount of space to reserve for second-stage deleted items as a percentage to add to the live site quota.
- Items stored in the second-stage Recycle Bin do not count toward the site quota. However, the size that is specified for the second-stage Recycle Bin increases the total size of the site and the content database that hosts it. If no site quota has been set, there is no limit on the size of the second-stage Recycle Bin.
- You can turn off the second-stage Recycle Bin.
- Only site collection administrators can restore from this stage.
- By default, items are sorted in descending order by date deleted.

# Recycle Bin



# Windows Backup

- %COMMONPROGRAMFILES%\Microsoft Shared\Web server extensions\12
  - ‘12’ Hive’
- Inetpub
  - Default location of SharePoint IIS virtual directories
- Solution Packages and other add-ons
  - Suggest put all packages and add-ons install files in one folder
- Global Assembly Cache (GAC):
  - cd c:\windows\assembly
  - XCOPY GAC “%BackupDirectory%\” /E
  - XCOPY GAC\_MSIL “%BackupDirectory%\GAC\_MSIL\” /E

# SharePoint Designer Backup

- Backup file includes:
  - List or library content
  - Security settings
  - User information
  - Navigation
  - Customizations
  - Personalizations (such as views, site templates, and content types)

# SharePoint Designer Backup

- Backup file does not include:
  - Workflows
  - Alerts
  - Properties stored at the site-collection level

# Microsoft IT Site Delete Capture

The Microsoft IT Site Delete Capture 1.0 tool is provided via Codeplex as part of the [SharePoint Governance and Manageability workspace](http://www.codeplex.com/governance). <http://www.codeplex.com/governance>

- Simply captures sites that are deleted by end users and backs them up to disk using the event model. ...this is basically a site recycle bin

# Links

- [Microsoft White paper: Data protection and recovery for Office SharePoint Server](http://technet.microsoft.com/en-us/library/cc262129(TechNet.10).aspx) (9/2008)
  - [http://technet.microsoft.com/en-us/library/cc262129\(TechNet.10\).aspx](http://technet.microsoft.com/en-us/library/cc262129(TechNet.10).aspx)
- [Model: Office SharePoint® Server 2007 data protection and recovery](http://go.microsoft.com/fwlink/?LinkId=124087&clcid=0x409) (.VSD)
  - <http://go.microsoft.com/fwlink/?LinkId=124087&clcid=0x409>
- [SharePoint Governance and Manageability](http://www.codeplex.com/governance) (Codeplex) <http://www.codeplex.com/governance>
- [Best Practices for Operational Excellence](http://technet.microsoft.com/en-us/library/cc850692.aspx) (TechNet) <http://technet.microsoft.com/en-us/library/cc850692.aspx>
- [Backup Demo Video](http://technet.microsoft.com/en-us/library/cc811605.aspx) (TechNet) <http://technet.microsoft.com/en-us/library/cc811605.aspx>
- [Restore Demo Video](http://technet.microsoft.com/en-us/library/cc424947.aspx) (TechNet) <http://technet.microsoft.com/en-us/library/cc424947.aspx>

# Books on My Desk

- Real World SharePoint® 2007:  
Indispensable Experiences from 16 MOSS  
and WSS MVPs (Wrox / Wiley Publishing)  
[http://www.amazon.com/Real-World-SharePoint-2007-Indispensable/dp/0470168358/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1212606622&sr=8-1](http://www.amazon.com/Real-World-SharePoint-2007-Indispensable/dp/0470168358/ref=sr_1_1?ie=UTF8&s=books&qid=1212606622&sr=8-1)
- Microsoft® SharePoint® 2007 Unleashed  
(SAMS) [http://www.amazon.com/Microsoft-SharePoint-2007-Unleashed-Michael/dp/0672329476/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1212606696&sr=1-1](http://www.amazon.com/Microsoft-SharePoint-2007-Unleashed-Michael/dp/0672329476/ref=sr_1_1?ie=UTF8&s=books&qid=1212606696&sr=1-1)
- Microsoft® SharePoint® Server 2007 Bible  
(Wiley Publishing) [http://www.amazon.com/Microsoft-SharePoint-Server-2007-Bible/dp/047000861X/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1212606767&sr=1-1](http://www.amazon.com/Microsoft-SharePoint-Server-2007-Bible/dp/047000861X/ref=sr_1_1?ie=UTF8&s=books&qid=1212606767&sr=1-1)

# Questions?

## Online Forums

- Where I 'hang out':

<http://www.SharePointU.com>



**SharePoint  
University**  
Clean slate. Nothing but SharePoint.

- Microsoft:

- [MSDN Forums](#)

<http://forums.microsoft.com/MSDN/default.aspx?ForumGroupID=328&SiteID=1>

- [Newsgroups](#) [http://www.microsoft.com/communities/newsgroups/en-](http://www.microsoft.com/communities/newsgroups/en-us/default.aspx?dg=microsoft.public.sharepoint.general&cat=en_US_2BE0F7C1-F80B-C480-EA27-790E679D7E1B&lang=en&cr=US)

[us/default.aspx?dg=microsoft.public.sharepoint.general&cat=en\\_US\\_2BE0F7C1-F80B-C480-EA27-790E679D7E1B&lang=en&cr=US](http://www.microsoft.com/communities/newsgroups/en-us/default.aspx?dg=microsoft.public.sharepoint.general&cat=en_US_2BE0F7C1-F80B-C480-EA27-790E679D7E1B&lang=en&cr=US)

- Microsoft.public.sharepoint.portalserver
- Microsoft.public.sharepoint.windowsservices

# Best practices for My Sites

- **Consider My Sites to be mini “team collaboration sites”**
- **Plan for My Site content databases**
- **Plan for My Site storage quotas**
- **Plan for performance**
- **Customization policies for My Sites**
- **Plan for manageability**
- **Configure content sources to optimize indexing scheduling**

# Best practices for My Sites

- **Do not pre-provision My Sites**
- **Plan for an effective rollout of My Sites capability and encourage on-going adoption**
- **Educate users about when to use their My Sites versus when to use team collaboration sites**
- **Use Personalization Sites to provide role-specific content in the context of a user's My Site**
- **Use domain-and-user name site naming format**

Check Out The Website

<http://NashvilleSUG.com>