

BACK UP AND RESTORE: SHAREPOINT SERVER 2013

TOOLS

SharePoint Server backup and restore tools

Determine backup and restore tools

The tools table shows the built-in backup and restore tools for SharePoint Server and the SQL Server tools that you can use for this process. Each tool backs up and restores different objects, has different size restrictions, and performs different types of backups.

The tool that you choose for your backup and restore process depends on what you need to protect in your SharePoint environment. Answer the following questions and then use the information provided in the table as a guide to help you choose the correct backup and restore tools to meet your business requirements:

- How much time does the tool take to backup and restore your objects?
- How complete is the recovery?
- What backup type does this tool support, (full, differential, or incremental)?
- How difficult is this tool to manage?

Note that you can also use Windows Server Volume Shadow Copy Service (VSS) writer and System Center Data Protection Manager 2010 or 2012 to backup additional objects in a SharePoint environment.

Tool	Type of restorable objects	Maximum backup size supported	Supported backup type
SharePoint Farm Backup and Restore	<ul style="list-style-type: none"> • Farm • Search • Service • Web application • Content database • Site collection • Site • List item/document • Configurations • Customizations (if packaged as user solutions) 	< 200 GB	Full Incremental
SQL Server	<ul style="list-style-type: none"> • Content database • Site (only if a single site collection is stored in a database) • List item/document 	Content databases > 200 GB (may require additional management)	Full Differential
Windows PowerShell Site Collection Backup and Restore	<ul style="list-style-type: none"> • Site collection (not recommended for site collections larger than 80 - 100 GB) 	100 GB	Full Differential
Windows PowerShell Import and Export	<ul style="list-style-type: none"> • Site (List or Doc Library) • List items • Customizations (if packaged as user solutions) 	100 GB	Full

SCENARIOS

SharePoint Server backup and restore scenarios

The scenarios table can help you determine the backup and restore plans for your SharePoint environment. A good backup and restore strategy is to first develop recovery objectives. Decide what you want to protect and restore. Be sure to decide what you can and cannot afford to lose in your SharePoint environment. Finally write backup plans and remember that they are dynamic and should change as your business requirements change.

SharePoint backup plans address data loss that might be caused by natural disasters, power outages, employee errors, hardware failures, and even lack of system upgrades. Use the common backup and restore scenarios that are shown in the table to help you define your backup and restore plans.

SharePoint Server backup systems

SharePoint Server provides two backup systems, the farm backup and granular backup. **Farm backups** utilize SQL Server to backup content and service application databases. Additionally, the farm backup writes configuration content to files and also backs up the Search service index files and then synchronizes them with the Search service database backups. **Granular backups** utilize Transact-SQL queries and export calls. Granular backups and exports are read-intensive and process-intensive operations. A granular backup can include site collection backup, and exports for sites, lists, and document libraries. The granular backup system can also use SQL Server Enterprise snapshots to make sure data is constant during the backup or export process. Both backup systems are represented in the scenarios table.

SharePoint Server restore processes

SharePoint Server can restore a farm from a farm backup that was created by using SharePoint tools. Additionally, you can restore a farm or portions of it by restoring from a component backup that used a farm backup system. You can also use the unattached database feature for a content database by using either a backup or an export to connect to it restore or import the data.

Scope	Backup	Restore
Complete farm	Regular backup schedules needed to help protect data and address disaster recovery, farm failure, or test backup process	Disaster recovery — recreate a complete SharePoint farm on new hardware, or in a different location, or test your backup and recovery validity
Site collection, site, or list	Periodic backup schedules needed for attached or unattached read-only sites, site collections, or lists	Restore content — use unattached databases to restore outdated site collections, sites, or databases
Content database	Regular backup schedules needed as content databases can grow to be very large and helps reduce data losses that can occur from hardware failure or power outages	Restore content database — to a new location on a farm
Service applications	Regular backup schedules needed to make sure all configurations and data that are related to service application are available for recovery	Restore service applications — situations sometime arise that a specific service application must be restored instead of the complete farm
Complete farm database	Regular backup schedules for configuration, Central Administration content, content, and service application databases provide an easier process when employing new database servers	Move complete farm — new database server (hardware/software) brought online to replace an old one

TASKS

Note: These scenarios are defined in the table at the top of this model/poster.

SharePoint Server backup and restore flow chart

The five commonly used SharePoint Server backup and restore scenarios are shown in the following flow chart. Each scenario resides in a separate swim lane that shows the backup and restore flow (red line) and required steps (white blocks) in the backup tasks, restore tasks, and post-restore tasks. Each step is essential for the task and contains descriptions. Most of the SharePoint Server backup and restore scenarios require multiple tools so the swim lane is divided between the upper line that represents SharePoint Server and Windows PowerShell, and the bottom line that represents SQL Server.

