



HOW TO PERFORM FILE SYSTEM BACKUP AND RESTORE WITH NETWRIX FILE SERVER CHANGE REPORTER

TECHNICAL ARTICLE

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Table of Contents

1. INTRODUCTION	4
1.1. Overview	4
1.2. How This Article is Organized	4
2. PRE-REQUISITES.....	5
2.1. Supported Operating Systems	5
2.2. Software Requirements	5
3. CONFIGURING THE VSS.....	6
4. CONFIGURING NETWRIX FILE SERVER CHANGE REPORTER.....	8
5. RESTORING YOUR FILE SYSTEM.....	9
6. EXAMPLE USAGE SCENARIOS.....	10
6.1. Restoring Files	10
6.2. Restoring Security and Audit Permissions.....	10
A APPENDIX: RELATED DOCUMENTATION.....	11

1. INTRODUCTION

1.1. Overview

Sometimes changes made to your file system are unsatisfactory or are not authorized, in which case you may want to roll back to a previously saved back-up point.

This article provides instructions on how to perform a backup and restore procedure using NetWrix File Server Change Reporter.

1.2. How This Article is Organized

This section explains how this article is organized and provides a brief overview of each chapter.

- Chapter [1 Introduction](#): the current chapter. It explains the purpose of this document and outlines its structure.
- Chapter [2 Pre-Requisites](#): lists all software pre-requisites for the file system backup and restore procedure.
- Chapter [3 Configuring the VSS](#): explains how to set the maximum storage size for your shadow copies storage.
- Chapter [4 Configuring NetWrix File Server Change Reporter](#): provides instructions on how to configure NetWrix File Server Change Reporter to create shadow copies for the volumes where your monitored shares are located.
- Chapter [5 Restoring Your File System](#): explains how to restore your file system to a previously saved backup point.
- Chapter [6 Example Usage Scenarios](#): provides step-by-step procedures for some common usage scenarios.

2. PRE-REQUISITES

2.1. Supported Operating Systems

File system backup and restore with NetWrix File Server Change Reporter is supported on Microsoft Windows XP and later.

2.2. Software Requirements

To perform your file system backup and restore, make sure that the following software has been installed:

- [NetWrix File Server Change Reporter](#) (for product requirements and installation instructions, refer to [NetWrix File Server Change Reporter Administrator's Guide](#)).
- Volume Shadow Copy Service (VSS). This is a built-in service in Windows XP and later. For detailed information on the Volume Shadow Copy Service, refer to [Microsoft documentation](#).

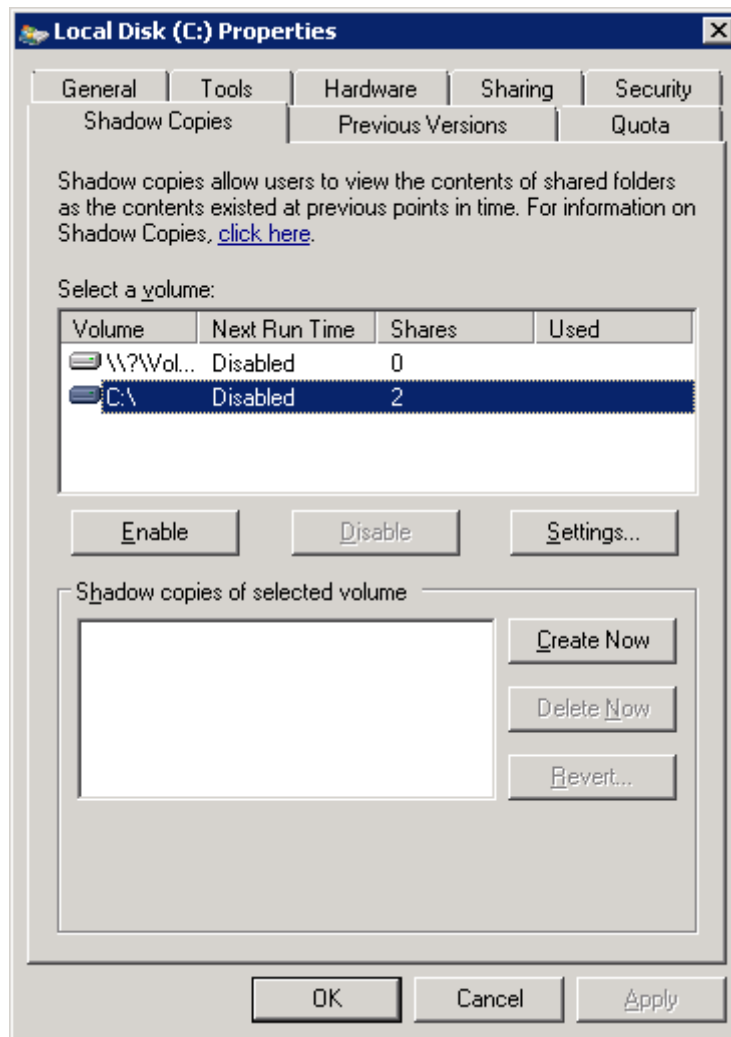
3. CONFIGURING THE VSS

You can configure the maximum size of your shadow copies storage. To do this, perform the following procedure:

Procedure 1. To configure the storage size

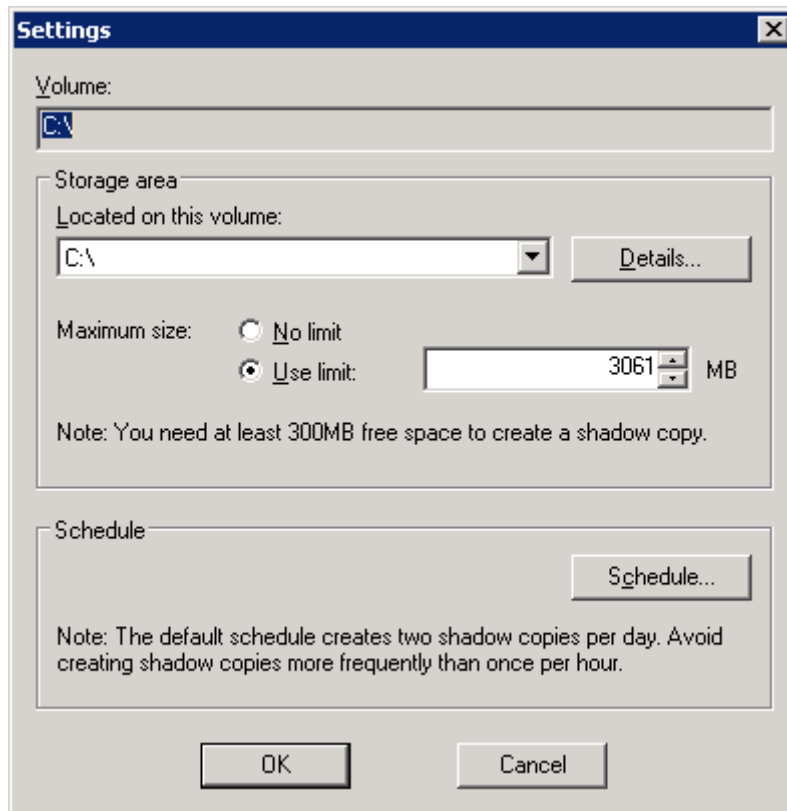
1. Navigate to the volume that you want to create shadow copies for.
2. Right-click on it, select **Properties** from the popup menu and open the **Shadow Copies** tab:

Figure 1: Disk Properties: Shadow Copies



3. Click **Settings**. The following dialog will be displayed:

Figure 2: Settings



4. Select the **Use limit** option and specify your storage maximum size.

Note: By default, the maximum size is set to 10 percent of the source volume being copied. For recommendations on how to select a correct size limit for your shadow copies storage, refer to section 'Amount of volume space to allocate to shadow copies' of the following article provided by Microsoft: [Designing a Shadow Copy Strategy](#).

4. CONFIGURING NETWRIX FILE SERVER CHANGE REPORTER

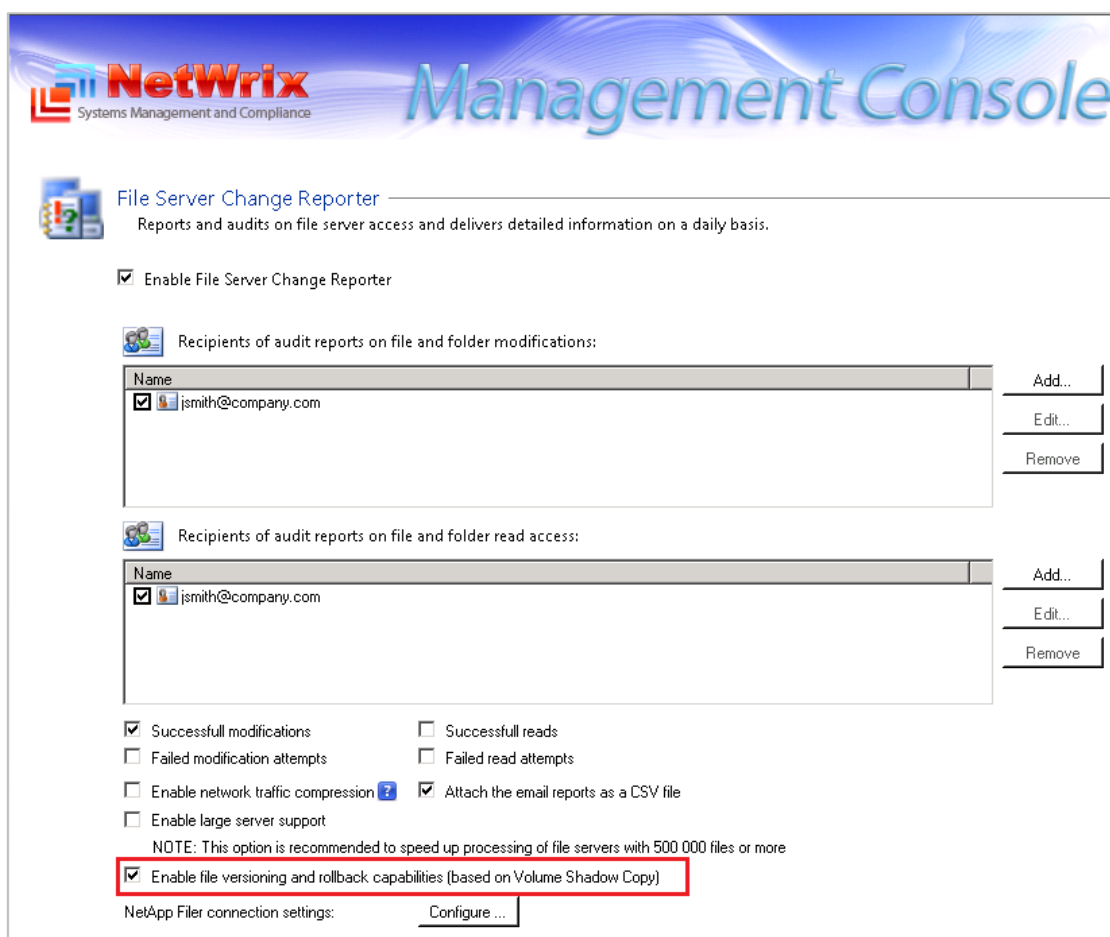
To configure NetWrix File Server Change Reporter for backup, perform the following procedure:

Note: It is assumed that the shares that you want to create shadow copies for have been added into the items list in your Managed Objects. For instructions on how to create and configure Managed Objects, refer to [NetWrix File Server Change Reporter Administrator's Guide](#).

Procedure 2. To configure NetWrix File Server Change Reporter for backup

1. Open NetWrix File Server Change Reporter (Start → All Programs → NetWrix → File Server Change Reporter → File Server Change Reporter (Enterprise Edition)).
2. In the left pane, expand the Managed Objects → <your_managed_object_name> → File Server Change Reporter node.
3. Select the Enable file versioning and rollback capabilities option:

Figure 3: File Server Change Reporter Page



Every time NetWrix File Server Change Reporter runs a data collection task (by default, every 24 hours, at 3 AM), it will create a shadow copy of your file system that you can roll back to at any time.

5. RESTORING YOUR FILE SYSTEM

If unwanted changes have been made to your file system, perform the following procedure to roll back to a point created by NetWrix File Server Change Reporter:

Procedure 3. To restore your file system

1. Navigate to the network share that changes have been made to and that you want to restore.
2. Right-click on it, select **Properties** from the popup menu and open the **Previous Versions** tab. A list of all shadow copies with the date and time when they were created will be displayed.
3. From the list of shadow copies, select the one you want to roll back to, and click **Open**. A snapshot of your file system for the selected date will be displayed.

Note: You can roll back to the selected backup point using a variety of tools. The examples in this guide use a built-in Windows utility called Robocopy.

6. EXAMPLE USAGE SCENARIOS

This chapter explains how to restore your removed files or modified security and audit permissions in your monitored file shares with the help of the Robocopy utility.

Note: The examples in this chapter use a limited set of Robocopy commands. For a full list of commands and restoration options, you can type `/?` in the Robocopy command line, or refer to [Robocopy documentation](#) provided by Microsoft.

6.1. Restoring Files

The example procedure below explains how to restore your file system with the help of the built-in Robocopy utility if files have been removed from your monitored share. To do this, perform the following steps:

Procedure 4. To restore files

1. Select a backup point you want to revert to as explained in [Procedure 3 To restore your file system](#).
2. Launch the Robocopy utility. To do this, go to **Start** → **Run** and type `robocopy`. The program's command prompt will start.
3. In the command line enter the path to the source network share (i.e the shadow copy created by the system), the path to the destination (i.e. your network share that you want to restore) and the 'DAT' command in the following format: "`<source_path>`" "`<destination_path>`" `/copy:dat`

Example:

```
"\\localhost\C$\@GMT-2011.09.27-12.24.25\test" "C:\test" /copy:dat
```

Your file share will be reverted to the selected backup point.

6.2. Restoring Security and Audit Permissions

The example procedure below explains how to restore your file system with the help of the built-in Robocopy utility if file security or audit permissions have been changed. To do this, perform the following procedure:

Procedure 5. To restore file permissions

1. Select a backup point you want to revert to as explained in [Procedure 3 To restore your file system](#).
2. Launch the Robocopy utility. To do this, go to **Start** → **Run** and type `robocopy`. The program's command prompt will start.
3. In the command line enter the path to the source network share (i.e the shadow copy created by the system), the path to the destination (i.e. your network share that you want to restore) and the 'SOU' and 'SECFIX' commands in the following format: "`<source_path>`" "`<destination_path>`" `/copy:sou /secfix`

Example:

```
"\\localhost\C$\@GMT-2011.09.27-12.24.25\test" "C:\test" /copy:sou /SECFIX
```

Your file share will be reverted to the selected backup point.

A APPENDIX: RELATED DOCUMENTATION

The table below lists all documents available to support NetWrix File Server Change Reporter:

Table 1: Related Documentation

Document Name	Overview
How to Perform File System Backup and Restore with NetWrix File Server Change Reporter	The current technical article provides instructions on how to roll back to a previously saved back-up point using NetWrix File Server Change Reporter.
NetWrix File Server Change Reporter Quick Start Guide for the Enterprise Edition	The guide provides instructions on how to start working with the program quickly and easily.
NetWrix File Server Change Reporter Administrator's Guide	The guide provides detailed instructions on how to configure and use NetWrix File Server Change Reporter
NetWrix File Server Change Reporter Troubleshooting Guide	The guide provides step-by-step instructions on troubleshooting of incorrect reporting.
Installing Microsoft SQL Server and Configuring the Reporting Services	The technical article provides instructions on how to install Microsoft SQL Server 2005/2008/2008 R2 Express and configure the Reporting Services.
How to Configure NetWrix File Server Change Reporter to Monitor NetApp Filer CIFS Shares	The technical article provides detailed instructions on how to configure NetWrix File Server Change Reporter and the NetApp filer for auditing.
How to Configure NetWrix File Server Change Reporter to Monitor EMC VNX/VNXe/Celerra CIFS Shares	The technical article provides detailed instructions on how to configure NetWrix File Server Change Reporter and the EMC VNX/VNXe/Celerra CIFS shares for auditing.
Subscription to SQL Server Reports	The article provides step-by-step instructions on how to configure subscription to SSRS reports.
NetWrix File Server Change Reporter Quick Start Guide (Freeware Edition)	The document is intended for evaluation of the product Freeware Edition. It provides instructions on how to start working with the program quickly and easily.
How to Configure Granular Audit Policy on a File Server Monitored by NetWrix File Server Change Reporter	The technical article provides instructions on how to configure granular Audit policy on a file server monitored by NetWrix File Server Change Reporter.
Installing SQL Express on Windows Vista Technical Article	The technical article provides detailed instructions on how to install SQL 2005 with Advanced Services on Windows Vista.
NetWrix File Server Change Reporter Release Notes	The document provides a list of known issues that customers may experience while using the release version 3.3.