HP Data Protector A.06.11

Granular Recovery Extension for Microsoft Office SharePoint Server 2007

User guide

Part number: N/A
First edition: June 2010

Legal and notice information

© Copyright 2010 Hewlett-Packard Development Company, L.P.

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

Contents

Publication history 9
About the guide 11
Intended audience 11
Document conventions and symbols 11
General Information 12
HP technical support 12
Subscription service 13
HP websites 13
Documentation feedback 13

1 Introduction 15
Backup 15
Recovery 15

2 Installation 17
Support matrix 17
Prerequisites 18
Procedure 19

3 Configuration 23
Verifying the configuration of the Recovery Web Application 23
Procedure 23
Configuring HP Data Protector user rights 23
Procedure 23
Configuring Data Protector backup specifications 25
Verifying the configuration of Internet Information Services application pools 26

4 Backup 29

5 Recovery 31

Opening the HP Data Protector Granular Recovery Extension GUI 31
Procedure 31
Importing content databases from backup 34
Prerequisites 34
Procedure 34
Importing content databases from the filesystem 37
Prerequisites 37
Considerations 37
Procedure 37
Executing Perform content recovery tasks 40
Prerequisites 40
Procedure 41
Recovering site items 41
Prerequisites 41
Considerations 42
Procedure 43
Removing content databases from the cache 50
Procedure 50
Monitoring granular recovery import jobs 50
Procedure 50
Changing HP Data Protector Granular Recovery Extension settings 51
Procedure 52

6 Command line reference 53
Examples 54
Restoring a content database from Data Protector backup 54
Monitoring jobs progress 54
Verifying target location disk space size 55
Listing content databases 55
Removing restore jobs 55
Recovering a site item to the original site 55
Recovering a site item to another location 56
Removing content databases from the cache 56
Removing content databases from the disk 56
Exporting items from a content database 56
Listing exported items 57
Importing items from a content database 57
Displaying Microsoft Office SharePoint farm information 57
Displaying content database information 57
Displaying a list of sites 57
Browsing sites 58

7 Troubleshooting 59
An import job fails 59
Problem 59
Action 59
A recovery session fails 60
Problem 60
Action 60
Granular Recovery Cache Management link is not accessible from My Sites 60
Problem 60
Action 61
Granular Recovery Cache Management link is not accessible from My Sites 62
Problem 62
Action 62
HP Data Protector Granular Recovery Extension cannot be removed 63
Problem 63
Action 64
Slow response of the command line interface 64
Problem 64
Action 64
Slow response of the graphical user interface 65
Problem 65
Action 65

8 Removal 67
Procedure 67

Index 71

Figures

1 Installing a medium farm that uses the HP Data Protector Microsoft Office SharePoint Server script solution (an example) 19
2 System Check page 20
3 Farm Deployment Targets page 21
4 Data Protector user rights 24
5 Selecting content databases 26
6 HP Data Protector Granular Recovery Extension links 32
7 Recovery Cache Management (empty) 32
8 Recovery Cache Management with a content database mounted 32
9 Site Collection Selection page 34
10 Backup Version Selection page 35
11 Content Database Recovery page 35
12 Monitoring job status 36
13 Recovery Cache Management 36
14 Specifying content database files 38
15 Importing a content database from filesystem 38
16 Monitoring job status 39
17 Recovery Cache Management 39
18 Perform content recovery task 40
19 Perform content recovery link 41
20 Selecting a content database and multiple sites for recovery 43
21 Selecting site items 44
22 Advanced search 45
23 Recovering site items 46

24 Recovering site items to another location 48
25 Recovering site items to another farm 48
26 Recovering site items to a network share 49
27 Removing a content database 50
28 Monitoring an import job progress 51
29 Changing Granular Recovery settings 52
30 Retrieving the command line help 53
31 Restore fails with not enough user rights 59
32 Manage Farm Features deactivating HP Data Protector Granular Recovery Extension 62
33 Granting Full Read permission 63
34 System Check page 68
35 Repair or Remove page 69
36 Uninstalling page 69
37 Uninstall Successfully Completed page 70

Tables

1 Edition history 9
2 Document conventions 11
3 Granular Recovery cache management 33

Publication history

Guide updates may be issued between editions to correct errors or document product changes. To ensure that you receive updated or new editions, subscribe to the appropriate product support service. See your HP sales representative for details.

Table 1 Edition history

Part number	Guide edition	Product
N/A	June 2010	HP Data Protector A.06.11 Granular Recovery Extension 1.00

About the guide

Intended audience

This guide is intended for administrators responsible for planning, setting up, and maintaining backups and recovery of Microsoft Office SharePoint Server 2007. It assumes you are familiar with:

- Basic Data Protector functionality
- Microsoft Office SharePoint Server 2007 administration

Document conventions and symbols

Table 2 Document conventions

Convention	Element
Blue text: Table 2 on page 11	Cross-reference links and e-mail addresses
Blue, underlined text: http://www.hp.com	website addresses
Bold text	• Keys that are pressed • Text typed into a GUI element, such as a box • GUI elements that are clicked or selected, such as menu and list items, buttons, tabs, and check boxes
Italic text	Text emphasis
`Monospace` text	• File and directory names • System output • Code • Commands, their arguments, and argument values

Convention	Element
Monospace, italic text	• Code variables • Command variables
Monospace, bold text	Emphasized monospace text

NOTE:

Provides additional information.

TIP:

Provides helpful hints and shortcuts.

General Information

General information about HP Data Protector Granular Recovery Extension for Microsoft Office SharePoint Server 2007 can be found at http://www.hp.com/go/dataprotector

HP technical support

For worldwide technical support information, see the HP support website:

http://www.hp.com/support

Before contacting HP, collect the following information:

- Product model names and numbers
- Technical support registration number (if applicable)
- Product serial numbers
- Error messages
- Operating system type and revision level
- Detailed questions

Subscription service

HP recommends that you register your product at the Subscriber's Choice for Business website:

http://www.hp.com/go/e-updates

After registering, you will receive e-mail notification of product enhancements, new driver versions, firmware updates, and other product resources.

HP websites

For additional information, see the following HP websites:

- http://www.hp.com
- http://www.hp.com/go/storage
- http://www.hp.com/support/manuals
- http://www.hp.com/support/downloads

Documentation feedback

HP welcomes your feedback.

To make comments and suggestions about product documentation, please send a message to DP.DocFeedback@hp.com. All submissions become the property of HP.

1 Introduction

This document describes the HP Data Protector Granular Recovery Extension for Microsoft Office SharePoint Server 2007 (**HP Data Protector Granular Recovery Extension**).

Backup

It is assumed that Microsoft Office SharePoint Server 2007 data is being backed up using one of the following backup solutions:

- HP Data Protector script solution for Microsoft Office SharePoint Server 2007 and SharePoint Server 2010
- HP Data Protector Microsoft SQL Server integration
- HP Data Protector Microsoft Volume Shadow Copy Service integration
- HP Data Protector Microsoft Volume Shadow Copy Service ZDB integration

Recovery

The main advantage of the HP Data Protector Granular Recovery Extension is **recover granularity**.

The smallest object that you can restore with the original backup solution is a Microsoft SQL Server database (**content database**), which may contain data of multiple web sites. In contrast, the smallest object that you can restore with HP Data Protector Granular Recovery Extension is an individual web site item, for example, a Calendar item, Tasks item, Team Discussion item, or a document.

2 Installation

This chapter describes how to install HP Data Protector Granular Recovery Extension.

Support matrix

<table>
<tr><th>Supported environments</th><th>Supported operating systems</th></tr>
<tr><td>Microsoft Office SharePoint Server 2007:
• 32-bit
• 64-bit (x64)</td><td rowspan="4">Windows Server 2003:
• 32-bit
• 64-bit (x64)
Windows Server 2008:
• 32-bit
• 64-bit (x64)</td></tr>
<tr><td>Microsoft SQL Server 2005:
• 32-bit
• 64-bit (x64)</td></tr>
<tr><td>Microsoft SQL Server 2008:
• 32-bit
• 64-bit (x64)</td></tr>
<tr><td colspan="2">Supported backup solutions</td></tr>
<tr><td colspan="2">• HP Data Protector A.06.11</td></tr>
<tr><td colspan="2">Supported web browsers</td></tr>
<tr><td colspan="2">• Windows Internet Explorer 7 and 8
• Mozilla Firefox 3.0 and newer minor versions</td></tr>
</table>

Prerequisites

Microsoft SQL Server packages

Install the following packages for Microsoft SQL Server 2005 or Microsoft SQL Server 2008:

- Microsoft SQL Server Native Client
- Microsoft Core XML Services (MSXML) 6.0
- Microsoft SQL Server 2008 Management Objects Collection

These packages must be installed on all the Microsoft Office SharePoint Server systems that have at least one of the following services enabled:

- Central Administration
- Windows SharePoint Services Web Application

You can download the packages from the web site: http://www.microsoft.com/downloads/en/default.aspx.

Search for **Feature Pack for Microsoft SQL Server 2008**.

HP Data Protector

Ensure you installed HP Data Protector as described in:

- *HP Data Protector script solution for Microsoft Office SharePoint Server 2007 and SharePoint Server 2010 white paper*
- *HP Data Protector integration guide for Microsoft applications: SQL Server, SharePoint Portal Server, Exchange Server, and Volume Shadow Copy Service*
- *HP Data Protector zero downtime backup integration guide*

In addition, ensure that the Data Protector `User Interface` component is installed on all Microsoft Office SharePoint Server systems that have at least one of the following services enabled:

- Central Administration
- Windows SharePoint Services Web Application

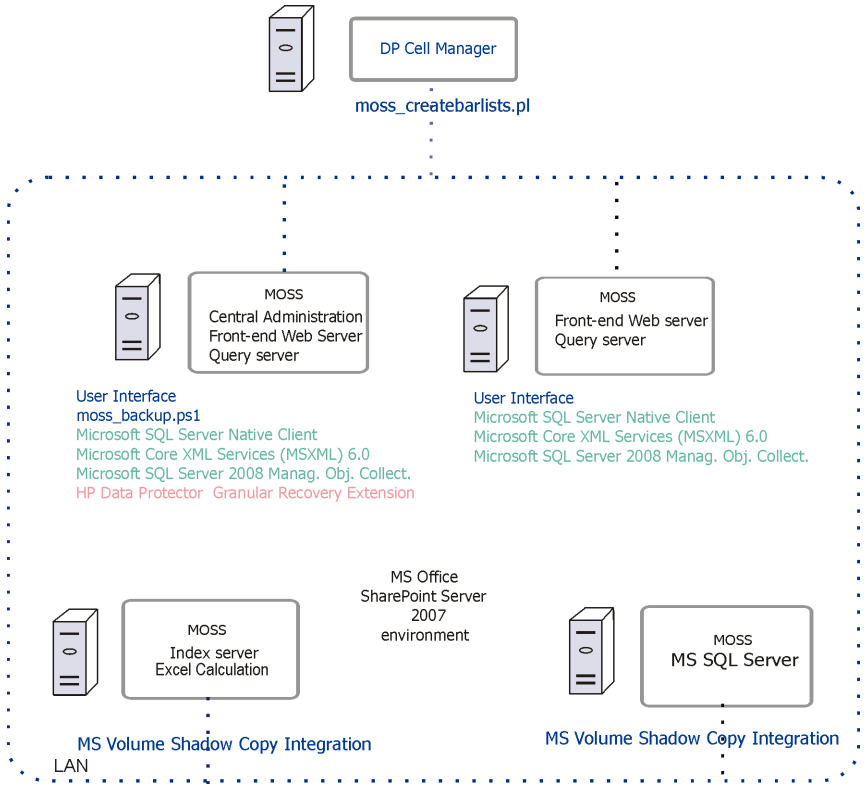

Figure 1 Installing a medium farm that uses the HP Data Protector Microsoft Office SharePoint Server script solution (an example)

In Figure 1, the HP Data Protector components are colored blue, the Microsoft SQL Server install packages are green, and the HP Data Protector Granular Recovery Extension component red.

Procedure

1. Log on to the Microsoft Office SharePoint Server Central Administration system under a Microsoft Office SharePoint Server **Farm Administrator** user account.
2. Run `Setup.exe` to install the HP Data Protector Granular Recovery Extension solution.

   Windows Server 2008: Do not forget to run `Setup.exe` with administrative rights if you have Windows UAC enabled (right-click **Setup.exe > Run as Administrator**). When the User Account Control dialog box is displayed, click **Allow**.

3. The HP Data Protector Granular Recovery Extension setup wizard is displayed. Click **Next**.
4. On the System Check page, click **Next**.

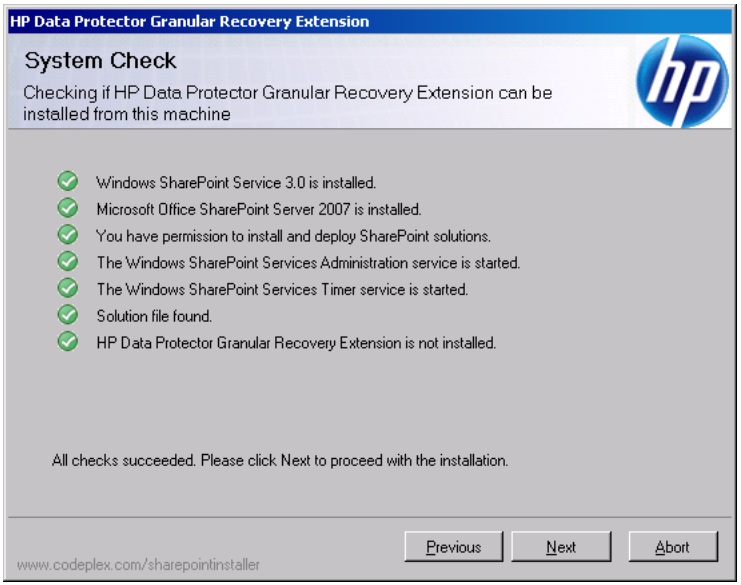

Figure 2 System Check page

5. On the End-User License Agreement page, select **I accept the terms in the License Agreement** and click **Next**.

6. On the Farm Deployment Targets page, click **Next**:

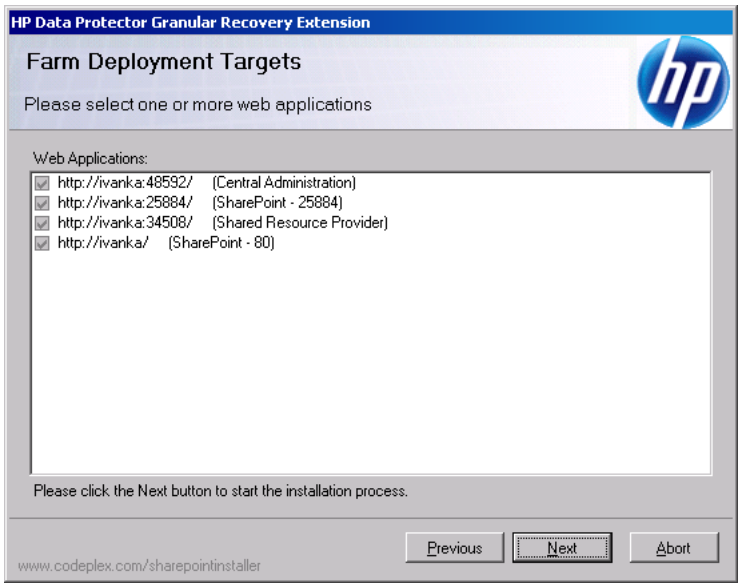

Figure 3 Farm Deployment Targets page

7. The Installing page is displayed. When the installation completes, click **Next**.
8. On the Installation Successfully Completed page, click **Close**.

NOTE:

Keep the installation package. This package is a prerequisite for the removal procedure. If the installation package is not on your system anymore, you can remove HP Data Protector Granular Recovery Extension using the Microsoft Office SharePoint Server command line tool: `stsadm`. For details, see Troubleshooting section "HP Data Protector Granular Recovery Extension cannot be removed" on page 63.

3 Configuration

Verifying the configuration of the Recovery Web Application

Procedure

1. Open the Central Administration web page and click the **Application Management** tab.
2. Under Application Security, click **Authentication providers** and click **Default**.
3. Ensure that the settings for the Recovery Web Application are the same as the default settings of the Central Administration Application.

Configuring HP Data Protector user rights

Procedure

1. Open the Data Protector GUI (**Data Protector Manager**).
2. In the Context list, select **Users**.

3. Ensure the user account under which the Windows SharePoint Services Timer service is running is assigned the Data Protector `Start restore` and `See private objects` user rights.

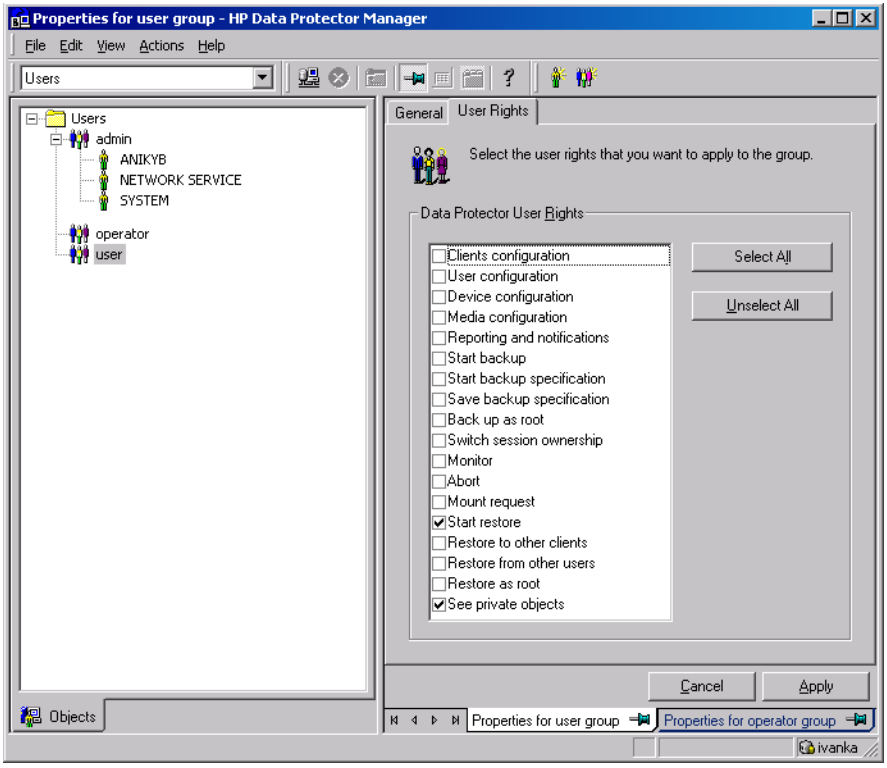

Figure 4 Data Protector user rights

NOTE:

The `See private objects` user right is useful in case you created your backup specification configured with access type private, and backup object owner. This is either the account under which the backup was executed or the account specified in the Ownership **Backup Option**. If this user account is different the user account under which the Windows SharePoint Services Timer service is running, the private backup objects are not accessible in the Recovery Cache Management.

Configuring Data Protector backup specifications

To prevent Data Protector from backing up content databases that are in the Granular Recovery Cache Management (in other words, to prevent Data Protector from backing up the same content databases twice), proceed with the following, depending on your configuration:

- If the same Microsoft SQL Server instance is used by both Microsoft Office SharePoint Server and HP Data Protector Granular Recovery Extension:

  When you create backup specifications, select individual content databases, and not the client, Microsoft SQL Server instance, or Microsoft Volume Shadow Copy Writer.

  The content databases restored by HP Data Protector Granular Recovery are named *`OriginalName_DataProtectorSessionID`*.

  See Figure 5 on page 26.

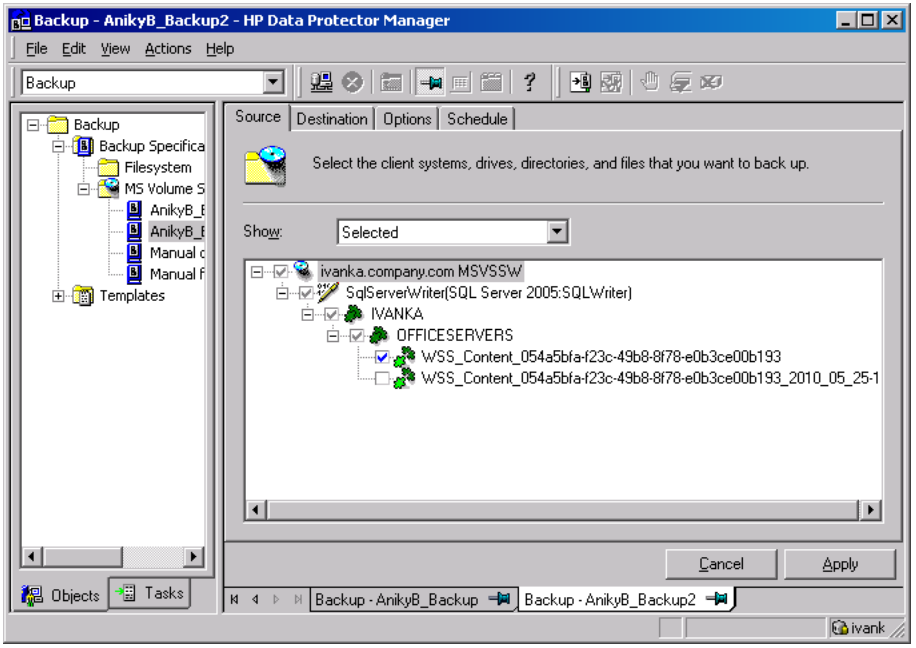

Figure 5 Selecting content databases

NOTE:

If you have a backup specification with individual content databases selected, each time a Farm Administrator adds a new content database, you need to include the newly-added content database in the backup specification.

- If a separate Microsoft SQL Server instance is used for granular recovery purposes, specify this system as the destination Microsoft SQL Server for the Import From Backup procedure.

  Ensure that this system is excluded from the backup specification.

Verifying the configuration of Internet Information Services application pools

The same Microsoft Office SharePoint Server user account is used by both the **Recovery Web Application** and **SharePoint Central Administration v3** application pools.

To be able to recover items to a filesystem, verify if the user specified in these application pools is granted enough permission. Ensure this user is granted full control of the filesystem.

To verify which user account is configured in the **Recovery Web Application** or **SharePoint Central Administration v3** application pools:

1. Connect to the Microsoft Office SharePoint Server Central Administration system.
2. In the Start menu, click **Control Panel**, **Administrative Tools**, and **Internet Information Services (IIS) Manager**.
3. Depending on the operating system version, proceed as follows:

   Windows Server 2008:

   a. Open the Application Pools page.
   b. Right-click an application pool and click **Advanced Settings**.
   c. Under Process Model, verify the `Identity` of the Microsoft Office SharePoint Server user account.

   Windows Server 2003:

   a. Expand **Application Pools**.
   b. Right-click an application pool and click **Properties**.
   c. Click the **Identity** tab, select the **Configurable** option, and verify the selected Microsoft Office SharePoint Server user account.

4 Backup

Back up Microsoft Office SharePoint Server data as described in your backup solution documentation.

For more information on the HP Data Protector backup solutions, see:

- *HP Data Protector script solution for Microsoft Office SharePoint Server 2007 and SharePoint Server 2010 white paper*
- *HP Data Protector integration guide for Microsoft applications: SQL Server, SharePoint Portal Server, Exchange Server, and Volume Shadow Copy Service*
- *HP Data Protector zero downtime backup integration guide*

5 Recovery

Each site has its data stored in a Microsoft SQL Server database (**content database**). Therefore, to recover site items, follow this basic procedure:

1. **Import**
   a. **Restore**

      Restore the content database from backup to a temporary location on a Microsoft SQL Server system.

   b. **Mount**

      Present the restored content database (**recovery content database**) to the Microsoft Office SharePoint Server. This creates a temporary site (**recovery site**).

2. **Recover**

   Transfer site items from the recovery site to the original site, or to another location of your choice.

3. **Dismount**

   Dismount the recovery content database from the Microsoft Office SharePoint Server. Optionally, delete the database from the disk.

Opening the HP Data Protector Granular Recovery Extension GUI

Procedure

1. Log on to the Microsoft Office SharePoint Server Central Administration system under a Microsoft Office SharePoint Server **Farm Administrator** user account.

2. Connect to the Central Administration web page, click the **Operations** tab, and look for **HP Data Protector Granular Recovery Extension**:

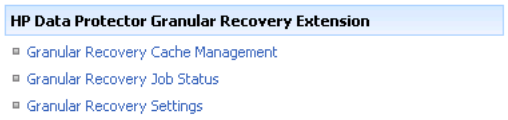

Figure 6 HP Data Protector Granular Recovery Extension links

3. Click **Granular Recovery Cache Management**. The Recovery Cache Management page is displayed.

   The Granular Recovery Cache shows which recovery content databases are currently mounted to the Microsoft Office SharePoint Server. In the beginning, the Granular Recovery Cache is empty. See Figure 7 on page 32.

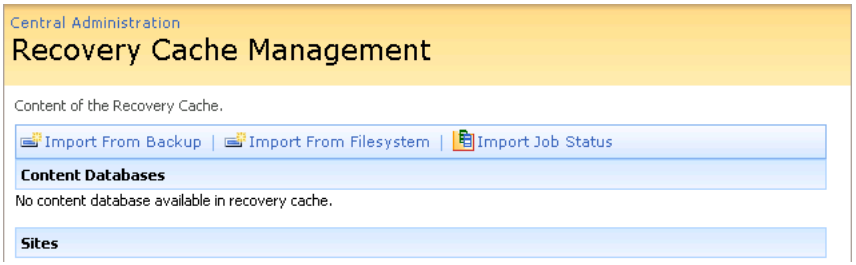

Figure 7 Recovery Cache Management (empty)

Figure 8 on page 32 shows available functionality of the Recovery Cache Management when a content database is already mounted. For a high-level description of the functionality, see Table 3 on page 33.

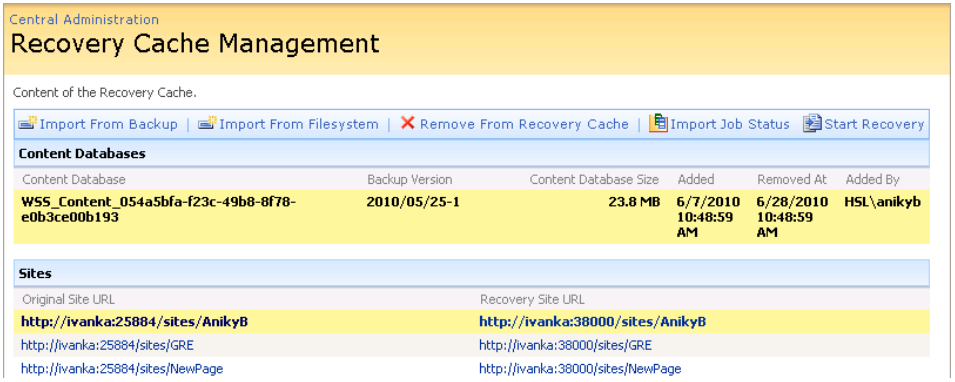

Figure 8 Recovery Cache Management with a content database mounted

Table 3 Granular Recovery cache management

• **Import From Backup** If you have backed up your content database with an HP Data Protector backup solution, use **Import From Backup** to restore the database to a temporary location and to mount the database to the Microsoft Office SharePoint Server. For details, see "Importing content databases from backup" on page 34.	• **Import From Filesystem** If you have restored the content database to the filesystem, use **Import From Filesystem** to mount the content database to the Microsoft Office SharePoint Server. For details, see "Importing content databases from the filesystem" on page 37.
• **Import Job Status** This enables you to monitor import jobs (importing a content database from backup or from filesystem) status. For details, see Monitoring granular recovery import jobs, page 50.	• **Remove from Recovery Cache** This dismounts a recovery content database from the Microsoft Office SharePoint Server (removes the content database from the Granular Recovery Cache) and removes the database files from the disk. For details, see "Removing content databases from the cache" on page 50.
• **Start Recovery** Use this to browse and recover objects that are stored in a recovery content database. Note that this is also available from the original site: **Site Actions > Site Settings > Granular Recovery**. For details, see "Executing Perform content recovery tasks" on page 40 and "Recovering site items" on page 41.	• **Original Site URL** The link to the original site. • **Recovery Site URL** The link to the recovery site.

Importing content databases from backup

Prerequisites

On the destination Microsoft SQL Server system, you need enough disk space for the content database that you want to import.

Procedure

1. On the Recovery Cache Management page, click **Import From Backup**. The Site Collection Selection page is displayed. Select the content database of the site you want to recover and click **Continue**.

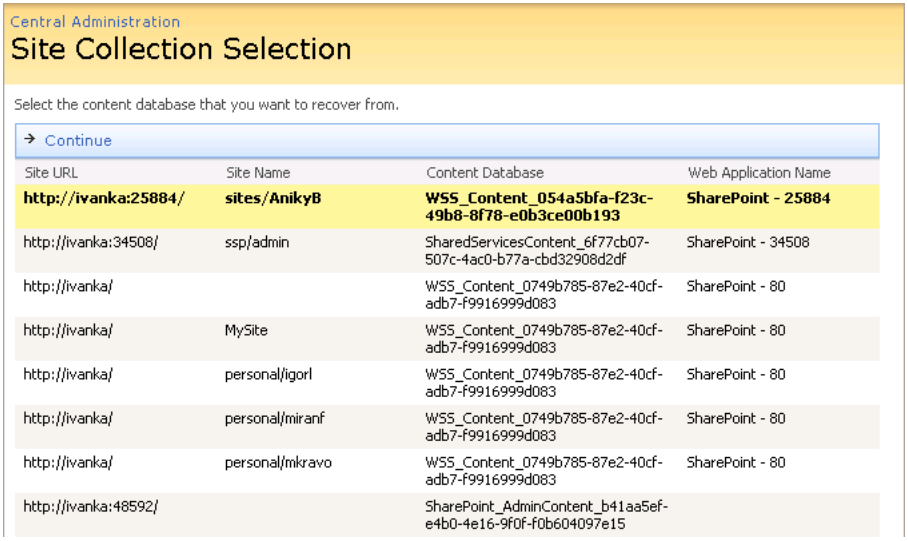

Figure 9 Site Collection Selection page

2. On the Backup Version Selection page, select the content database version that you want to restore and click **Continue**.

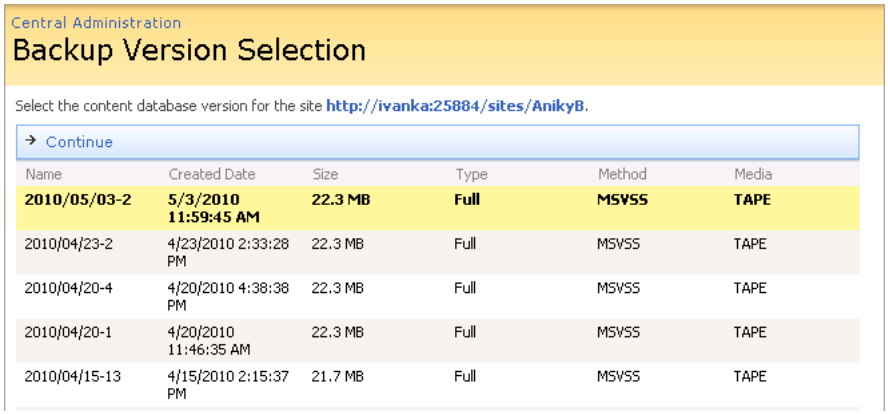

Figure 10 Backup Version Selection page

3. The Content Database Recovery page is displayed:

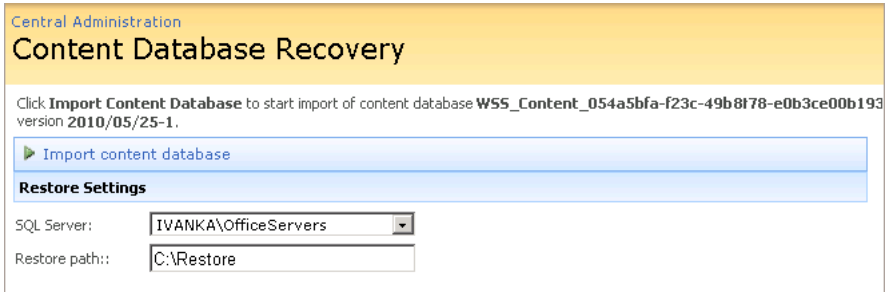

Figure 11 Content Database Recovery page

In the **SQL Server** drop-down list, select the destination Microsoft SQL Server instance. You can change the default restore location by specifying a new path. The default is `C:\Restore`.

NOTE:

If your Microsoft SQL Server is configured in a cluster, ensure that the restore location resides on the Microsoft SQL Server cluster shared disk.

Click **Import content database**.

4. Optionally, to monitor job status, click **Continue**. The Granular Recovery Import Job Status page is displayed:

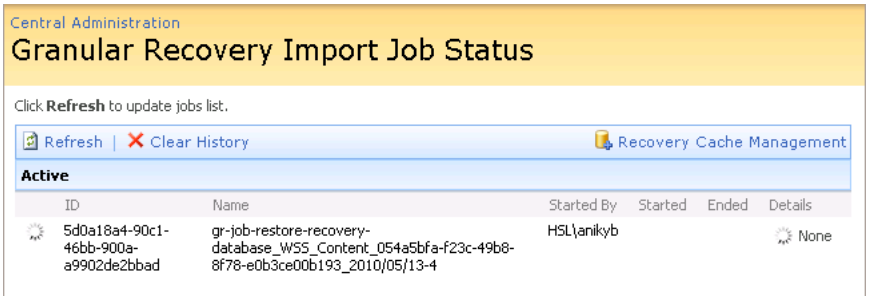

Figure 12 Monitoring job status

5. Click **Recovery Cache Management** to return to that page.

   The content database is mounted to the Microsoft Office SharePoint Server.

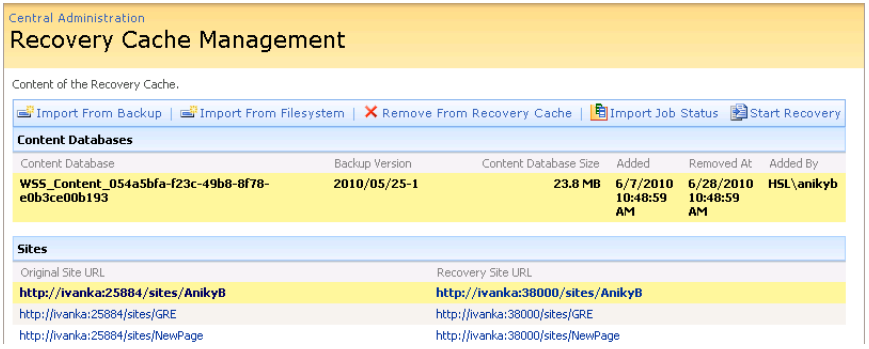

Figure 13 Recovery Cache Management

NOTE:

Once the content database is mounted to the Microsoft Office SharePoint Server, a **Perform content recovery** task is assigned to the Site Collection Administrator.

For details, see "Executing Perform content recovery tasks" on page 40.

Importing content databases from the filesystem

Prerequisites

- The content database must be restored to the filesystem.
- The user account under which the Windows SharePoint Services Timer service is running must be granted full control permission for the content database.

Considerations

- The Microsoft SQL Server Database Primary Data Files and all transaction log files cannot be imported from a network share.
- If a site already exists in the Recovery Cache Management, and you perform an Import From Filesystem session for the same site, the new URL is:
  - `http://computer.company.com:38000/`*`OriginalNameSequenceNumber`*
  - `http://computer.company.com:25884/`*`SequenceNumber`*
    (root site)
- If the original site does not exist in the Recovery Cache Management, the site URL does not change.
- If a root site does not exist, the Recovery Cache Management uses an empty string during the restore session, the URL of the root site changes to:
  `http://computer.company.com:25884/`*`SequenceNumber`*

Procedure

1. On the Recovery Cache Management page, click **Import From Filesystem**.

2. On the Enter content database data page, specify the location of the Microsoft SQL Server Database Primary Data File *AbsolutePath*.mdf and all transaction log files *AbsolutePath*.ldf. Click **Add**.

   Click **Continue**.

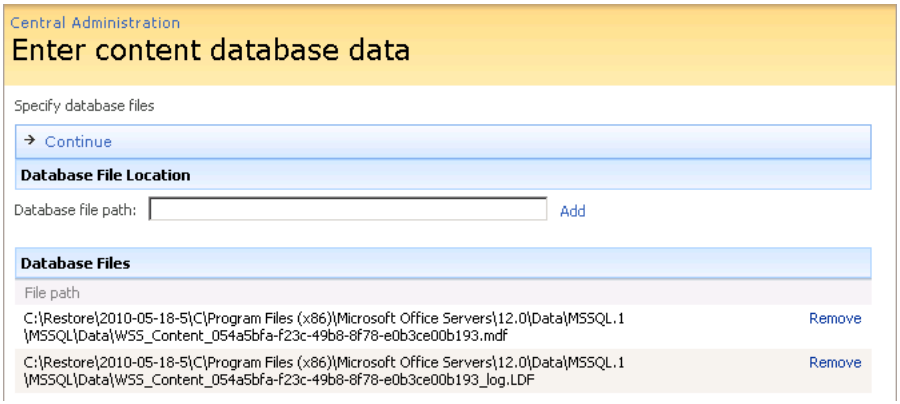

Figure 14 Specifying content database files

3. In the **SQL Server** drop-down list, select the destination Microsoft SQL Server instance.

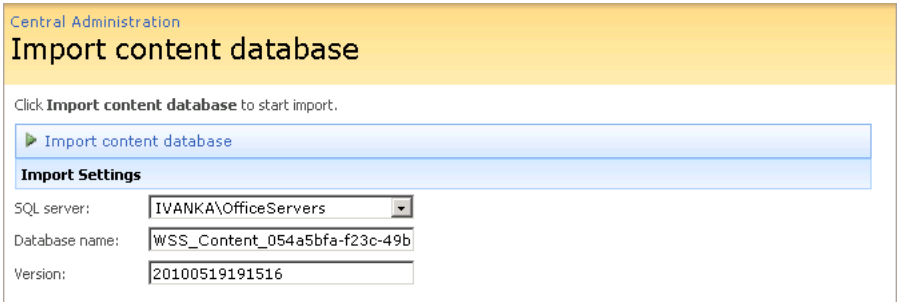

Figure 15 Importing a content database from filesystem

The content database name and version are filled in automatically. Optionally, you can edit the database's name and version to better suit your needs.

Click **Import content database**.

4. Optionally, to monitor job status, click **Continue**.

   The Granular Recovery Import Job Status page is displayed:

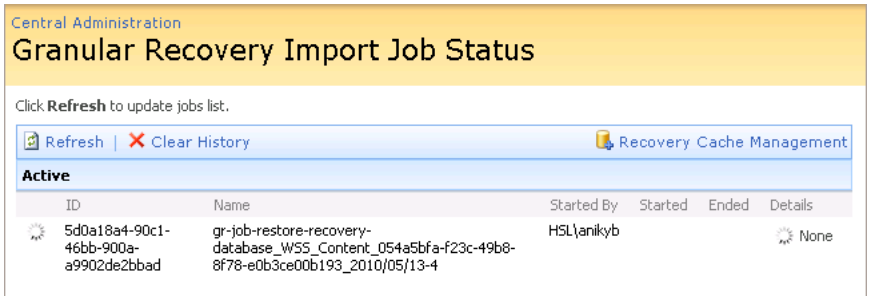

Figure 16 Monitoring job status

5. Click **Recovery Cache Management** to return to that page.

   The content database is mounted to the Microsoft Office SharePoint Server.

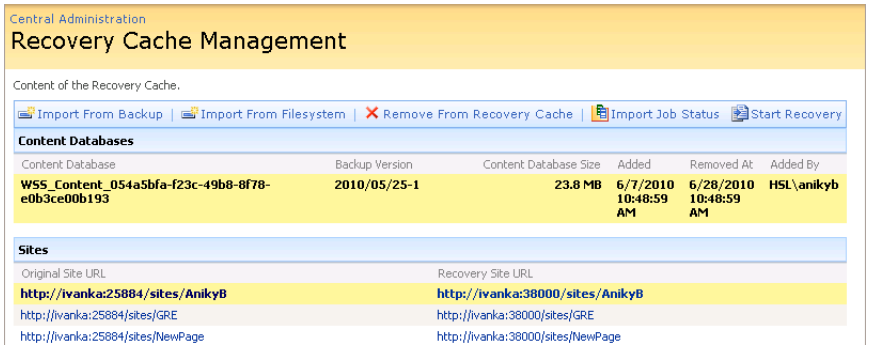

Figure 17 Recovery Cache Management

NOTE:

Once the content database is mounted to the Microsoft Office SharePoint Server, a Perform content recovery task is assigned to the Site Collection Administrator.

For details, see "Executing Perform content recovery tasks" on page 40.

Executing Perform content recovery tasks

Prerequisites

- The content database must be mounted to the Microsoft Office SharePoint Server, by Importing content databases from backup, page 34 or by Importing content databases from the filesystem, page 37.
- You must be a **Site Collection Administrator** of the site you want to recover.

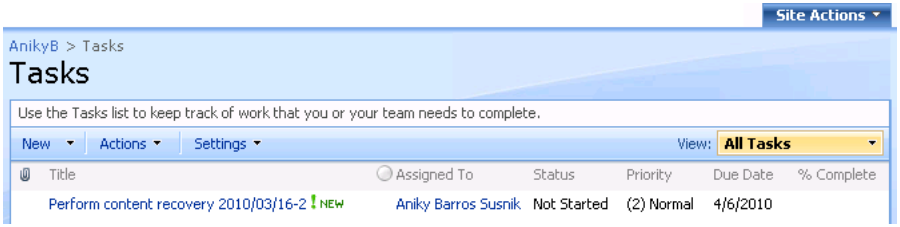

Figure 18 Perform content recovery task

Figure 19 Perform content recovery link

Procedure

1. Click the link in the Perform content recovery task. The Browse and Select Objects page is displayed.
2. Proceed with the step 2 of the procedure "Recovering site items" on page 41.

Recovering site items

Prerequisites

- On all the front-end Web Server systems, you need enough disk space for the site items that you plan to recover. The default location is `C:\Recovery`. To change the default path, see "Changing HP Data Protector Granular Recovery Extension settings" on page 51.
- You must be a **Site Collection Administrator** of the site you want to recover.
- The recovery content database must be mounted to the Microsoft Office SharePoint Server.
- If the original site no longer exists, ensure that you create a blank site and use the **Overwrite Existing** recovery mode. You must be a **Farm Administrator** of the site you want to recover in the Recovery Cache Management. If you have a sub

site in the recovered site, quick links, top navigation bar are relocated at the end of the lists.

Considerations

- If the data to be recovered already exists at the destination, depending on the recovery mode, note the following:
  - **Rename if Exists**: Files, folders, and items are recovered with different names, *OriginalName*_MOSSGR_*Timestamp*. For example, suppose that on November 17, 2009 at 10:59:35 you start a recovery of the file `wizard.txt`. The file is recovered with the name `wizard_MOSSGR_20091117-105935.txt`.
  - **Leave Existing**: Files, folders, and items are not recovered.
  - **Overwrite Existing**: Files, folders, and items are recovered with the original names, replacing the existing. For example, the existing Microsoft Office SharePoint Server items (Document Library) are overwritten with those from the backup data. Only lists and sites are not overwritten.
- If the data to be recovered does not exist at the destination, it is recovered with the original name.
- If the List items (Announcement, Contact, Link, Calendar, or Task) are recovered to other location, or to other farm twice, depending on the recovery mode:
  - **Overwrite Existing**: the List items are duplicated with the same names and different IDs. Delete the items with the same names.
  - **Rename if Exists**: the List items are renamed even though these kinds of items do not support renaming.
- If discussion items, with attachments and replies, or surveys with responses are recovered with the **Overwrite Existing** recovery mode, the items are overwritten but the attachments, replies, or responses are not recovered. To avoid data loss, delete the attachments, replies, or responses before starting your recovery session.
- Multiple recovery sessions can be performed in parallel, except if the same items are selected for recovery.
- Multiple farm administrators and site collection administrators can browse objects in parallel.

Procedure

1. On the Recovery Cache Management page, select the content database and the sites you want to recover. Note that a content database may contain data of multiple sites.

TIP:

To recover items from multiple sites, hold **Ctrl** while selecting specific sites under **Sites**, and then click **Start Recovery**.

You can also hold **Shift** while selecting a group of sites under **Sites**, and then click **Start Recovery**.

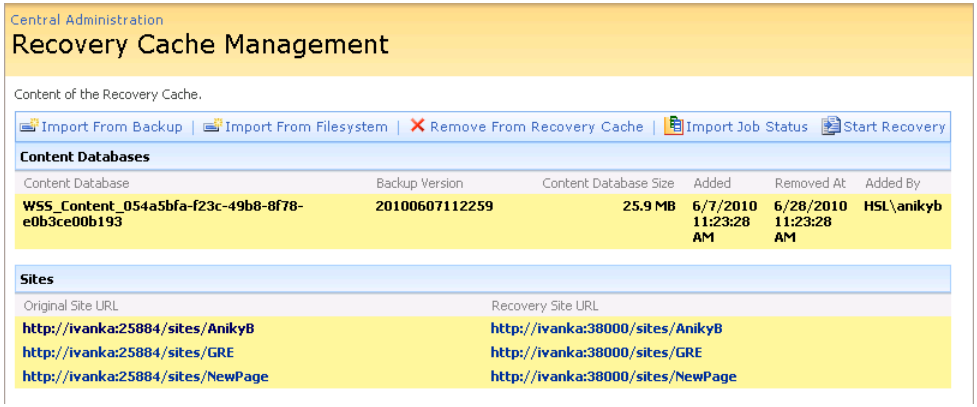

Figure 20 Selecting a content database and multiple sites for recovery

NOTE:

Alternatively, you can start a recovery session:

- By connecting to the original web site. In the **Site Actions** menu, select **Site Settings**. On the Site Settings page, look for HP Data Protector Granular Recovery Extension. Click **Granular Recovery**.
- By performing site tasks. For details, see "Executing Perform content recovery tasks" on page 40.

2. On the Browse and Select Objects page, select the site items that you want to recover.

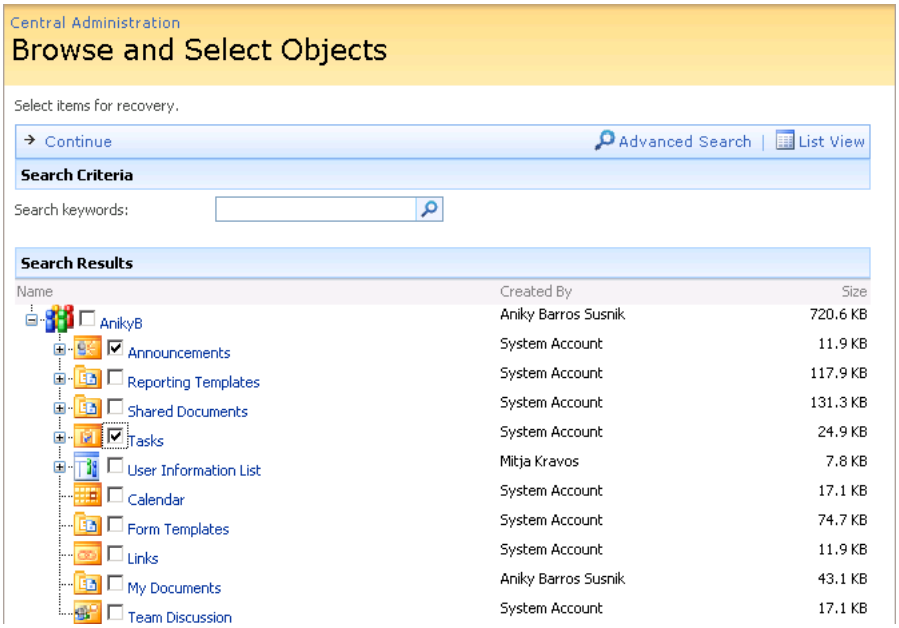

Figure 21 Selecting site items

NOTE:

All items can be previewed by clicking on the item name.

TIP:

To select multiple list view items, hold **Ctrl** while selecting specific items. Alternatively, you can hold **Shift** while selecting a group of items.

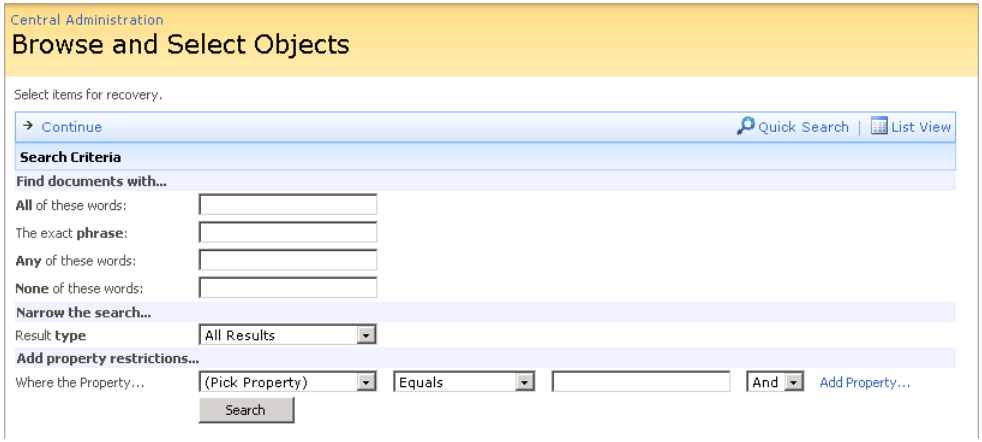

Figure 22 Advanced search

TIP:

You can filter the items using the **Advanced search**. For example, in **Result type**, select **Microsoft Office Word documents**. In **Add properties restriction**, select a property and click **Search**.

For details about the advanced and quick search, see the *Microsoft SharePoint Server Help*.

To select multiple list view items, hold **Ctrl** while selecting specific items. Alternatively, you can hold **Shift** while selecting a group of items.

Click **Continue**.

3. On the Recovery Objects page, the selected site items are displayed.

NOTE:

The **Recovery mode** drop-down list offers the following options:

- **Rename if Exists**: Items such as files and folders are recovered with a new name *OriginalName_MOSSGR_Timestamp*.
- **Leave Existing**: Items are not recovered, the existing items remain the same in the target location.
- **Overwrite Existing**: Recovered items replace the existing items.

TIP:

When recovering recurring events, for example, weekly team meetings in Calendars, before selecting the **Overwrite Existing** recovery mode, ensure the deletion of all the recurring events.

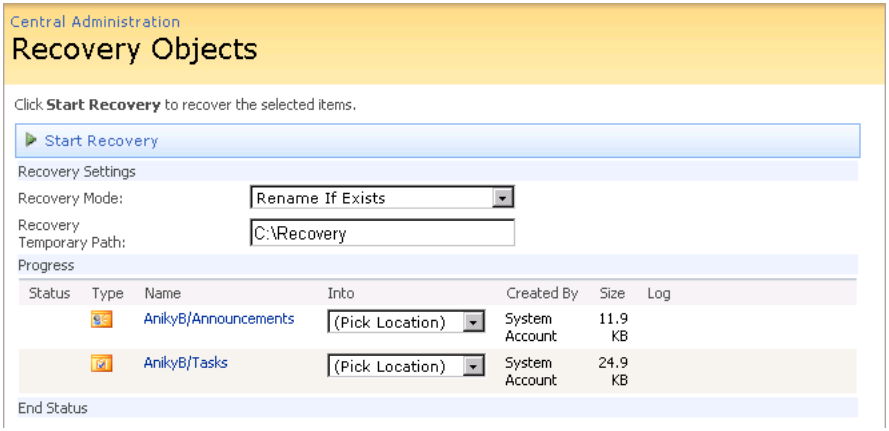

Figure 23 Recovering site items

The **Temporary Path** option specifies which location on your Microsoft Office SharePoint Server system to use for recovery.

NOTE:

The **Into** drop-down list specifies the restore destination:

- **Original Location**: The item is recovered to the original location in the original site.
- **Other Location**: The item is recovered to a different site or a different location in the original site. Use this location, if the original site no longer exists.
- **Other Farm**: The item is recovered to a different destination farm.
- **Filesystem**: The item is recovered to a directory in your filesystem. This option is available only for files and folders.

- If you select **Other Location**, the Recovery to other location dialog box is displayed.

Figure 24 Recovering site items to another location

In the Site drop-down list, select the destination site.

If you select the **Apply to all items of the same type** option, items of the same type (for example, calendar items) are recovered to the same location.

Click **OK**.

TIP:

The sites listed in the Recovery to other location dialog box are those for which you have enough permission. For example, if you are a Site Collection Administrator, you need to be granted the read configuration database right.

- If you select **Other Farm**, the Recovery to other farm dialog box is displayed.

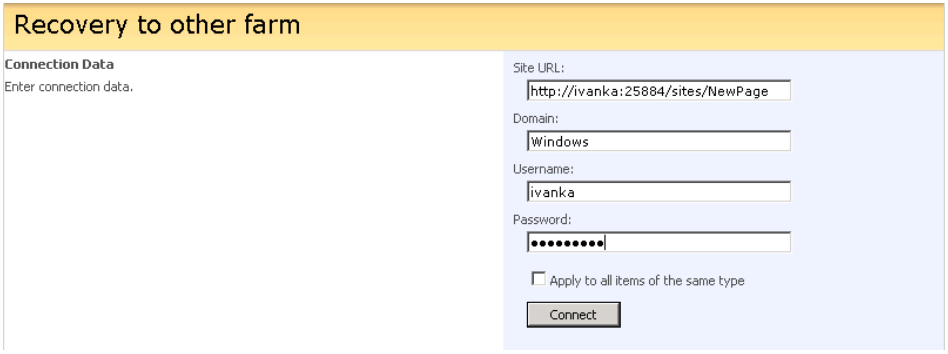

Figure 25 Recovering site items to another farm

Specify the destination farm and which Windows domain user account to use.

If you select the **Apply to all items of the same type** option, items of the same type (for example, calendar items) are recovered to the same farm.

Click **Connect**.

- If you select **Filesystem**, the Recovery to Filesystem dialog box is displayed.

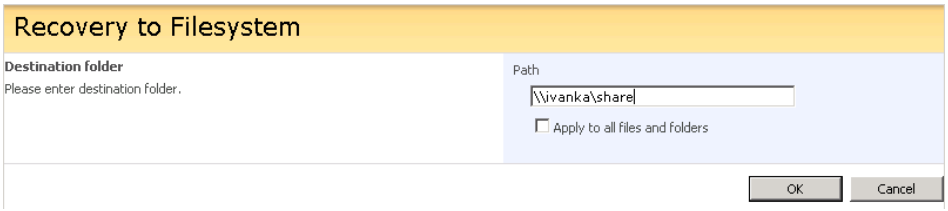

Figure 26 Recovering site items to a network share

In **Path**, specify the destination directory.

When specifying a network share as a destination, ensure that:

- Read, write, and change permissions are granted to the user that starts the recovery session.
- All necessary permissions are granted to the network share. Grant the same permissions specified for the user account configured in the **Web Recovery Application** and **SharePoint Central Administration v3** application pools. For details, see "Verifying the configuration of Internet Information Services application pools" on page 26.
- The share is accessible from the system where the Windows SharePoint Services Web Application is running, in which the recovery session was started.

When specifying a folder as a destination, ensure that:

- The folder is accessible from the system where the Windows SharePoint Services Web Application is running.
- Read, write, and change permissions are granted to the user that starts a recovery session.

If you select the **Apply to all files and folders** option, all files and folders are recovered to the same directory.

Click **OK**.

4. Click **Start Recovery**.

Once the recovery completes, you can find the recovered items at the specified destination.

Removing content databases from the cache

Procedure

1. On the Recovery Cache Management page, select which content database to remove, and click **Remove From Recovery Cache**. The Remove From Recovery Cache page is displayed.
2. To keep the content database files on the disk, clear the **Delete files from disk** option.

   Click **Remove**.

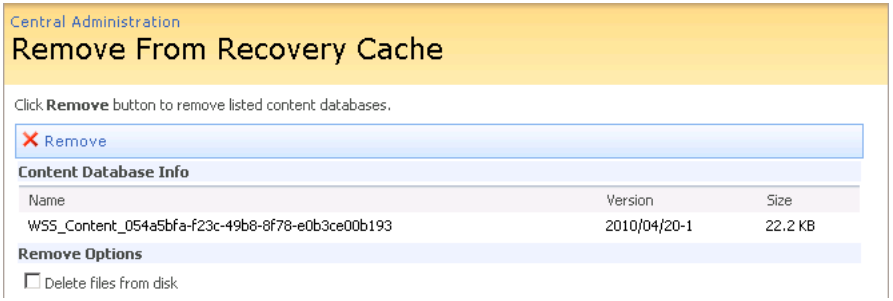

Figure 27 Removing a content database

Monitoring granular recovery import jobs

Procedure

1. Connect to the Central Administration web page, click the **Operations** tab, look for **HP Data Protector Granular Recovery Extension**, and click **Granular Recovery Job Status**. The Granular Recovery Import Jobs page is displayed.

2. Once you start a content database import session, HP Data Protector Granular Recovery Extension starts monitoring the import job progress.

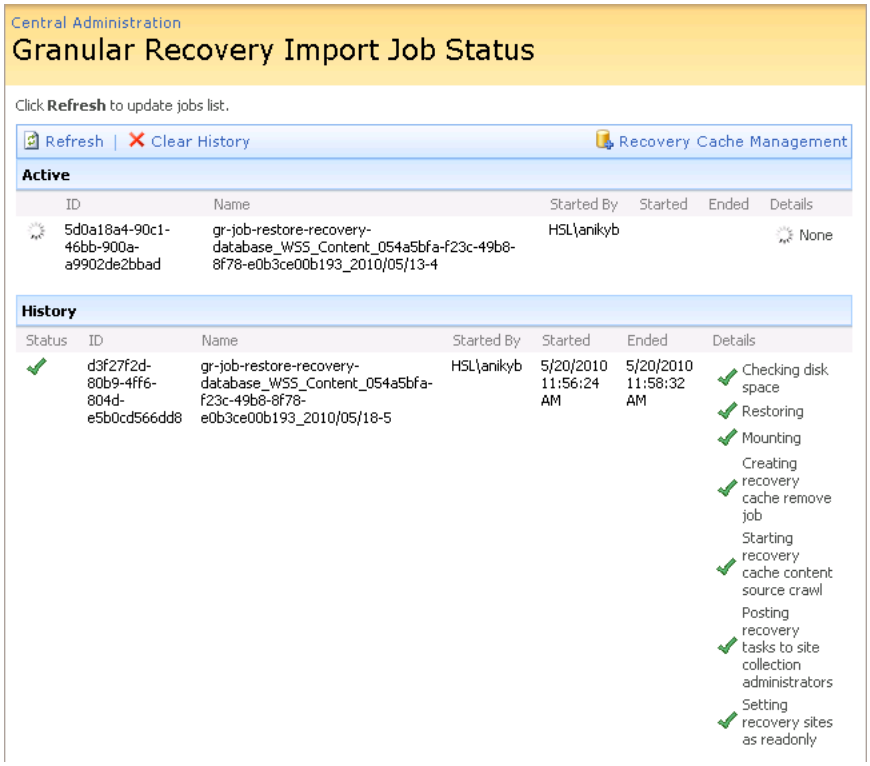

Figure 28 Monitoring an import job progress

Optionally, after the recovery job is finished and you no longer need the job statuses, click **Clear History**.

Changing HP Data Protector Granular Recovery Extension settings

During a granular recovery session, a content database is first restored to a temporary location on the selected Microsoft SQL Server system (default: `C:\Restore`).

Before the site items are recovered, they are copied to a temporary location on a Microsoft Office SharePoint Server system (default: `C:\Recovery`).

Procedure

1. To change these default locations, connect to the Central Administration web page, click the **Operations** tab, look for **HP Data Protector Granular Recovery Extension**, and click **Granular Recovery Settings**.
2. On the Granular Recovery Settings page, enter a new restore location or temporary recovery location and click **OK**.

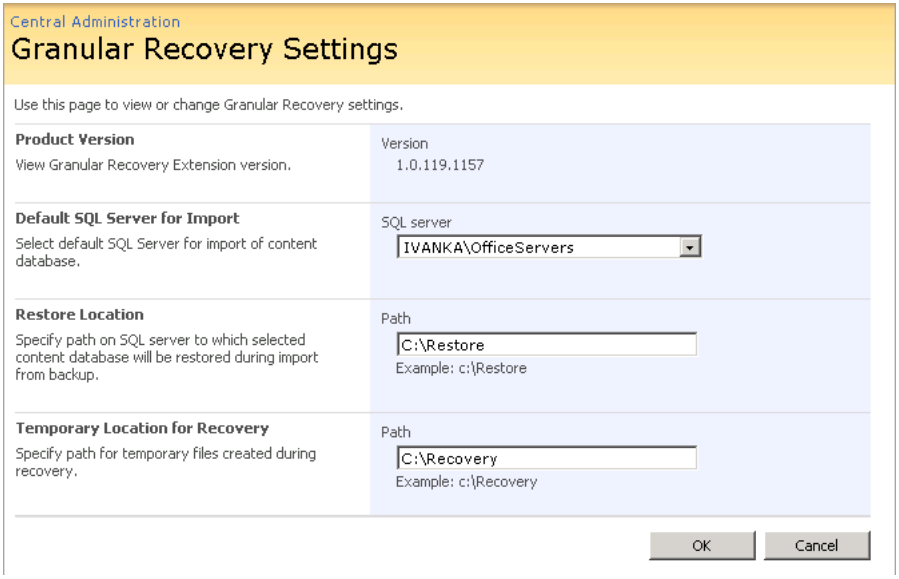

Figure 29 Changing Granular Recovery settings

6 Command line reference

Use the `HP.SharePoint.GranularRecovery.CLI.exe` command line tool that is located in:

```
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\BIN
```

To display descriptions of options and their usage, run:

```
HP.SharePoint.GranularRecovery.CLI.exe --help.
```

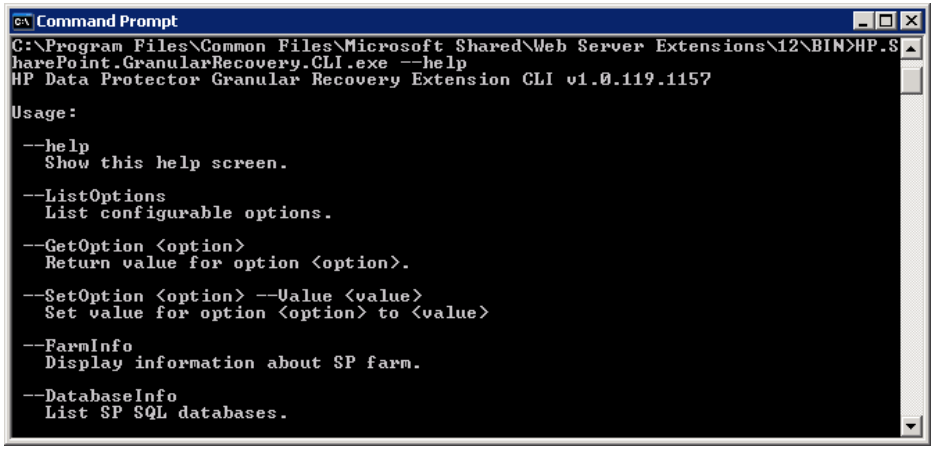

Figure 30 Retrieving the command line help

NOTE:

In the examples below, `HP.SharePoint.GranularRecovery.CLI.exe` is omitted for simplicity.

Examples

Restoring a content database from Data Protector backup

- To list all the backup versions of your content database named `WSS_Content_054a5bfa-f23c-49b8-8f78-e0b3ce00b193`, specify:

  ```
  --ListBackupVersions
  --ContentDB=WSS_Content_054a5bfa-f23c-49b8-8f78-e0b3ce00b193
  ```

Monitoring jobs progress

- To list all the jobs that have been started of your content database, specify:

  ```
  --ListJobs
  ```

- To start a restore job by importing the content database from the backup version "`2010/04/20-4`" to the default restore location `C:\Restore`, specify:

  ```
  --StartImportJob
  --ContentDB WSS_Content_054a5bfa-f23c-49b8-8f78-e0b3ce00b193
  --BackupID "2010/04/20-4" --Server computer
  --Instance OFFICESERVERS --TargetLocation C:\Restore
  ```

- Suppose you want to start a restore job by importing the content database from a filesystem to the Microsoft Office SharePoint Server to the default restore location `C:\Restore`.

  If the Microsoft SQL Server Database Primary Data File is `WSS_Content_054a5bfa-f23c-49b8-8f78-e0b3ce00b193.mdf` and the SQL Server Transaction log file is `WSS_Content054a5bfa-f23c-49b8-8f78-e0b3ce00b193_log.LDF`, specify:

  ```
  --StartImportJob
  --ContentDB WSS_Content_054a5bfa-f23c-49b8-8f78-e0b3ce00b193
  --BackupID "2010/04/20-4" --Server computer
  --Instance OFFICESERVERS
  --Files="C:\Restore\WSS_Content_054a5bfa-f23c-49b8-8f78-e0b3ce
  00b193.mdf";"C:\Restore\WSS_Content054a5bfa-f23c-49b8-8f78-e0b
  3ce00b193_log.LDF"
  --TargetLocation C:\Restore
  ```

Verifying target location disk space size

- To check the available disk space on the default restore location `C:\Restore`, specify:

  ```
  --QueryServerInfo --Server computer --Instance OFFICESERVERS
  --TargetLocation C:\Restore
  ```

  This also lists the location of all content database files in the tree structure.

Listing content databases

- To list all content databases in the Recovery Cache including the backup versions, specify:

  ```
  --ListCache --All
  ```

- To list detailed information of the content databases, specify:

  ```
  --ListCache --Verbose
  ```

Removing restore jobs

- To delete all the restore job statuses, specify:

  ```
  --DeleteAllJobs Confirm
  ```

- To delete a specific restore job, specify:

  ```
  --DeleteJob=JobID
  ```

Recovering a site item to the original site

- Suppose you want to recover the site item `/Shared Documents/Document.txt` that was backed up from the site `http://computer.company.com:25884/sites/AnikyB`. Suppose the recovery site is `http://computer.company.com:38000/sites/AnikyB`. To recover the item to the original location, specify:

  ```
  --Recover
  --Source http://computer.company.com:38000/sites/AnikyB
  --Destination http://computer.company.com:25884/sites/AnikyB
  --TempLocation="C:\Recovery"
  --Items "/Shared Documents/Document.txt"
  ```

  The recovery session finishes and the following message is displayed:

```
recovery ended, object status:
object: [/Shared Documents/Document.txt]
destination: [/Shared Documents/Document_MOSSGR_24032010-024302.txt]
status: Finished
status details: [recovered to [http://computer.company.com:
25884/sites/AnikyB//Shared Documents]]
```

Recovering a site item to another location

- To recover the site item "/Shared Documents/Document.txt" to My Documents, specify:

  ```
  --Recover
  --Source http://computer.company.com:38000/sites/AnikyB
  --Destination http://computer.company.com:25884/sites/AnikyB
  --TempLocation="C:\Recovery"
  --Items "/Shared Documents/Document.txt:/My Documents"
  ```

Removing content databases from the cache

- To remove a database from the cache, specify:

  ```
  --RemoveFromCache --ContentDB DatabaseName
  ```

- To remove all the content databases from the cache, specify:

  ```
  --RemoveFromCache --All
  ```

Removing content databases from the disk

- To delete a content database from the disk after you have removed it from the cache, specify:

  ```
  --RemoveFromCache --ContentDB DatabaseName --DeleteFiles
  ```

Exporting items from a content database

- To export an item from a content database, specify:

  ```
  --Export --Source source --Location path
  --Item item
  ```

- To export items from a content database, specify:

  ```
  --Export --Source source --Location path
  --Items item1 item2 item3
  ```

Listing exported items

- To list the exported items, specify:

  `--ListExport --Location`

Importing items from a content database

- To import an item from a content database, specify:

  `--Import --Destination` *`destination`* `--Location` *`path`*

  `--Item` *`item`*

- To import items from a content database, specify:

  `--Import --Destination` *`destination`* `--Location` *`path`*

  `--Items` *`item1 item2 item3`*

Displaying Microsoft Office SharePoint farm information

- To display detailed information of the farm, such as name, display name, address, type name, role, version, status and all services running in this farm, specify:

  `--FarmInfo`

Displaying content database information

- To display content database information such as: Office Servers, Shared Services, SharePoint configuration, Share Services Search, Recovery Web Application, Shared Services Content, SharePoint Admin Content, content database name, specify:

  `--DatabaseInfo`

Displaying a list of sites

- To display the Web Application name, the site's URL, content database name and the all the sites in this content database, specify:

  `--ListSites`

Browsing sites

- To browse a My Site structure and items such as: Forms, Lists, Template Gallery, Master Page Gallery, Personal Documents, Shared Documents, Shared Pictures, Site Template Gallery, User Information List, and Web Part Gallery, specify:

  ```
  --BrowseSite --Site http://ivanka/personal/anikyb
  ```

7 Troubleshooting

The folder with debugs entries and logs is located in the folder `C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\LOGS\GranularRecovery`, and contains the files `debugs.txt`, `debugs_cliproxy.txt`, `note.txt`, and `note_cliproxy.txt`. The folder location may vary depending on where you install the Microsoft Office SharePoint Server.

An import job fails

Problem

After performing an Import From Backup, Granular Recovery Import Job Status reports a failed status in the Restoring phase.

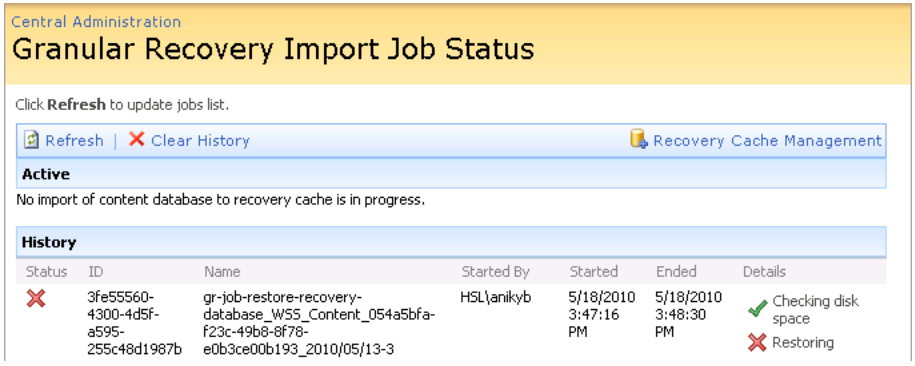

Figure 31 Restore fails with not enough user rights

Action

Ensure the user account under which the Windows SharePoint Services Timer service is running is assigned the Data Protector `Start restore`, and the `See private`

`objects` user rights. For example, if the Windows SharePoint Services Timer service is the one running under the `Network Service` account:

1. Open the Data Protector GUI (**Data Protector Manager**).
2. In the Context list, select **Users**. Right-click the user's group that has the `Start restore` and the `See private objects` user right enabled, and click **Add/Delete Users**.

   The `Network Service` user account should be configured with the following properties:

   - Name: `Network Service`
   - Domain/Group: `NT Authority`
   - Client system: `Any`

   For details, see "Configuring HP Data Protector user rights" on page 23.

A recovery session fails

Problem

If you start a recovery session by connecting to the original web site, the following message is displayed:

```
No recovery available for this site
http://computer:25884/sites/User! Please contact Granular
Recovery Administrator for further info!
```

Action

The root cause of the problem is that the content database is not in the cache. Perform an import job.

Granular Recovery Cache Management link is not accessible from My Sites

Problem

After you create a new site collection, a new web application, and backup your new site collection. You select **Site Actions > Site Settings > Granular Recovery** from My

Sites. The Granular Recovery Cache Management link is not accessible from My Sites. The following message is displayed:

```
GR resource files are missing in site's "App_GlobalResources"
folder.
```

Action

Open **Central Administration** on the Operations Tab, under **Global Configuration** select **Manage Farm Features**. Click the **Deactivate** button by HP Data Protector Granular Recovery Extension. The Warning page is displayed, click the **Deactivate this feature** link, and then go back to Manage Farm Features, and click **Activate** by the HP Data Protector Granular Recovery Extension.

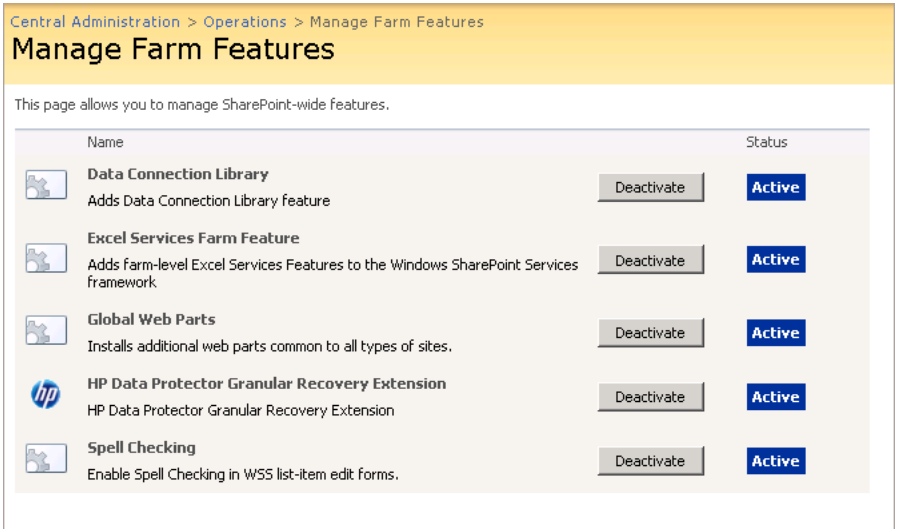

Figure 32 Manage Farm Features deactivating HP Data Protector Granular Recovery Extension

Granular Recovery Cache Management link is not accessible from My Sites

Problem

After you create a new site collection, a new web application, and backup your new site collection. After you perform an Import From Backup procedure, you select **Site Actions > Site Settings > Granular Recovery from My Sites**. The Granular Recovery Cache Management link is not accessible from My Sites. The message "`Access denied.`" is displayed. The following debug entry is displayed:

```
[6 - Fatal] FATAL debugs - Recovery.aspx: OnPreInit: -
Exception: Thread was being aborted.
```

Action

All application pool users must be granted the Read permission on the Recovery Web Application. To grant the Read permission to application pool user accounts:

1. Connect to the Microsoft Office SharePoint Server Central Administration system, click **Application Management**, under Application Security, and click **Policy for Web Application**.
2. Select the user and click **Edit Permission of Selected Users**. The Edit Users page is displayed. By the Permission Policy Levels select the **Full Read - Has full read-only access** option and click the **Save** button.

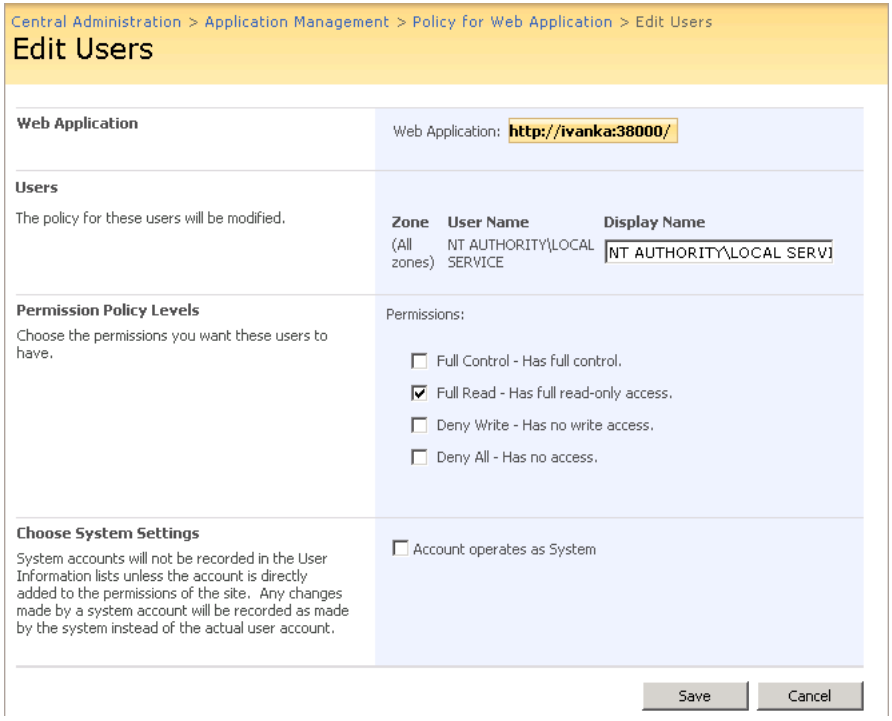

Figure 33 Granting Full Read permission

HP Data Protector Granular Recovery Extension cannot be removed

Problem

The root cause of the problem is that having the HP Data Protector Granular Recovery Extension installation package on the system is a prerequisite for the removal procedure.

Action

To remove HP Data Protector Granular Recovery Extension, use the Microsoft Office SharePoint Server command line tool `stsadm` that is located in `C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\BIN`:

```
stsadm -o retractsolution -name HPDP-GRE-version.wsp
-allcontenturls -immediate
```

```
stsadm -o execadmsvcjobs
```

```
stsadm -o deletesolution -name HPDP-GRE-version.wsp
```

To find out the name of the `HPDP-GRE-version.wsp` package used, connect to the Central Administration web page, click the **Operations** tab, look for HP Data Protector Granular Recovery Extension, and click **Granular Recovery Settings**. For example, by the Product Version you find the number `1.0.105.1121`. In this example, you should replace `HPDP-GRE-version.wsp` with `HPDP-GRE-1.0.105.1121.wsp`.

Slow response of the command line interface

Problem

You can notice slow response of the HP Data Protector Granular Recovery Extension command line interface. For example when you run the `HP.Sharepoint.GranularRecovery.CLI.exe --help` command, the command takes from 10 seconds to several minutes to display the usage. The root cause of the problem is the HP Data Protector Granular Recovery Extension signature verification which may take quite some time to complete.

Action

To disable the HP Data Protector Granular Recovery Extension signature verification, locate the `cliproxy.exe` and the `HP.Sharepoint.GranularRecovery.CLI.exe` files in the Microsoft Office SharePoint Server `BIN` folder. By default, the path of the `BIN` folder is `C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\BIN`. In the `BIN` folder, create the configuration files `cliproxy.exe.config` and

HP.Sharepoint.GranularRecovery.CLI.exe.config with the following content:

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
<runtime>
<generatePublisherEvidence enabled="false"/>
</runtime>
</configuration>
```

Slow response of the graphical user interface

Problem

You can notice slow response of the HP Data Protector Granular Recovery Extension GUI. For example when importing a content database from backup or from filesystem. The import job might fail, due to a time-out. The root cause of the problem is the HP Data Protector Granular Recovery Extension signature verification which may take too long to complete.

Action

To disable the HP Data Protector Granular Recovery Extension signature verification, locate the cliproxy.exe and the HP.Sharepoint.GranularRecovery.CLI.exe files in the Microsoft Office SharePoint Server BIN folder. By default, the path of the BIN folder is C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\BIN. In the BIN folder, create the configuration files cliproxy.exe.config and HP.Sharepoint.GranularRecovery.CLI.exe.config with the following content:

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
<runtime>
<generatePublisherEvidence enabled="false"/>
</runtime>
</configuration>
```

8 Removal

Procedure

1. Log on to the Microsoft Office SharePoint Server Central Administration system under a Microsoft Office SharePoint Server **Farm Administrator** user account.
2. Run `Setup.exe` to remove the HP Data Protector Granular Recovery Extension.

   Windows Server 2008: Do not forget to run `Setup.exe` with administrative rights if you have Windows UAC enabled (right-click **Setup.exe > Run as Administrator**). When the User Account Control dialog box is displayed, click **Allow**.
3. The HP Data Protector Granular Recovery Extension setup wizard is displayed. Click **Next**.

4. On the System Check page, click **Next**.

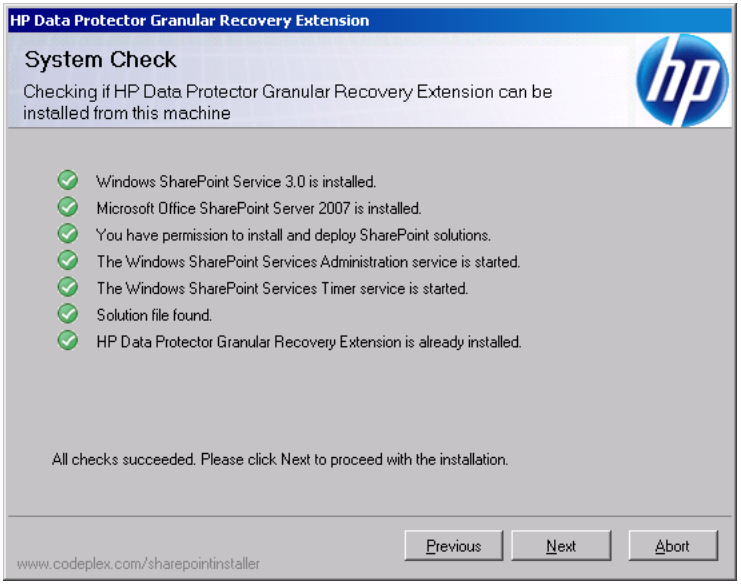

Figure 34 System Check page

5. On the Repair and Remove page, select **Remove** and click **Next**.

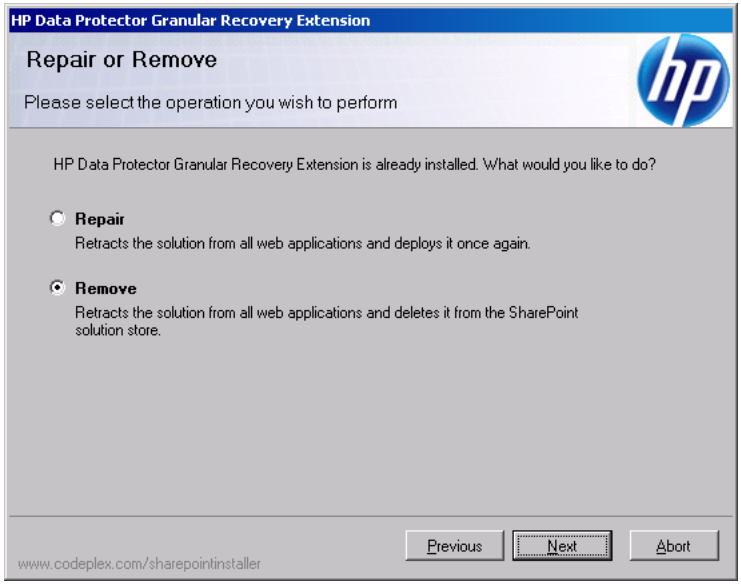

Figure 35 Repair or Remove page

6. On the Uninstalling page, click **Next**.

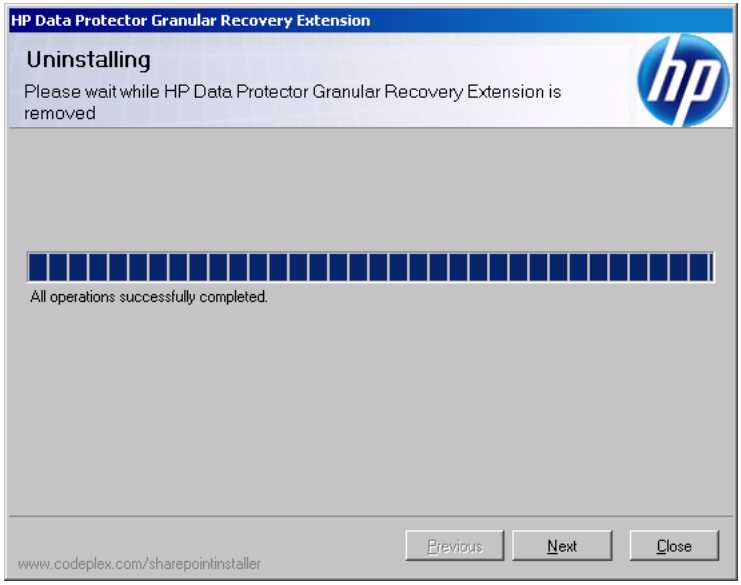

Figure 36 Uninstalling page

7. On the Uninstall Successfully Completed page, click **Close**.

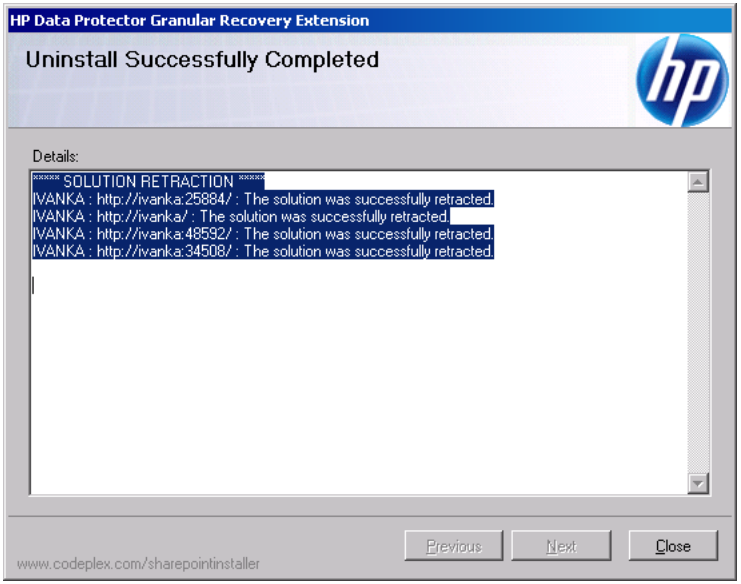

Figure 37 Uninstall Successfully Completed page

Index

A

advanced search, 45
audience, 11

B

backup, 29
backup solutions, 17
backup solutions, 15
  more information, 18
backup specifications
  configuring, 25
backup, importing content databases from, 34
browsing sites, 58

C

cache
  management, 33
  removing content databases, 50, 56
changing settings, 51
CLI, 53
command line reference, 53
configuring, 23
  Data Protector backup specifications, 25
  user rights, 23
content databases
  importing, 34
content databases, 15
  displaying information, 57
  exporting items, 56
  importing, 37
  importing from backup, 37
  importing from filesystem, 37
  importing items, 57
  listing, 55
  removing from cache, 50, 56
  removing from disk, 56
  restoring, 54
content recovery tasks, 40
conventions, document, 11

D

delay
  command line, 64
  HP Data Protector Granular Recovery Extension, 65
disk space, verifying, 55
document conventions, 11
documentation, providing feedback, 13

E

environments, 17
exported items, listing, 57
exporting from content database, 56

F

farm information, 57

filesystem, importing content databases from, 37

G

granular recovery
  cache management, 33
    link not accessible, 60, 62
  monitoring import jobs, 50
  starting, 31
granularity, 15
GUI, opening, 31

H

help, obtaining, 12
HP Data Protector Granular Recovery Extension
  cannot be removed, 63
  changing settings, 51
HP Data Protector Granular Recovery Extension
  installing, 17
  removing, 67
HP technical support, 12

I

IIS application pools, verifying configuration, 26
import jobs, monitoring, 50
importing
  content databases, 34
  content databases, 37
  content databases from backup, 34
  content databases from filesystem, 37
  from filesystem, 37
  from backup, 34
  items from content database, 57
installation, 17
installing
  HP Data Protector Granular Recovery Extension, 17
Internet Information Services
  See IIS

J

jobs, monitoring, 54

L

listing exported items, 57

M

Microsoft Office SharePoint farm information, 57
monitoring jobs, 54
mount fails, 59

O

Office SharePoint farm information, 57
opening the GUI, 31
operating systems, 17

P

performing content recovery tasks, 40
prerequisites
  before installing, 18
  for recovering site items, 41

R

recover granularity capability, 15
recovering site items, 41
  to a folder, 49
  to a network share, 49
  to another farm, 48
  to another location, 48, 56
  to original site, 55

recovery, 31
  fails, 60
Recovery Web Application
  settings, 23
Recovery Web Application
  verifying configuration, 23
removal, 67
removing
  content databases
    from cache, 50, 56
    from disk, 56
  HP Data Protector Granular Recovery Extension, 67
  HP Data Protector Granular Recovery Extension
    not possible, 63
  restore jobs, 55
restore
  fails, 59
  jobs, removing, 55

S

settings, changing, 51
site items
  advanced search, 45
  recovering, 41
  recovering to a folder, 49
  recovering to a network share, 49
  recovering to another farm, 48
  recovering to another location, 48, 56
  recovering to original site, 55
sites
  browsing, 58
  listing, 57
Subscriber's Choice, HP, 13
support matrix, 17

T

tasks, content recovery, 40
technical support
  service locator website, 13
technical support, HP, 12
troubleshooting, 59

U

user rights, 23

V

verifying configuration
  IIS application pools, 26
  Recovery Web Application, 23
verifying target disk space, 55

W

web browsers, 17
websites
  HP, 13
  HP Subscriber's Choice for Business, 13