



Copyright Notice & Proprietary Information

© Redstor Limited, 2016. All rights reserved.

Trademarks

® - Mac, Leopard, Snow Leopard, Lion and Mountain Lion are registered trademarks of Apple Inc.

Instruction Symbols

The following icons appear in the document:



Note: Important additional information.



Example: Practical illustration of a process or procedure.



Tip: Suggestion or hint to guide or assist users performing a task.



Warning: Warning against potential mistakes and actions that could cause critical error.



Contents

INTRODUCTION	6
Product overview	6
1. GETTING STARTED	7
2. INSTALLATION	7
Backup Pro Installer	8
Step 2 of 4: Select an install destination Step 3 of 4: Install Step 4 of 4: Close the installer	9
3. SETUP WIZARD	11
Step 1 of 7: Specify Storage Platform settings Step 2 of 7: Create or connect to a Backup Account Step 3 of 7: Specify Backup Account details Step 4 of 7: Confirm Backup Account summary Step 5 of 7: Schedule backup process Step 6 of 7: Optimise for backup environment Step 7 of 7: Confirm backup configuration Congratulations	
4. UPDATING BACKUP CLIENTS	
Auto Updates	
5. GRAPHICAL USER INTERFACE (GUI)	16
Opening the Backup Client The GUI explained Menu bar and toolbar buttons Tabs Product Help Status bar	
6. BACKUPS	21
How to back up Selecting data to back up Determining the backup selection size Exporting a selection report Starting a backup manually Scheduling automatic backups Cancelling a backup Resuming a backup	
7. RESTORES	32
How to restore	32



Finding files in backups	34
Restoring a backup selection	37
Restoring archived data	37
8. LOGS	39
Accessing log files	39
Changing log file settings	
9. OPTIONS AND SETTINGS	
Backup Account	
Details area	
Security area	
Backup Schedule	
Global Exclusions	
Exclude Files area	
Exclude Folders area	
Profiled Exclusions area	
Connection	
Proxy Server area	
Connection Throttle	45
Speed Limits area	45
Throttle Map area	45
Advanced Communications	46
Secure Connection	46
Retries and Timeouts	47
Concurrent Transfer	47
Backup Priority	47
Compression	48
Compression Level area	48
Compression Exceptions area	
Patching	
Delta Blocking area	
Binary Patching Threshold area	
Mandatory Patching area	
Disk Usage	
Working Folders area	
Disk Footprint	
Advanced Performance	
Backup Limit area	
Memory Allocation area	
Logging	
Backup Logs area	
Service Log area	
Advanced tools	
Remote Management	
Multiple backup sets	
Health Check	
Backup Snapshots	
Restore Snapshots (Disaster recovery)	60



Profiling	61
10. PLUG-INS	63
Email Notification plug-in	63
11. REFERENCE	65



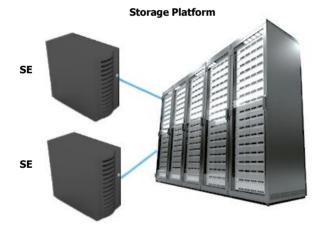
Introduction

Congratulations on choosing Backup Pro Server Edition. Backup Pro minimises risk, maximises productivity and allows businesses to regain control of their most valuable asset - their data.

For technical support, please go to **Redstor Backup Pro SE > About Redstor Backup Pro SE**, and then use the contact details provided.

Product overview

With Backup Pro Server Edition (SE), data stored on servers and databases can be backed up to a Storage Platform quickly, securely and automatically.



The following diagram illustrates the scenario:

Files and folders stored on one or more servers running SE can be backed up to a Storage Platform. In the event of data loss or corruption on the server, you can retrieve data from the Storage Platform and restore it to the original or another server in just a few easy steps.

A Backup Administrator can manage the entire backup environment (Backup Clients and the Storage Platform)

remotely, using the Backup Pro Storage Platform Console. For more information, please refer to the *Storage Platform Console User Manual*.



1. Getting started

Enabling manual or automatic backups is easy with Backup Pro Server Edition:



2. Installation

For the latest system requirements and compatibility information, please refer to the *System Requirements and Compatibility Matrix*.

The SE MSI file contains pre-configured information to make installing SE quick and easy.



Note: The options available during the installation process depend on the settings enabled by the administrator when the DMG file was created. These options range from advanced install settings to specifying the install location.



Warning:

- If running antivirus software, please ensure that all Backup Pro folders are excluded from being scanned to avoid data corruption.
- Both antivirus software scans and backup processes are resource-intensive. It is advised not to run a backup and virus scan at the same time as this will significantly decrease machine performance.
- Java is not included with installations of Mac OS X 10.7/10.8. For Backup Pro to function as intended, Java must be installed before Backup Pro. For more information, please refer to the Redstor Knowledge Base.

To install Backup Pro SE:

- 1. Run the DMG file.
- 2. Run the PKG file.



Warning: If you attempt to install Backup Pro on a system that is not supported, an error will be shown and the installation aborted. For the latest system requirements and compatibility information, please refer to the System Requirements and Compatibility Matrix.

3. In the Backup Pro Installer that appears, follow the steps to completion. See below.



Backup Pro Installer

The Backup Pro Installer typically consists of four steps to guide you through the installation in a simple, stepby-step manner. These steps also make it possible to undo previous operations by navigating backward.



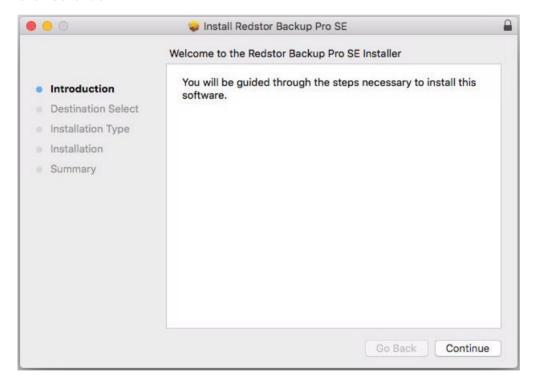
Note: Some of the settings described below may have been removed when the DMG was created. Furthermore, the wizard may contain additional steps. Please read each window carefully before continuing.

Step 1 of 4: Welcome

The Welcome page will outline the task to be performed.

To start the Backup Pro SE Setup Wizard:

Click Continue.



Step 2 of 4: Select an install destination

To select a destination for the SE application files and folders:

1. Select the disk on which you wish to install SE.



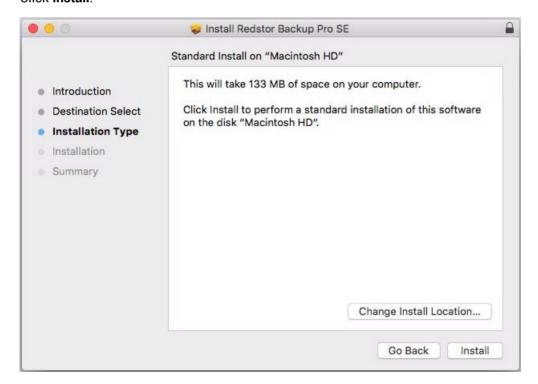


2. Click Continue.

Step 3 of 4: Install

To begin the SE installation:

Click Install.





Tip: Should you wish to change the install location, you can use the **Change Install Location** button.



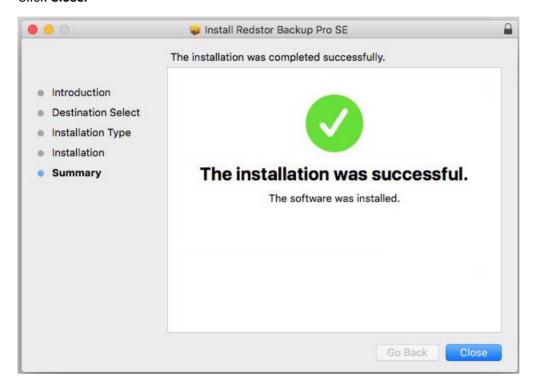
Note: At this point, you may be prompted to provide a password to allow the installer to make the required changes to the operating system. Supply your Mac username and password in the boxes provided, and then click **OK**.



Step 4 of 4: Close the installer

To close the installer:

Click Close.



After clicking Close, Backup Pro SE will be installed on the machine.

Eject the DMG when the installation is complete.

Upon opening the SE Client for the first time, the **Setup Wizard** will launch, enabling you to create a Backup Account. Follow the wizard steps as described in Chapter 3, "Setup Wizard".



3. Setup Wizard

The Setup Wizard consists of the Account Wizard and Backup Wizard combined into one. It is used to set up a Backup Account (which is required for backing up) and configure your backup settings. The Setup Wizard runs automatically the first time the Backup Client is opened. You can run the standalone Account Wizard or Backup Wizard at any other time by clicking:

- Tools > Wizards > Account Wizard
- Tools > Wizards > Backup Wizard



Note: If you run the Account Wizard, a warning box will appear. Click the **Run Account Wizard** button and follow the instructions.

The Setup Wizard typically consists of seven steps to guide you through the setup task in a simple, step-bystep manner.



Note: Some of the settings encountered in the wizard may have been removed when the DMG was created. Furthermore, the wizard may contain additional steps. Please read each window carefully before continuing.

Step 1 of 7: Specify Storage Platform settings

To specify the Storage Platform settings:

- 1. In the **Storage Platform address** box, type the IP address or DNS name of the Storage Platform where the Backup Account resides.
- 2. In the Backup Group box, specify which Backup Group the Backup Account belongs to.



Note: Type the Group name in relation to any Collections it may belong to. For example: COLLECTIONA\COLLECTIONB\GROUP

3. In the **Account Create Key** field, specify the preconfigured Backup Account create key for the applicable Group. If you do not have access to this key, please contact your Storage Platform administrator.



Note: This key is case sensitive.

4. Once all the correct settings have been entered, click **Next**.



Step 2 of 7: Create or connect to a Backup Account

You can either create a Backup Account or connect to an existing Backup Account.

To create a new Backup Account:

- 1. Select I want to create a new Backup Account.
- 2. Click Next.

To connect to an existing Backup Account:



Note: You can select I want to connect to an existing Backup Account to:

- Connect to an Account that has been opened for use by this computer.
- Reconnect to an Account to recover data from the computer that had previously backed up to this Account.
- 1. Select I want to connect to an existing Backup Account.



Warning: Different servers cannot back up to the same Backup Account. A separate Backup Account needs to be created for each server.

2. Click Next to continue.

Step 3 of 7: Specify Backup Account details

Depending on the option you selected in the previous step, you will either be prompted to specify new Backup Account details or to supply the already configured details of the existing Backup Account.

To specify new Account details:

- 1. In the **Backup Account name** box, type a Backup Account name that consists of a minimum of 4 characters.
- 2. In the **Backup Account password** box, type a password that consists of a minimum of 4 characters. Confirm it in the **Confirm password** box.
- 3. In the **Encryption key** box, type an encryption key that consists of a minimum of 8 characters. Confirm it in the **Confirm key** box.



Warning: Please write down your encryption key and store it in a safe place as YOU WILL NOT BE ABLE TO RESTORE YOUR DATA WITHOUT IT.

4. Click Next.



When connecting to an existing Account:

- 1. In the **Backup Account name** box, type the Backup Account name.
- 2. In the **Backup Account password** box, type the Account password.
- 3. In the Encryption key box, type the encryption key chosen when the Backup Account was created.
- 4. Click Next.

Step 4 of 7: Confirm Backup Account summary

Confirm that the information you have supplied is correct, and then click **Create** or **Reconnect**, depending on whether you are creating a new Backup Account or connecting to an existing Backup Account.

The Backup Client will connect to the Storage Platform and configure your Backup Account. A message will be displayed confirming that your Backup Account has been successfully configured.

This is the last step of the Account Wizard. After your Backup Account is successfully configured, the Setup Wizard will immediately start the Backup Wizard to help you configure your backup settings.

Step 5 of 7: Schedule backup process

Backup Pro can run backups on included files and folders either upon request (manually) or automatically. This step enables you to set up a backup schedule.



Tip: It is advised to back up at night when the server is running and the Backup Client is not in use. The server must be switched on at the time(s) specified for scheduled backups, but the Windows user does not need to be logged in.

To configure the Backup Client to run only manual backups:



Warning: This option is not recommended. If an automated backup schedule is not created, backups will have to be run manually. Enabling automatic backups is strongly advised.

- 1. Clear the **Daily automated backup** and **Advanced schedule...** check boxes.
- 2. Click **Next** to move to the next step in the wizard.

To schedule a daily automated backup:

- 1. Select the **Daily automated backup** check box.
- 2. Specify a time in the associated box.
- Click Next to move to the next step in the wizard or create an advanced backup schedule as described below.



To create an advanced backup schedule:

- 1. Select the Advanced schedule (back up at the following times) check box.
- 2. In the Week day box, select a day on which a backup should be initiated.
- 3. Specify the time in the Backup time box.
- 4. Click the Add button to add the day and time to the Advanced schedule box.
- 5. Repeat the steps above until you have added all desired schedules.
- 6. Click **Next** to move to the next step in the wizard.

Step 6 of 7: Optimise for backup environment

The Backup Wizard enables you to quickly optimise your settings for backing up in a specific environment.

To optimise your settings:

- 1. Select what type of connection you use to back up.
- 2. Select whether you want to optimise to minimise time and disk usage or transfer size.
 - Using the options you have chosen, the Backup Wizard displays a compression and processing summary that details the effects your choices will have. It also provides a brief summary of these effects.
- 3. Click Next to continue.

Step 7 of 7: Confirm backup configuration

The wizard displays a summary of the choices you have made. It also shows the working folders which you can edit by clicking the **edit...** link.



Note: If the drive on which the Backup Client is installed has limited space available, you can move the folders and selection database to another location.

The **Temp** and **Cache** folders must reside on the same drive/volume.

The wizard also displays a list of installed plug-ins. Certain plug-ins, identified by blue text, can be customised from this step clicking on the plug-in. Alternatively, you can access and configure the plug-ins later from the **Tools** menu.

Finally, the wizard also displays the optimisation options that you chose, together with the effects of your choices.

Click Finish to complete the wizard.

Congratulations

You have now successfully completed the Setup Wizard. Click Next and select data to back up.



4. Updating Backup Clients

Auto Updates

Backup Pro automates the update process so that the Backup Client is automatically updated with the latest software version during the backup process.

Redstor distributes software updates to the AccountServer. The AccountServer then distributes these packs to the different Backup Clients as they are requested during the backup process.



Note:

- Auto Updates must be enabled on the Storage Platform for this feature to work. For more information on enabling Auto Updates, please refer to the Storage Platform Console User Manual.
- By default, if there is less than 500 MB free space available, an update pack is not requested. This is logged to the Backup Service log.
- Backup Clients are always updated to the latest version and service pack available on the Storage Platform.



Warning: Backup Pro v16 does not support the PowerPC architecture or the Leopard OS. If Auto Updates are enabled on an environment featuring either of these, the Backup Client will not be upgraded to v16.

If a Backup Client update is available, the following will occur. After the backup process has completed, if the Backup Client GUI is open, you will be presented with an update dialog box. You have the option to update now or cancel:

- Clicking Update now closes the Backup Client GUI and installs the update.
- Clicking **Cancel** closes the dialog box and does **not** install the update. The dialog box will appear again the next time you back up.

If the Backup Client GUI is closed when an automated backup occurs, the update will be installed automatically. After an Auto Update occurs, the Backup Pro system tray icon will display a notification indicating that the update was successfully applied.

Plug-ins can also be updated automatically. During the backup process, the Storage Platform will compare the plug-in versions received from the Backup Client with the latest versions available on the Storage Platform. If newer versions are available, the Backup Client will download the files and automatically update the installed plug-ins.



5. Graphical User Interface (GUI)

You can use the Graphical User Interface (GUI) to:

- Select files for backup
- Launch backups
- Schedule automatic backups
- Find files in previous backups
- · Restore files and folders from previous backups

Opening the Backup Client

To open the SE Client interface:

Click the Backup Pro icon on the Dock.



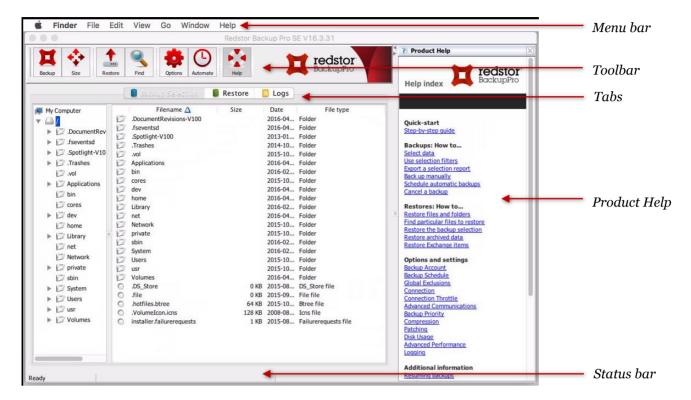
Note: The first time you open the Backup Client, the Setup Wizard launches automatically. For more information on creating a Backup Account, see Chapter 3, "Setup Wizard".

The GUI explained

You can manage and monitor backups using the Backup Client application window.

The Backup Client application window contains the following areas:





Menu bar and toolbar buttons

All Backup Client functions can be performed from the menu bar. Shortcuts to the most commonly used menu bar functions are also available on the toolbar and shortcut (Control-click) menus.

Menu bar

Each menu on the menu bar contains one or more options. The tables below describe the options available.

Backup Pro SE menu

Option	Click the option to	
About Redstor Backup Pro SE	Access the product information and support contact details.	
Preferences	Opens the Options and Settings dialog box that enables you to modify a range of Backup Client settings. For more information, see Chapter 9, "Options and settings".	
Hides the Backup Pro SE application window.		
Hide Backup Pro SE	Note: This will not stop the Backup Pro service from running scheduled backups.	
Quit Backup Pro SE	Closes the Backup Pro SE application.	



File menu

Option	Click the option to	
Backup	Initiate a backup immediately.	
Restore	Switch to the Restore view in the Backup Client. Tip: For faster access to the Restore view, click the Restore tab instead of	
	using the File menu.	
Calculate Size	Determine the total size of the data included in the backup selection. For more information, see <i>Determining the backup selection size</i> in Chapter 6, "Backups".	
Find Files in Backups	Access the Find Files in Backups dialog box. This box enables you to search for particular files in your backups. For more information, see <i>Finding files in backups in Chapter 7, "Restores"</i> .	
Export Selection	Export a list of all backup inclusions and exclusions to an html file for future reference. For more information, see Exporting a selection report in Chapter 6, "Backups".	

Tools menu

Option	Click the option to
Additional Backup Sets > Add	Create additional backup sets. This enables you to have separate backup selections that you can recover as separate sets of files. For more information, see <i>Multiple backup sets</i> in Chapter 9, "Options and settings".
Additional Backup Sets > Manage	Access the Backup Schedule page in the Options and Settings dialog box. Using the settings in this dialog box, you can manage the schedule(s) of your backup sets. For more information, see <i>Multiple backup sets</i> in Chapter 9, "Options and settings".
Automatic Backups	Access the Backup Schedule settings in the Options and Settings dialog box. Configure the settings in the Automatic Backups area to set up one or more automatic backups. For more information, see <i>Scheduling automatic backups</i> in Chapter 6, "Backups".
Wizards > Account Wizard	Launch the Account Wizard, which is a standalone wizard that enables you to change your Backup Account settings. For more information, see Chapter 3, "Setup Wizard".
Wizards > Backup Wizard	Launch the Backup Wizard, which is a standalone wizard that enables you to configure your backup settings. For more information, see Chapter 3, "Setup Wizard".
Remote Management	Access the Remote Management Settings dialog box. Using the settings available, you can enable Remote Management of the Client via the SP Console. For more information, see <i>Remote Management</i> in Chapter 9, "Options and settings".
Health Check	Access the Health Check dialog box. Performing a Health Check enables you to highlight possible issues. For more information, see <i>Health Check</i> in Chapter 9, "Options and settings".
Snapshot > Export Backup Snapshot	Access the Export Backup Snapshot dialog box, which enables you to configure the next backup to be a Snapshot backup to a specific location. For more information, see <i>Backup</i>

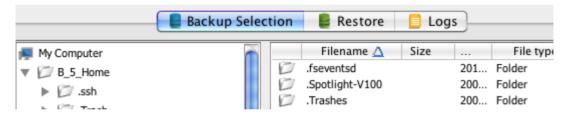


Option	Click the option to	
	Snapshots in Chapter 9, "Options and settings".	
Snapshot > Import Restore Snapshot	Access the Import Backup Snapshot dialog box, which enables you to configure Restore Snapshot settings. For more information, see <i>Restore Snapshots</i> in Chapter 9, "Options and settings".	
Plug-ins > Email Notification	Access the Email Notification settings dialog box, which you can use to enable/disable Email notification and configure its settings. For more information, see <i>Email Notification plug-in</i> in Chapter 10, "Plug-ins".	

Help menu

Option	Click the option to
Icon Legend	Access a list of the icons used in the Backup Pro Client and their meanings.
Product Help	Access the Product Help.

Tabs



There are three tabs available in the Backup Client:

- Backup Selection: This tab displays the files and folders on the computer, enabling you to select the items to be backed up. For more information, see *How to select data to data back up* in Chapter 6, "Backups".
- Restore: Use this tab to browse previous backups and restore files and folders.
- Logs: Use this tab to view detailed information on each backup and restore.



Tip: When the **Backup Selection** and **Restore** tabs are selected, you can click any of the column headings in the right-hand pane to sort the contents accordingly.

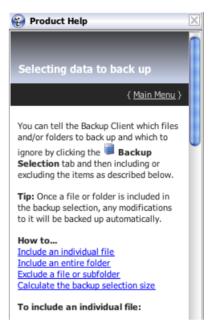


Product Help



You can access the Backup Client Help by clicking **Product Help** on the **Help** menu. Alternatively, click the **Help** button on the toolbar.

As you navigate the Backup Client, the **Product Help** pane will display information relevant to the selected tab.



Status bar

This area displays the date and time of the last backup performed by the system.

Ready Last backup:Jan 23, 2010 4:10:58 PM



6. Backups

After installing Backup Pro Server Edition (SE) and creating a Backup Account, you can tell the Backup Client which files and/or folders to back up and which to ignore by creating a backup selection (see "Selecting data to back up" below). You can then start a backup manually or schedule automatic backups (see "Performing a manual backup" and "Scheduling automatic backups" below).



Note: Any changes, additions or deletions to included files and folders will be backed up intelligently with every manual or scheduled backup.

How to back up

The following sections describe how to:

- Select data to back up
- Use filters to specify files and/or folders to be excluded from the backup selection
- Determine the backup selection size
- · Export a selection report
- Start backups (automatically and manually)
- Cancel a backup
- Resume a failed or cancelled backup

Selecting data to back up

You can make your first backup selection or modify a backup selection at any time using the **Backup Selection** tab as described below.



Tip: You should exclude the Backup Client installation folder, as including it increases the size of your backup unnecessarily.

To select files and folders for backup:

- 1. Click the Backup Selection tab.
- 2. In the Backup Selection tree, navigate to the folder or directory containing the file or folder.
- 3. Include or exclude files and/or folders, as described below.





Tip: Once a file or folder is included in the backup selection, any modifications to it will be backed up automatically. For more information, see Patching in Chapter 9, "Options and settings".



Warning: If you have limited space on the drive running the Backup Client, it is recommended that you move the Cache, Logs and Temporary folders as well as the selection database to another location. For more information, see Disk Usage in Chapter 9, "Options and settings".

To include an individual file:

In the Backup Selection tree, navigate to the folder or directory containing the file. In the right-hand pane, click the file icon () or point to the file name and Control-click, and then click **Include**. An included file is displayed with a green icon: .

To deselect a file, you can either click the icon again or point to the file name and Control-click, and then click **Deselect**. A folder containing some included files is displayed with a green tinted icon:

To include an entire folder:

Point to the folder icon () and Control-click, and then click **Include Folder**. Alternatively, you can select the folder in the Backup Selection tree, and then click **Include Folder** on the **Selection** menu. Included folders are displayed with a green icon:



Note: All files in the included folder and its subfolders will be included in the next backup. Any changes made within this folder or its subfolders will automatically be included as well.

To deselect a folder,

Point to the folder icon, Control-click, and then click Deselect Folder.

To exclude a file or subfolder:

If an entire folder is included but you wish to exclude a particular file or subfolder, point to the file or folder icon and Control-click, and then click **Exclude** or **Exclude** Folder. Excluded items are displayed with red icons: \bigcirc or \bigcirc . Folders that have been included but have some files or subfolders excluded are green with a red tint: \bigcirc .



Tip:

- You can create different backup selections for different backup sets. For more information, see Multiple backup sets in Chapter 9, "Options and settings".
- You can use filters to automate file selection based on file types.
- Once you have selected all files to be included and excluded, it may be useful to check the size
 of your backup selection before initiating your first backup. For more information, see Using
 filters later in this chapter.





Note: Some directories (and their contents) are forcefully excluded from the backup selection. On Mac machines, these are the /dev and /proc directories.

Using filters

You can use filters to automate file inclusions or exclusions within a folder, based on file types.



Example: A *.pdf filter will include or exclude all PDF files within a folder, as well as any new PDF files that are added to that folder later.

To apply a predefined filter to a specific folder:

- 1. In the Backup Selection tree, point to the folder icon and Control -click.
- 2. Point to Filters.
- 3. Point to one of the available filters in the list (e.g. MS Office documents).
- 4. Click Include or Exclude.

To modify an existing filter:

- 1. In the Backup Selection tree, point to the folder icon and Control-click, point to **Filters**, and then click **Edit filters**.
- 2. Select one of the filters and then modify its properties in the **Edit filter** box.
- 3. Click OK.



Tip: To add a new filter from within the **Edit filters** dialog box, click the **New** button, supply a name that describes the filter, enter the file type(s), and then click **OK**.

To add a new filter via the Backup Selection tree:

- 1. Point to the folder icon, Control-click, and then click New filter.
- 2. In the **Filter name** box, type a name to be used in the Filters menu.
- 3. In the **Filter** box, specify the file extensions to which the filter will apply.
- 4. Click OK.

The filter will be added to the Filters menu and you will be able to use it to include or exclude all files matching its criteria.

To remove filters from a folder:

1. Point to the folder icon and Control-click.



- 2. Point to Filters.
- 3. Point to the name of the filter you wish to remove.
- 4. Clear the check mark next to the selection (Include or Exclude).

To identify files and folders selected by filters:

Look at the icon state. Files and folders included in the backup selection by filters display with icons containing blue check marks: \bigcirc and \bigcirc .

Inclusions and exclusions by "profiling"

Some inclusions and exclusions are enforced at administration level on the Storage Platform. This is called "profiling". For more information, see *Profiling* in Chapter 9, "Options and settings".

Files and folders affected by profiling display with the following icons:

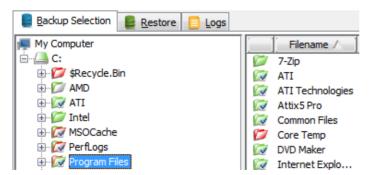




Note: Profiled selections cannot be modified from within the Backup Client and can only be changed on the Storage Platform. For more information, please refer to the Storage Platform Console User Manual.

Icon legend

On the **Backup Selection** tab, each file and folder is displayed with an associated icon. The colour of the icon indicates the file or folder's backup selection status. (For more information on backup selections, see *Selecting data to back up* earlier in this chapter.)



The following icon legend lists the Backup Pro icons and the statuses they indicate. You can access this legend by clicking **Icon Legend** on the **Help** menu.



Icon legend

Icon	Status	Description
0	File (not selected)	The file exists in the folder or directory but is not <i>included</i> in the backup selection (neither included nor excluded).
•	Selected by user	The Backup Client user has included the file in the backup selection.
⊙	Selected by user filter	The Backup Client user has applied a filter to the parent folder or directory. That filter has <i>included</i> the file in the backup selection.
0	Excluded by user	The Backup Client user has <i>excluded</i> the file from being backed up to the Storage Platform.
0	Excluded by administrator	The Backup or Storage Platform Administrator has <i>excluded</i> this file or its file type. Files displaying this icon will not be backed up to the Storage Platform.
9	Included by profiling	The Backup or Storage Platform Administrator has <i>included</i> this file or file type. Files displaying this icon will be backed up to the Storage Platform and cannot be deselected from within the Backup Client.
Q	Included by profiling filter	The Backup or Storage Platform Administrator has applied a filter to the parent folder or directory. That filter has <i>included</i> the file in the backup selection. Files displaying this icon cannot be <i>deselected</i> or <i>excluded</i> from within the Backup Client.
0	Excluded by profiling	The Backup or Storage Platform Administrator has <i>excluded</i> this file or its file type. Files displaying this icon will not be backed up to the Storage Platform and cannot be <i>included</i> in the backup selection from within the Backup Client.
0	Folder (not selected)	The folder exists in the directory but it is not <i>included</i> in the backup selection.
	Some files included by user	The Backup Client user has <i>included</i> some files or folders in the backup selection.
	All files selected by user	The Backup Client user has <i>included</i> all files in the backup selection.
	All files selected by user, some excluded	The folder contains no unselected files. Each file is either <i>included</i> or <i>excluded</i> .
>	All files excluded by the user	The Backup Client user has <i>excluded</i> all files in the folder from being backed up to the Storage Platform.
	Filter applied by user	The Backup Client user has applied a filter to the folder. The filter has <i>included</i> one or more files within the folder or sub-folders.
	Filter applied by user, some excluded	The Backup Client user has applied a filter to the folder that has <i>included</i> and <i>excluded</i> files within it.



lcon	Status	Description
	All items included by profiling	The Backup Administrator has <i>included</i> all the files contained in the folder. All files will be backed up to the Storage Platform. These inclusions cannot be changed by the Backup Client user.
	Filter applied by profiling	The Backup Administrator has applied a filter to the folder. This filter cannot be removed by a Backup Client user.
	Filter applied by user, all items excluded	The Backup Client user has applied a filter to the folder, resulting in the folder being <i>excluded</i> from the backup selection.
	Filter applied by profiling, some items included by user	The Backup Administrator has applied a filter to this folder using profiling and some items have been manually <i>included</i> by the Backup Client user (see "Selecting data to back up" earlier in this chapter).
⊠	Filter applied by profiling, some items included and some items excluded by user.	The Backup Administrator has applied a filter to this folder using profiling. Some items have been <i>excluded</i> and others <i>included</i> by the Backup Client user (see "Selecting data to back up" earlier in this chapter).
	Filter applied by profiling but items excluded by user.	Items in the folder have been <i>included</i> using filters (see "Using filters" earlier in this chapter.)
	Folder excluded by Global Filter.	The folder has been excluded using Global Exclusions.
10	All items (files, folders, etc.) excluded by profiling	The Backup Administrator has <i>excluded</i> all files in the folder and sub-folders. These <i>excluded</i> files cannot be <i>included</i> by a Backup Client user.
Æ	Plug-in node (not selected)	The plug-in exists but is not selected for backup to the Storage Platform.
æ	Some items selected by user	The Backup Client user has selected some of the items in the plug-in for backup to the Storage Platform.
A	All items selected by user	The Backup Client user has selected all items in the plug-in for backup to the Storage Platform.
A	All items selected by user, some excluded	The Backup Client user has included and excluded items in the plug-in.
Æ	All items excluded by user	The Backup Client user has <i>excluded</i> all items in the plug-in from being backed up to the Storage Platform.
A	Filter applied by user	The Backup Client user has applied a filter to the plug-in; specifying that certain file types must be <i>included</i> for backup to the Storage Platform.
ß	Filter applied by user, some excluded	The Backup Client user has applied a filter to the plug-in; specifying that certain file types be <i>included</i> for backup to the Storage Platform but some items have been <i>excluded</i> either through the use of an exclusion filter or by manual exclusion.



Note: For more information, see "Inclusions and exclusions by 'profiling'" in Chapter 5, "Graphical User Interface (GUI)" and plug-ins in Chapter 10, "Plug-ins".



Determining the backup selection size

It is useful to determine the backup selection size before starting the backup process to avoid Over Limit errors.



Note: The Backup Client compares your backup selection size with the Backup Account limit (specified by your Backup Administrator) at the beginning of the backup process. If the selection size exceeds the Account limit, the backup process will stop and an Over Limit error message will be displayed.

To calculate the backup selection size:

- A. On the File menu, click Calculate Size.
- B. Alternatively, click the **Size** button on the toolbar:



The **Backup Selection Size** dialog box that appears displays total size of your backup selection (i.e. all files included for backup).

Backup set index prepared in < 1s Files and directories: 0 Total size: 0 bytes



Warning:

- If your backup selection size exceeds your Backup Account limit, you need to remove some items from the selection or ask your Backup Administrator to upgrade your Backup Account limit
- If a backup fails and an Out of Memory error message is recorded in the backup log, you need to increase the default amount of server memory you wish to allocate to the backup service.

To remove a file from the backup selection:

A. In the **Size** dialog box, point to file's icon: and Control-click. The icon will turn red to indicate that it is excluded:



Note: Important additional information.

B. Alternatively, on the **Backup Selection** tab, deselect or exclude files or folders that are currently selected for backup. For more information, see *Selecting data to back up* in Chapter 6, "Backups".



Exporting a selection report

After creating a backup selection, you can export a list of all backup inclusions and exclusions to an html file for future reference.

The selection report will specify:

- Files and folders included in the backup
- Files and folders excluded from the backup
- How each item was selected (user-selected, filters, profiling, global exclusions or mandatory patching)
- Where each item is located on the machine
- The total number of items in the backup selection

To export a selection report:

- 1. On the File menu, click Export Selection.
- In the Save As dialog box, select the location in which to save the file, type a file name in the File name box, and then click Export.

The file will be saved to the specified location and can be viewed in any Internet browser.



Starting a backup manually



Tip: Run a backup manually after creating your backup selection to ensure immediate data transmission to the Storage Platform. Thereafter, automatic backups will ensure hassle-free continuous backups. For more information, see "Scheduling automatic backups" later in this chapter.

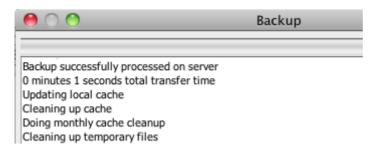
To start a backup manually:

1. On the File menu, click Backup Now. Alternatively, click the Backup button on the toolbar.



The **Backup** dialog box appears and displays the progress of the backup:





If multiple backup sets are enabled and their backup windows overlap, a backup queue will display in the **Backup** dialog box, enabling you to cancel the current backup in favour of the next, should you wish to do so. For more information, see *Multiple backup sets* in Chapter 9, "Options and settings".

To close the Backup Client after the backup process has started, click the **Hide** button. This will **not** cancel the backup process and the Backup Client can be re-opened at any time to view the progress of the backup.



Tip: Suggestion or hint to guide or assist users performing a task.

- You can monitor the backup progress at any time by pointing to the system tray icon, Controlclicking, and then clicking **Monitor Progress**.
- To view backup logs, click the **Logs** tab. Backup log dates are displayed in blue.

Scheduling automatic backups

Automatic backups are usually enabled and configured either during the Setup Wizard or during the Backup Wizard but you can enable and schedule them at any point in time using the **Options and Settings** dialog box.

To schedule a daily automated backup:

- 1. On the **Redstor Backup Pro SE** menu, click **Preferences**. Alternatively, click the **Options** button on the toolbar.
- 2. In the Options and Settings dialog box, click Backup Schedule.
- 3. If multiple backup sets are enabled, ensure that the correct set is selected in the **Backup set** drop-down box. (For more information on backup sets, see *Multiple backup sets* in Chapter 9, "Options and settings".)
- 4. Select the Daily automated backup check box, and then specify a backup time in the associated box.
- 5. Click OK.

To create an advanced backup schedule:

- 1. On the Redstor Backup Pro SE menu, click Preferences.
- 2. In the Options and Settings dialog box, click Backup Schedule.
- 3. If multiple backup sets are enabled, ensure that the correct set is selected in the Backup set drop-down box. (For more information on backup sets, see *Multiple backup sets* in Chapter 9, "Options and settings".)



- 4. Select the Advanced schedule (back up at the following times) check box.
- 5. In the Week day box, select the day on which a backup should be initiated.
- 6. Specify the time in the **Backup time** box.
- 7. Click the Add button to add the day and time to the Advanced schedule box.
- 8. Repeat steps 2 to 4 above until you have added all desired schedules to the Advanced schedule box.

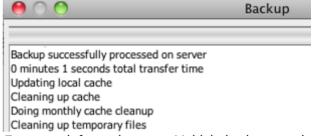


Tip:

- You are advised to back up at night when the server running the Backup Client is not in use. It
 must be switched on at the scheduled backup time(s), but the Mac user does not need to be
 logged in.
- Configuring automatic backups ensures that all selected data is backed up automatically, without the need for any user interaction. This is a safer alternative to relying on manual backups.

Backups will initiate at the scheduled times and the **Backup** dialog box will appear displaying the progress of the backup:

If multiple backup sets are enabled and their backup windows overlap, a backup queue will display in the **Backup** dialog box, enabling you to cancel the current backup in favour of the next. should you wish to do so



backup in favour of the next, should you wish to do so. For more information, see *Multiple backup sets* in Chapter 9, "Options and settings".



Tip:

- To close the Backup Client after the backup process has started, click the Hide button. This will
 not cancel the backup process and you can re-open the Backup Client at any time to view the
 progress of the backup.
- You can monitor the backup progress at any time by pointing to the system tray icon, Controlclicking, and then clicking Monitor Progress.
- To view backup logs, click the **Logs** tab. Backup log dates are displayed in blue.

Backups will be stored on the Storage Platform and accessible via the **Restore** tab. For more information on restoring data, see Chapter 7, "Restores".

Cancelling a backup

Once a backup is in progress, you can cancel the process via the Backup progress window or using the system tray icon.



To cancel a backup:

In the **Backup** progress window, click the **Cancel** button.



The backup will be cancelled.

Resuming a backup

By default, the Backup Client tries to connect to the Storage Platform four times before cancelling the backup process. If, however, the previous backup was not successful and a manual backup is initiated, the Backup Client will display the prompt: "Do you want to resume the failed backup...?" with a 30 second countdown.



- Click Yes to instruct the Backup Client to try to continue from where the process failed during the previous backup,
- Click No to initiate a new backup or
- Cancel to return to the Backup Client application window.



Note:

- You can only resume a backup if the backup completed the Processing stage.
- A new backup will be initiated automatically after the countdown has elapsed.



7. Restores

On the **Restore** tab, you can browse a tree structure representation of all successful backups and their files and folders.

How to restore

The following sections describe how to select data to restore, start the restore process, and search for specific backed up files.

Selecting data to restore

On the **Restore** tab, the Restore tree gives you access to backed up files via two main nodes: **Last Backup** and **Previous Backups**.

The **Last Backup** node contains the file/folder structure of the last successful backup and displays the date and time it occurred in parentheses "()".



Note: Restores done from the **Last Backup** node are typically faster than those done from the **Previous Backups** node as the Backup Client may be able to retrieve the data from the cache instead the Storage Platform.

When you expand the **Previous Backups** node, the Backup Client retrieves the list of previous backups from the Storage Platform and displays them in the tree.

To select and restore data from the last backup:

- 1. Click the Restore tab.
- 2. Expand the Last Backup node to view the files/folders.
- 3. Include a single file by clicking the icon next to the file or by pointing to the file name, Control-clicking, and then clicking **Include**. Each included file is displayed with a green icon:
- 4. Include an entire folder by pointing to the folder, Control-clicking, and then clicking **Include folder**. Each included folder is displayed with a green folder icon:
- 5. If an entire folder is included but you wish to exclude a particular file or subfolder, point to the file or folder icon, Control-click, and then click **Exclude** or **Exclude Folder**. Excluded items are displayed with red icons: or control-click items are displayed with a red icons: or control-click. Included folders that have some files or subfolders excluded are green with a red tint: control-click.
- 6. Once all the files and folders to be restored are selected, start the restore process by clicking **Restore** on the **File** menu or the **Restore** button on the toolbar. For information on the restore options available, see "Restoring data" later in this chapter.



To select and restore data from previous backups:

- 1. Click the Restore tab.
- 2. Expand the **Previous Backups** node to connect to the Storage Platform and retrieve a list of all previous backup dates.
- 3. Expand the relevant backup node, and then click the folder/directory containing the data.
- 4. Include a single file by clicking the icon next to the file or by pointing to the file name, Control-clicking, and then clicking **Include**. Each included file is displayed with a green icon:
- 5. Include an entire folder by pointing to the folder, Control-clicking, and then clicking **Include folder**. Each included folder is displayed with a green folder icon:
- 6. If an entire folder is included but you wish to exclude a particular file or subfolder, point to the file or folder icon and Control-click, and then click **Exclude** or **Exclude Folder**. Excluded items are displayed with red icons:
 or
 note included folders that have some files or subfolders excluded are green with a red tint:
- 7. Once all the files and folders to be restored are selected, start the restore process by clicking **Restore** on the **File** menu or the **Restore** button on the toolbar. For information on the restore options available, see "Restoring data" below.

Restoring data

After you have selected the files and folders to restore, you can start the restore process as described below.

To start the restore process:

1. On the File menu, click Restore. Alternatively, click the Restore button on the toolbar:



The **Restore** dialog box will prompt you for a restore location:

2. Select **Original location** to restore the files to the same location that they were backed up from or select **Folder** and then browse to a new location.



Warning: If **Original location** is selected, the restored files will overwrite any existing files with the same name in that location. A warning will, however, be displayed before the Backup Client overwrites any files.

- 3. In the I want... section, select either the fastest restore (no resume possible) or to resume interrupted transfers depending on your requirements.
- 4. Click the **Show advanced options...** link to display the advanced restore options. You can now specify the rest of the restore options by selecting or clearing the following check boxes:



a. **Recreate folder structure** – This option is selected by default. It instructs the Backup Client to recreate the folder structure in the restore folder. Clear this check box if you wish to restore the files to a single folder.



Note: If restoring files from different folders with the same file names, you need to recreate the folder structure to prevent overwriting the files

b. **Restore empty folders** – If the **Recreate directory structure** option is selected, you can select this check box to recreate empty folders.



Note: This option is only available when Recreate directory structure is selected.

- c. **Restore file and folder permissions** Clear this check box if you do not wish to restore the file and folder permissions. You would typically only select this option after a complete server failure (to restore files before user accounts are re-created).
- d. **Overwrite files** Select this check box if you do not want the Backup Client to prompt you before overwriting an existing file.
- 5. Click Restore.



Note: You can view restore logs on the **Logs** tab. Restore log dates are displayed in green.

Finding files in backups

To find a specific backed up file, it may be easier to use the **Find** function than to browse the Restore tree.

You have the option to scan only your last backup (locally), or you can connect to the Storage Platform and search through previous backups.

To search for a file in your latest backup:

1. On the File menu, click Find Files in Backups. Alternatively, click the Find button on the toolbar:



2. Type the file name or part thereof in the **File name** box, and then click **Find**.







Example: If "sales" is searched for, the Backup Client will display a list of all files in the last backup containing "sales" in the filename.



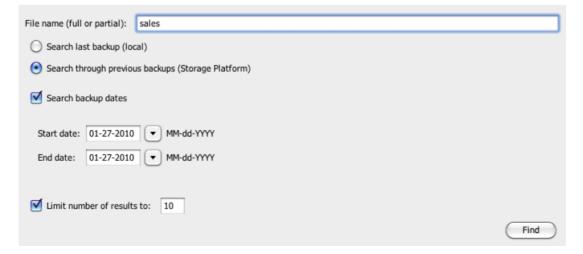
Tip: Use the * and ? wildcards for advanced search queries.

To search for a file in previous backups:

1. On the File menu, click Find Files in Backups. Alternatively, click the Find button on the toolbar:



2. Type the file name or part thereof in the File name box.



- 3. Select the Search through previous backups (Storage Platform) check box.
- 4. If you wish to limit the search to particular dates, select the **Search backup dates** check box and then use the **Start date** and **End date** boxes to specify a time period.



- 5. To limit the number of results that display, select the **Limit number of results to** check box and then type a number in the box provided.
- 6. Click Find.



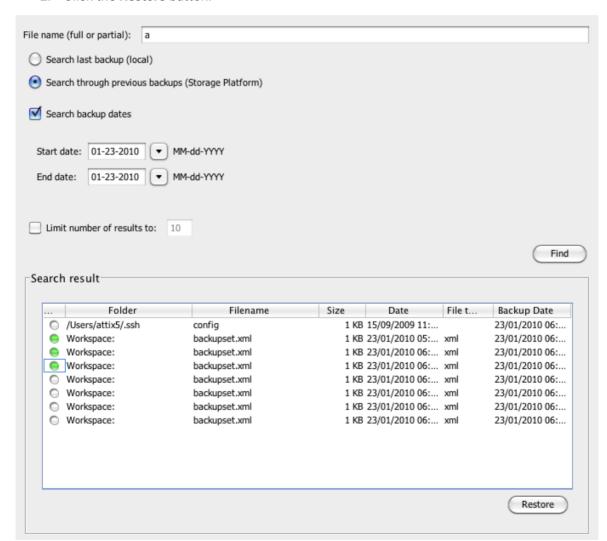
Tip: Use the * and ? wildcards for advanced search queries.



Note: If **Search backup dates** is selected, the **backup date** is used for the search instead of the **file created** or **file modified** date.

To restore files from the Find Files in Backup dialog box:

- 1. In the search results list, include the files to restore by clicking the icons next to the file names or by Control-clicking each file name and then clicking **Include**.
- Click the Restore button.





The **Restore Options** dialog box will appear, enabling you to specify the location in which to save the restored files. For more information on restore options, see "Selecting data to restore" earlier in this chapter.

Restoring a backup selection

By default, with every backup performed, a copy of the backup selection is saved on the Storage Platform. For more information on backup selection, see "Selecting data to back up" earlier in this chapter.

This enables you to restore, not only your backed up files and folders, but the selection you used to back them up as well.



Note: This is especially useful in disaster recovery cases, as it enables you to restore your entire backup setup to perform exactly as it did at the last backup.

To restore a backup selection:

- 1. Click the Restore tab.
- 2. Expand the relevant backup folder, and then click the Workspace node.
- 3. In the right-hand pane, click the icon next to the name of the backup set to include it for restore. If you have not enabled multiple backup sets (see *Multiple backup sets* in Chapter 9, "Options and settings"), include the only entry that displays.



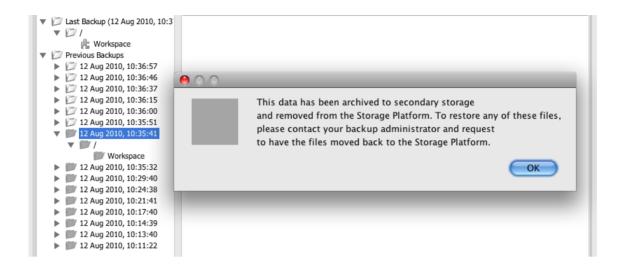
- 4. Click the **Restore** button on the toolbar.
- 5. Select the appropriate restore options. (See "Selecting data to restore" earlier in this chapter.)
- 6. Click Restore.

The backup selection will be restored to the location specified in the restore options.

Restoring archived data

Backup Pro allows Backup Administrators to archive Backup Clients' data to tape or another disk drive using the Hierarchical Storage Management (HSM) feature. Once data has been archived, the backups will display in the Restore tree as greyed out folders, allowing you to browse the file/folder structure of the backups. However, if you try to restore archived data, you may receive a message informing you that the data has been archived to secondary storage, as illustrated in the screenshot below.







Note: Grey folders indicate archived data. However, if you do not see these folders in the **Restore** tree, it does not mean that no archived backups are available. In such cases, please consult your Backup Administrator for further details about archived backups.

You can access archived data by requesting that your Backup Administrator import the HSM data to the Storage Platform. Once the data has been imported, it will be available for restore in the same manner as all other backups.

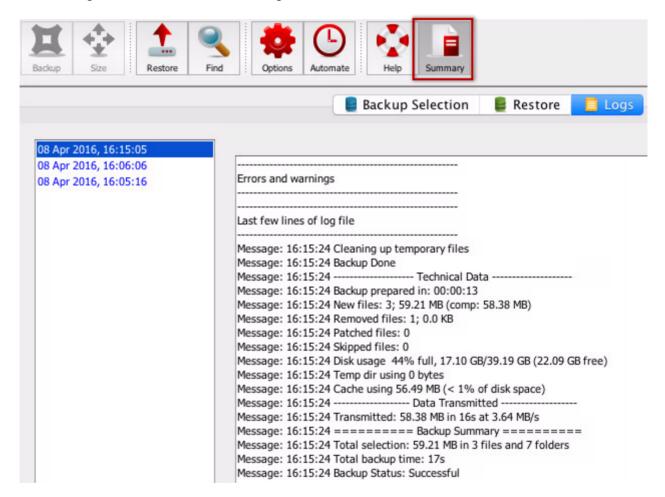


8. Logs

The Backup Client logs all backup and restore processes and their results in log files that you can view on the **Logs** tab. The following sections describe how to access log files and modify their settings.

Accessing log files

The **Logs** tab in the Backup Client provides detailed information about each backup and restore. An additional toolbar button appears when the **Logs** tab is opened: the **Summary** button. Use the button to view only errors and warnings and the last 14 lines in the log file.





Tip: You can use the **Up** arrow, **Down** arrow, **Page Up**, **Page Down**, **Home** and **End** keys to navigate the log.



Changing log file settings

You can specify your logging preferences on the Logging page in the Options and Settings dialog box.

Modifiable settings include:

- · level of detail included
- date inclusion/exclusion in time stamp
- log file retention period

For information on configuring the log file settings, see Logging in Chapter 9, "Options and settings".



9. Options and settings

To access the Options and Settings dialog box:

- On the Tools menu, click Options.
- Alternatively, click the **Options** button on the toolbar:



The various options and settings are grouped in the left-hand pane according to their functions. Click an item on the left to view the full set of options related to that function.



Warning: The **Options and Settings** dialog box controls advanced features in the Backup Client. Please read through this section carefully before changing any settings. Incorrect settings could cause critical errors.

Backup Account

You can use the Backup Account page in the Options and Settings dialog box to:

- Retrieve Backup Account settings
- · Modify security settings

The Backup Account page consists of the following areas:

- Details
- Security

Details area

This area displays your Backup Account information as it is configured on the Storage Platform. You can use the **Retrieve settings** button to retrieve your Backup Account details from the Storage Platform.



Tip: This button is useful to verify that the Backup Account limit has been modified after requesting a change from the Backup Administrator, or to update Backup Group Profiling settings.

Security area

If you need to change your password or encryption key, click the **Change password** or **Change encryption key** buttons.





Warning:

- Changing the encryption key involves intensive processing on the Storage Platform and may take several minutes. You should avoid doing this unless the encryption key has been compromised.
- Disaster recovery is not possible without the encryption key. Please ensure that this key is kept in a safe place. THIS ENCRYPTION KEY IS NOT STORED ON THE STORAGE PLATFORM AND CANNOT BE RECOVERED OR RESET IF LOST.

You can select whether or not the Backup Client should prompt for the Backup Account password. Three options are available:

- Never (default): The Backup Client remembers the Backup Account password when doing a backup or restore.
- When doing a restore: The Backup Client prompts for the Backup Account password when opening the Restore tab.
- When loading the Backup Client: The Backup Client prompts for the Backup Account password when opening the Backup Client and the Restore tab.

Backup Schedule

You can use the Backup Schedule page in the Options and Settings dialog box to:

- Enable/disable a daily automated backup
- Create advanced automatic backup schedules



Note: If using multiple backup sets, use the **Backup set** drop-down at the top of the dialog box to specify which backup set schedule you wish to configure. For more information, see Multiple backup sets in Chapter 9, "Options and settings".

Daily automatic backups are enabled by default unless disabled during the Setup Wizard. If disabled, you can enable it by following the instructions below.

To enable a daily automated backup:

- 1. Select the **Daily automated backup** check box.
- 2. Specify a time in the associated box.
- 3. Click Ok.

To create an advanced backup schedule:

- 1. Select the Advanced schedule (back up at the following times) check box.
- 2. In the **Week day** box, select the day on which a backup should be initiated.



- 3. Specify the time in the **Backup time** box.
- 4. Click the Add button to add the day and time to the Advanced schedule box.
- 5. Repeat steps 2 to 4 above until you have added all desired schedules to the Advanced schedule box.

To disable automatic backups (not recommended):

- 1. Clear the Daily automated backup and Advanced schedule check boxes.
- 2. Click Ok to close the Options and Settings dialog box.



Warning: This option is not recommended. If an automated backup schedule is not created, backups will have to be run manually. Enabling automatic backups is strongly advised.

For detailed instructions on how to enable and schedule automatic backups, see *Scheduling automatic backups* in Chapter 6, "Backups".

Global Exclusions

You can use the Global Exclusions page in the Options and Settings dialog box to:

- Exclude files globally
- Exclude folders globally
- View profiled global exclusions

The Global Exclusions page in the Options and Settings dialog box consists of the following areas:

- Exclude Files
- Exclude Folders
- Profiled Exclusions

Exclude Files area

In this area, you can specify that files with certain file names, extensions or last modified dates be excluded from all backups.

To exclude files based on their file names or extensions:

- 1. Select the **Exclude these files** check box.
- 2. Type the file name(s) and/or file extension(s) in the box provided; separated by semicolons or listed beneath each other.





Tip: You can use wildcards. E.g. *.mp3 will exclude all MP3 files from backups. For example, to exclude all MP3 and AVI files, specify *.mp3 and *.avi in the text box. Separate entries with a semicolon or type each on a new line.

3. Click OK.

To exclude files based on their 'last modified' dates:

- 1. Select the Do not back up files older than check box.
- 2. In the box provided, type the date in dd-mm-yyyy format. Alternatively, click the drop-down arrow and select a date.
- 3. Click OK.

Exclude Folders area

In this area, you can exclude certain folders from all backups.

To exclude folders:

- 1. Select the Exclude these folders check box.
- 2. Type the folder names in the box provided; separated by semi-colons or listed on separate lines.



Note:

- Wildcards and path separators are not supported in this area.
- Entries are case sensitive.
- 3. Click OK.

Profiled Exclusions area

This area will indicate if any file/folder global exclusions have been set by the Backup Administrator. Since profiled settings can only be changed from the Storage Platform Console, contact your Backup Administrator if there is a problem with the files/folders being excluded.



Note: Profiled exclusions are combined with the user's exclusions in the Backup Client. However, profiled exclusions take precedence over the user's inclusions.

For more information, see *Profiling* in the *Advanced Tools* section later in this chapter.



Connection

You can use the Connection page in the **Options and Settings** dialog box to enable, disable, configure proxy server details

Proxy Server area

In this area, you can specify whether the Backup Client should connect to a proxy server when connecting to the Internet. If you select that it should, you can specify the proxy server details in the available boxes.

Connection Throttle

The Connection Throttle page in the **Options and Settings** dialog box enables you to specify the Backup Client's bandwidth usage speed limits. You can do this by creating a throttle map. Backup data will then only be transferred at the specified speed limits during each interval.

The Connection Throttle page consists of the following areas:

- Speed Limits
- Throttle Map

Speed Limits area

In this area, you can specify one or more speed limits (in kilobytes per second) that can be applied when sending backup data to the server.

To specify a speed limit:

Choose a colour to represent the limit and specify the limit in that colour's Limit box.

You can now schedule the speed limits in the Throttle Map area as described below.



Note: A limit of 0 indicates that no limit will be applied.

Throttle Map area

In this area, you can indicate when the speed limits specified in the Speed Limits area should apply by creating a throttle map.



Tip: By default, a throttle map is provided with different colours indicating week day office hours, out-of-office hours and weekends (using intervals of 60 minutes). You can either set speed limits for the colours used in this default map or you can click the **Clear** button and create a new map by following the instructions below.



To create a throttle map:

- 1. In the Interval box, specify the number of minutes that each block in the graph should represent.
- 2. In the **Speed Limits** area, click a speed limit colour. Alternatively, click the **Selected speed limit** box to cycle between the different limits.
- 3. In the **Throttle Map** area, click the schedule interval boxes you wish to apply the limit to. The colour of the selected interval boxes will change to match that of the chosen limit.



Tip: Should you wish to revert to the default throttle map at any point in time, click the **Default** button.

4. Click OK.

Advanced Communications

You can use the Advanced Communications page in the **Options and Settings** dialog box to configure all advanced communication settings.

The Advanced Communications page consists of the following areas:

- Secure Connection
- Retries and Timeouts
- Concurrent Transfer

Secure Connection

Use secure (SSL-enabled) connection for data transfer (recommended). This option is selected by default, enabling SSL encryption for Backup Client-to-StorageServer data transfers. Deselecting this option disables SSL encryption for data transfer. This enhances transfer speeds but should only be done within a secure network environment.



Note:

- Disabling this feature will only have an effect on security for the actual data transfer and not the encryption of the data on the Storage Platform.
- Secure data transfer connections can only be disabled if the StorageServer has been configured
 to accept non-secure connections. If the StorageServer cannot accept non-secure connections,
 an SSL-enabled connection will automatically be used instead.



Warning: Before disabling SSL encryption, first ensure that the backup environment is secure.



Retries and Timeouts

Number of backup or restore retries

By default, the Backup Client tries to connect to the Storage Platform four times before cancelling the backup process.



Note: You are advised to increase the number of attempts when using a slow Internet connection. The backup will continue from the previous point of failure and not resend the entire backup.

Duration before connection retries

By default, the Backup Client will try to reconnect to the Storage Platform after 60 seconds, should the connection be dropped. This setting enables you to increase/decrease the duration between retries.

Socket timeout

The default socket timeout is 60 seconds. If the Backup Client is connected to the Storage Platform and there is no communication between the two, the time specified in this box (in seconds) is how long the Backup Client will stay connected before dropping the connection.

Concurrent Transfer

Begin transferring data during the compression phase

Select this option if you wish to make use of concurrent backup processing to speed up the backup process. With this setting enabled, the Backup Client compresses/patches files in the background using one thread and transmits files to the Storage Platform using a second thread as soon as the files are compressed/patched.

Backup Priority

You can use the Backup Priority page in the **Options and Settings** dialog box to limit CPU usage and disk access.

The Backup Client uses a fair portion of the available processing power to patch, compress and encrypt files during the backup process. The constant disk access that the backup process requires can also reduce performance for other applications, although it ensures that the process completes as quickly as possible.

If you use the computer while it is backing up, you might experience some performance deterioration. To lessen this effect, you can choose to lower the processor usage and/or disk access.



Note: If you use the highest **Disk access** setting, the Backup Client will continuously use all available disk access to read and write to the disk, ensuring that the process completes as quickly as possible. The process will take longer if this setting is lowered but other disk-intensive applications will perform better.





Warning: If you use the highest **Processor usage** setting, it will affect server performance during the backup.

Compression

You can use the Compression page in the **Options and Settings** dialog box to configure the Backup Client compression level and exceptions.

The Compression page consists of the following areas:

- Compression Level
- Compression Exceptions

Compression Level area

The Compression Level area allows you to change the compression level by selecting the option that best suits your needs. The **Medium (default)** compression level provides the fastest speed, but the compressed files will be slightly larger than those produced using the High or Maximum options.

Compression Exceptions area

The Compression Exceptions area allows you to specify the file types that the Backup Client should not compress during the backup process.



Tip: Compression is not effective on all file types as some files may already be compressed or cannot be compressed at all. The Backup Client could waste some time and processing power trying to compress these files. This setting can be used to specify a list of file extensions that should not be compressed during the backup process. The list of file types already specified are types that typically do not compress well.

To exclude files types from compression:

- 1. Select the **Exclude from compression** check box.
- 2. Type the file extensions in the box provided, separated by semi-colons.



Tip: Compression is not effective on all file types as some files may already be compressed or cannot be compressed at all. The Backup Client could waste some time and processing power trying to compress these files. This setting can be used to specify a list of file extensions that should not be compressed during the backup process. The list of file types already specified are types that typically do not compress well.

3. Click OK.



Patching

You can use the Patching page in the Options and Settings dialog box to:

- Enable/disable Delta Blocking
- Enable a Binary Patching threshold
- Specify mandatory patching

The Patching page in the **Options and Settings** dialog box consists of the following areas:

- Delta Blocking
- Binary Patching Threshold
- · Mandatory Patching

Delta Blocking area

Delta Blocking is an alternative to Binary Patching and compares changes on a block level. It is significantly faster than Binary Patching and does not require a complete copy of a file in the cache to calculate the patch, only a footprint file. The footprint file requires very little free disk space - 0,0006% of the original file. However, depending on the data being backed up, Delta Blocking patches can be larger than Binary patches.



Note: It is vital that you read through this section before enabling this option in your Backup Client.

To enable Delta Blocking:

- 1. Select the Enable Delta Blocking for check box.
- 2. The Delta Blocking file selection criteria can be set in two ways: by file size or file type. Select the applicable condition(s) and supply the necessary information. Any recently changed files not matching these criteria will be patched using Binary Patching.



Tip: You can enable both conditions by selecting both options as well as the and option.



Warning: Some database files may not be suitable for Delta Blocking since data is shifted at the beginning of the file. When this happens, it will result in a patch as large as the complete file. It is advisable to closely monitor the sizes of the patches when Delta Blocking is enabled and disable it if it turns out to be ineffective.



Binary Patching Threshold area

Binary Patching is the most effective form of patching. It is CPU-intensive but will deliver the smallest patches. The process is only possible if a complete copy of an older version of the file is available in the cache.



Note: Binary Patching is enabled by default and nothing needs to be configured in this area for normal use.

Enabling Binary Patching threshold: It is possible that a file could be modified in such a way that it becomes impractical to patch it. An example would be a database that is re-indexed.

In such a case, the patching can take extremely long (it may exceed the backup window) and will eventually create a patch that is the same size as the complete file. It would be better to abort the patching and compress the new file instead. When the patching threshold is reached, patching will be aborted and the complete file will be compressed and resent to the Storage Platform.

To specify the Binary Patching threshold:

- 1. Select the Enable Binary Patching threshold check box.
- 2. In the associated box, specify the abort threshold in gigabytes.



Note:

- When this threshold is reached, patching will be aborted and the complete file will be compressed and resent to the Storage Platform.
- Patching limits should only be enabled if you have severe patching problems with large files.

Mandatory Patching area

The Mandatory Patching area enables you to specify files to be scanned for changes, regardless of whether or not it appears that they have changed since the last backup.



Tip: Mandatory patching is useful in situations where files are held open by an application (internally the file has changed but the change is not reflected in the last modified date on the file system or in the size of the file itself).



Note: VSS enables the backup of these files without impacting the running application or corrupting the files.

To include files for mandatory patching:

- 1. Click the Add button.
- 2. Use the **Open** dialog box to select the file(s), and then click **Open**.
- 3. The path to the file(s) will display in the associated box. Click **OK** to save your settings.



4. Ensure that you include the mandatory patching files in your backup selection or they will not be backed up.



Tip: Select more than one file at a time by holding down the **SHIFT** key and selecting the files with your keyboard or mouse.

Files selected for mandatory patching display in the Backup Selection tab with a green icon containing the letter "M": .



Disk Usage

You can use the Disk Usage page in the **Options and Settings** dialog box to specify the working folders and control the disk footprint.

Working Folders area

- If you have limited space on the drive where the Backup Client is installed, you can move the **Temp**, **Cache** and **Database** folders to another location.
 - Temp Used as temporary workspace when the files are patched, compressed and encrypted.
 - Cache Keeps a local, compressed and encrypted, copy of the selected files for a specified number of days.
 - Database Compares the latest backup selection with the previous backup to determine the changes.



Note: Important additional information.

- Performance will be degraded if the Temp and Cache folders are on different drives.
- If you move these folders to a network share, please ensure that the Backup Client has the correct permissions to reconnect and write to that share. Storing the folders on a UNC path degrades backup performance.
- Days to keep files in cache When modifications are made to a file, the Backup Client only transmits
 changes to that file, as opposed to transmitting the complete file again. This is accomplished by the
 use of a local cache.

By default, recently modified files are kept in the cache for 20 days, after which they will be deleted. Once a file has been flushed from the cache, a full copy will be backed up when any modifications are made to the file. The longer files are kept in the cache, the better the chance of only transmitting patches instead of full copies and thus reducing the amount of data that needs to be transmitted. If there is limited disk space available, consider shortening the time files are kept in the cache.





Note: If you specify 0 days, patching is disabled. All files in the cache will be deleted, and full copies of changed files will be transmitted to the Storage Platform during each backup.

• To delete the current cache, click the **Clear** button. If the cache is deleted, full copies of the selected files will be re-sent to the Storage Platform during the next backup.

Disk Footprint

To enable Streaming Backup:

Select the **Stream backups directly to the Storage Platform** check box. Streaming Backup causes data to be transferred to the Storage Platform without being written to temporary storage first. Streaming Backup has the following benefits:

- · Extremely fast
- Uses very little disk space
- Optimised for use in environments where bandwidth usage is not an issue, e.g. data centres

Streaming Backup has the following limitations:

- Supports Delta Blocking only, not Binary Patching
- · Does not support resumes
- Provides target de-duplication only, not source de-duplication

Streaming Backup disables certain options:

- Advanced Communications > Concurrent Transfer
- All patching options aside from Mandatory Patching Streaming Backup only supports Delta Blocking
- Advanced Performance > Backup Limit

To enforce a minimum amount of free space on your hard drive:

To ensure that the Backup Client does not use all available hard drive space during data dumps, patching or compression, you can select the **Enforce minimum free space...** check box, and then specify the amount of free disk space that must remain available.



Advanced Performance

You can use the Advanced Performance page in the **Options and Settings** dialog box to configure the settings relating to:

- Backup limit
- Memory allocation

The Advanced Performance page in the **Options and Settings** dialog box consists of the following areas:

- Backup Limit
- Memory Allocation

Backup Limit area

If you wish to limit the total amount of data that may be transferred during each backup, select the **Restrict the** size of each backup check box, and then specify a maximum size in the box provided.



Note:

- This feature is especially useful if you have a poor Internet connection and encounter problems with transmitting large backups.
- File changes will be sent in the same backup regardless of whether a size restriction is specified.

Cycle backup process... – You can use this setting in conjunction with the backup size restriction to cycle backups successively until all data included in the backup selection has been transmitted to the Storage Platform. This setting can only be enabled if a backup size restriction has been specified.



Warning:

- It may take several backups before all your files are backed up to the SP because the Backup Client will transfer new files only after changes to existing files have been transferred.
- If changes to files amount to the size restriction, larger files such as databases might not be backed up at all.

Memory Allocation area

Use the Backup service and Backup Client interface boxes to set the respective memory amounts.



Note: If you change the backup service amount, you will need to restart the backup service before the change takes effect. If you change the Backup Client interface amount, you will need to restart the interface before the change takes effect.



Logging

You can use the Logging page in the **Options and Settings** dialog box to specify your logging preferences.

Modifiable logging settings include:

- Location of backup and restore logs
- Level of detail included
- Date inclusion/exclusion in time stamp
- Log file retention period
- · Debug message inclusion/exclusion in service log

The Logging page in the **Options and Settings** dialog box consists of the following areas:

- Backup Logs
- Service Log

Backup Logs area

In this area, you can specify where to store the backup and restore logs, as well as the level of detail to be displayed in them. You can also select the **Include date in log file time stamp** check box to add the date to every line in each log file.

You can also enable a log file retention period by specifying that the Backup Client delete files older than a particular number of days. To do this, select the **Delete log files older than (days)** check box, and then specify the number of days in the box provided.



Tip: To delete all logs older than the specified number of days immediately, click the **Delete older logs now** button.

Service Log area

In this area, you can specify whether or not debug messages should be logged.



Advanced tools

SE includes tools that allow advanced users to modify, enhance and streamline the Backup Client.

Remote Management

Remote Management enables the Backup Administrator to remotely access and configure the Backup Client using the Storage Platform Console.

To enable Remote Management:

- 1. On the Tools menu, click Remote Management.
- 2. In the **Remote Management Settings** dialog box that appears, select the **Enable Remote Management** check box.
- 3. In the Connection area, ensure that the port number in the **Port** box is correct (9091 is specified by default). If incorrect, modify as required.
- 4. If the server has multiple IP addresses available, you can specify whether the Remote Service must bind to all available IP addresses or to only one IP address.
- 5. In the Access area, select the access credentials to be allowed.



Note:

- Allow SP controlled access enables Backup Administrators with the correct access
 permissions to use their Storage Platform User Access Management usernames and
 passwords to connect to and administer this Backup Client. If you clear this check box,
 Storage Platform administrators will not have remote access.
- Select Allow custom access and supply a username and password if you do not wish to make use of the above-mentioned Storage Platform Access Accounts. These custom access credentials must be specified in the Storage Platform Console for its user to gain remote access.
- 6. Click **OK** to save the settings. Services will restart automatically to apply the settings.

Multiple backup sets

When a backup is initiated, the backup selection is sent to the Storage Platform as a "backup set"; a set of *included* files and folders. You can restore the entire backup set (all its files and folders structured as they were at the time of backup), or restore individual files and/or folders within it.

The first backup selection you make in the SE Client is automatically saved as the "default backup set". For more information, see *Selecting data to back up* in Chapter 6, "Backups". You may, however, create more than one backup set. This enables you to back up different data selections at different times.





Example: A full backup of all data on a server can be scheduled to run once a week (e.g. over the weekend, when there are no resource limitations) and another backup of only the SQL database on that same server can be scheduled to run every day. This ensures that the SQL database is backed up regularly, using minimal resources, and that the entire server is still backed up but at more convenient and practical time intervals.



Note: A maximum of 10 backup sets are allowed (including the default backup set).

To create a new backup set:

1. On the Tools menu, point to Additional Backup Sets and then click Add. Alternatively, click the Add button above the Backup Selection/Restore/Logs tabs.



Note: The **Add** button will only be available above the Client tabs when at least two backup sets exist. If this is your first addition, you need to use the **Tools** menu.

- 2. In the Backup set name box, type a display name for the set, and then click OK.
- 3. Ensure that the new name is selected in the **Backup set** drop-down box.
- 4. Configure the schedule as desired. For detailed instructions on how to schedule backups, see *Scheduling automatic backups* in Chapter 6, "Backups".



Note: If backup set schedules overlap due to manual schedule configuration or overlapping backup windows, the backups will be placed in a queue. Three seconds after the first backup in the queue is complete, the next will run. Backup sets are queued alphanumerically. If, however, two or more backups are scheduled for the same backup set and their backup windows overlap, the first backup will run to completion and duplicates will be excluded from the queue.

5. Click **OK**. The **Options and Settings** dialog box will close and the SE Backup Client will display the new backup set name in a **Backup set** drop-down box above the **Backup Selection** tab.



Note: The **Backup set** drop-down and **Add** and **Schedule** buttons only display in the SE Backup Client if more than one backup set is enabled. If only the default backup set exists, these items will not display.

The **Backup Selection**, **Restore** and **Logs** tabs now display information relevant to the new backup set and they can be used to configure, restore from and monitor it accordingly.

6. Select the data to be backed up in this backup set.

Included data will be backed up at the times specified in the backup set's backup schedule and can be restored using the **Restore** tab.



To rename a backup set:

- 1. Click the Manage button above the Backup Selection/Restore/Logs tabs.
- 2. Select the backup set name in the Backup set drop-down list.
- 3. Click the **Rename** button **2**.
- 4. Type the new name in the **Backup set name** box.
- 5. Click Ok.

To modify a backup set's backup schedule:

- 1. Click the Manage button above the Backup Selection/Restore/Logs tabs.
- 2. Select the backup set name in the Backup set drop-down list.
- 3. Configure the schedule. (See Scheduling automatic backups in Chapter 6, "Backups".)
- 4. Click Ok.

To delete a backup set:

- 1. Click the Manage button above the Backup Selection/Restore/Logs tabs.
- 2. Select the backup set name in the Backup set drop-down list.
- 3. Click the **Delete** button **②**.
- 4. In the Confirmation dialog box that appears, click Yes.
- 5. Click Ok.

Health Check

The Backup Client Health Check provides information to highlight possible issues before backup (e.g. free disk space or file/folder access problems). It can also provide the estimated line speed to the Storage Platform.

The following options are available:

- Memory Memory utilisation statistics from the last backup as well as overall memory usage to date.
- Data Protected Information includes the number of files and directories included in the backup selection.





- Disk Usage Free space availability for all local drives.
- Line Speed Line Speed estimate to the Storage Platform (determined by transmitting data for 10 seconds).

You can specify which checks to run by selecting or clearing the relevant check boxes in the Options area. Use the **Show Last Health Check** button to see the last report. You can **Print** and/or **Export** the Health Check reports.

To run a health check:

1. On the Tools menu, click Health Check.

In the **Health Check** dialog box that appears, specify which checks to run by selecting or clearing the check boxes next to the options. Four checks are available (see above).

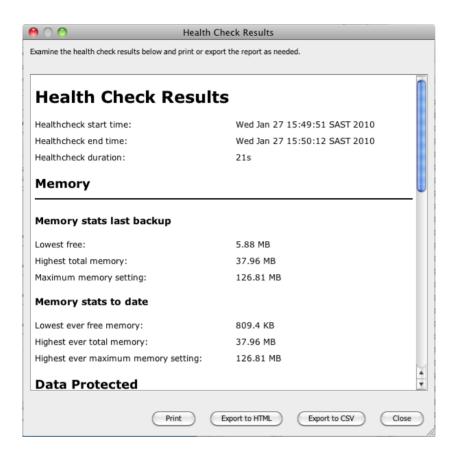
2. Click the **Start** button to begin the health check process. The **Health Check** dialog box appears, displaying the progress of the health check until completion.



3. When the message: "Health check complete" displays, click OK.

The Health Check results display in a new dialog box with options to print, export to HTML and export to CSV.





Backup Snapshots

The Backup Snapshot feature enables you to create a backup of all items included in your backup selection and send it to a disk drive. This snapshot data can then be moved to the Storage Platform.

You can use this feature to reduce the initial backup window if there is a large amount of data to be transferred, typically over a slow Internet/network connection. A similar procedure enables you to restore a large amount of data (e.g. during a disaster recovery). For more information about restore snapshots, see "Restore Snapshots (Disaster recovery)" below.



Note: A snapshot backup uses Blowfish 448 encryption and the backup encryption key to encrypt the data.



Warning:

- This procedure should only be performed with the assistance of the Backup Administrator.
- Ensure that you have an active Backup Account.
- It is advised to perform a test backup that transfers only a small amount of data before beginning the Backup Snapshot process.



To export a Backup Snapshot:

- 1. On the Tools menu, point to Snapshot, and then click Export Backup Snapshot.
- 2. Select **The next backup must be a Snapshot backup**. Ensure **Verify snapshot after backup** is selected this will confirm that the snapshot is not corrupt.



Warning:

- Verifying the snapshot causes the backup process to take significantly longer.
- Cancelling the verification cancels the backup.
- 3. Specify a destination in the box provided.
- 4. Click **Backup Now**. If you click **OK**, the next backup you initiate will be a snapshot backup.

The Snapshot data is now stored in the location specified in step 3 above and can be moved to the Storage Platform. The Backup Administrator can then import the snapshot data to the StorageServer using the Storage Platform Console. (For more information, please refer to the Storage Platform Console User Manual.)



Note: The Backup Account will be disabled at this point to ensure that the Snapshot data is the most recent. Once the data has been successfully imported to the Storage Platform, the Account will be enabled automatically and backups can proceed as usual.

Restore Snapshots (Disaster recovery)

The Restore Snapshot feature enables you to restore large amounts of data from a locally connected device to a machine via the Backup Client.



Note:

- Before you can perform the steps outlined below, the snapshot data needs to be exported from the StorageServer to a mobile storage device by a Backup Administrator. For more information, please refer to the Storage Platform Console User Manual.
- A snapshot restore uses Blowfish 448 encryption and the backup encryption key to encrypt the data.

To restore data from a Snapshot:

- 1. Connect the mobile storage device containing the snapshot data to the Client machine or to a Local Area Network so that it has access to the Client machine.
- 2. On the Tools menu, point to Snapshot, and then click Import Restore Snapshot.
- 3. Select whether you wish to restore the data from a disk drive or recovery server.
 - a. If restoring from disk, select the **Show Restore Snapshot(s) in Restore panel** check box and then specify the path to the data in the **Snapshot location** box.





Note: You need to specify the snapshot data's parent folder, NOT the snapshot folder itself. (E.g. If your snapshot data folder is called **20100506124347** and you've copied it to \Backups\Import\Snapshot-Restore, you need to specify

\Backups\Import\Snapshot-Restore in the **Snapshot location** box, NOT **\Backups\Import\Snapshot-Restore** 20100506124347.)



Warning: The default snapshot location specified is: C:\Backups\Import\Snapshot-Restore. If you wish to use this location, you need to create the folder structure on the machine and then paste the snapshot data onto the **Snapshot-Restore** folder. This folder is not created automatically. Alternatively, you can use the **Browse** button to browse to the location in which you have saved the snapshot data.

b. If restoring from a recovery server, select the **Do restores from recovery server** check box and then specify the server address and port number in the boxes provided. If using a proxy server, select the **Use proxy settings for recovery** check box.



Note: This option can only be used if the Backup Administrator has prepared a recovery server.

4. Click OK.

The Snapshot data will display as an entry in the Restore tree, enabling you to browse a directory of its contents and restore files and folders. For more information, see Chapter 7, "Restores".

Profiling

Profiling enables your Backup Administrator to propagate certain client-side settings from the Storage Platform to your Backup Client.

It can be used to enforce the following settings:

- Backup schedules
- Inclusions and exclusions
- Filters
- Most options and settings accessible via the Tools and Backup Pro menu



Note: Profiled settings take priority over settings specified in the Backup Client.

When the Backup Client connects to the Storage Platform, it receives a list of all profiled settings. These changes are implemented in the Backup Client. You can, however, connect to the Storage Platform and update profiled settings manually.



To update profiled settings manually:

- 1. On the Redstor Backup Pro SE menu, click Preferences.
- 2. On the Backup Account page of the Options and Settings dialog box, click the Retrieve settings button.

The Backup Client will retrieve any profiled settings from the Storage Platform and update its options and settings accordingly.



Note: Profiled settings are greyed out, and cannot be modified from within the Backup Client.

Inclusions /exclusions applied by profiling are displayed with yellow icons in the Backup Client:

File icons:

- Included file
- File included by filter
- Excluded file

Folder icons:

- Included folder
- Folder included by filter
- Excluded folder



10. Plug-ins

Backup Pro Server Edition provides solutions for numerous databases and applications in the form of plug-ins to the Backup Client.

This User Manual includes instructions for the Email Notification plug-in, as it is distributed with the SE Backup Client. Please refer to the *Server Edition Plug-ins User Manual* for detailed information on the other available plug-ins and settings.

Plug-ins currently available:

- Email Notification
- Script

Email Notification plug-in

The Email Notification plug-in enables you to receive email notification on backup activity. You can configure the plug-in to send emails to specified email addresses, notifying the recipients of the status of backups.



Note:

- This plug-in has been included in SE installers since v4.2. If it is not installed, run the Plug-in Installer and select the Email Notification plug-in.
- The Plug-in Installer will run automatically during the SE Client installation if located in the same folder as the Client DMG.

To configure the email notification plug-in:

- 1. On the Tools menu, point to Plug-ins, and then click Email Notification.
- 2. Select the Use email notification check box to enable the plug-in.





- 3. Select the types of notifications to be emailed. The following options are available:
 - · Notify me when a backup fails
 - · Notify me after a successful backup
 - Append the subject line with the following options and message:
 - Warnings
 - Errors



Note:

- You can modify the Email subjects and content by clicking in the **Messages Subject** and **Warnings/Errors** boxes, and then editing the text.
- The Backup Account name is automatically included in the subject, e.g. "Backup Completed [Backup Account name]".
- 4. In the **Mail settings** area, type **To** (recipient) and **From** (sender) email addresses in the fields provided and supply the **SMTP server** address and authentication information if necessary.



Tip: In the **SMTP Server** box, you can specify the SMTP Server name in isolation (e.g. mail.yoursmtp.com) or you can include the port number (e.g. mail.yoursmtp.com:80).

When no port is specified, 25 will be used by default.

- 5. Select **Enable STARTTLS** to establish a secure connection to an online mail service like Gmail.
- 6. Click the **Test** button to verify that the settings are correct. A test email will be sent to the address specified in the **To** box and a message will appear confirming if the email was sent successfully. Click **OK** to close the message and return to the **Email Notification settings** dialog box.
- 7. Select the **Attach files** check box to include a log file and/or backup selection report as attachments.
- 8. In the Attachment settings area, select from the following options:
 - · Summary, warnings and errors
 - Entire log file (as per Advanced Options log level setting)
 - Backup selection report Provides a summary of the backup selection
- 9. Click Ok to save the settings and close the Email Notification settings dialog box.

The Email Notification plug-in is now activated and configured and will start emailing reports during the next backup.



11. Reference

Keyboard shortcuts and hotkeys

Keys	Action
F5	Refresh active window
SPACEBAR x1	Include selected file/folder
SPACEBAR x2	Exclude selected file/folder
SPACEBAR x3	Clear inclusion/exclusion
SHIFT+∱/↓	Select multiple files
↑	Select previous item, or scroll up if you are in the Logs tab
Ψ	Select previous item, or scroll down if you are in the Logs tab
Page Up	Scroll up one page
Page Down	Scroll down one page
Home	Scroll to the beginning of the page if you are in the Logs tab
End	Scroll to the end of the page if you are in the Logs tab