

# BackupVault Enterprise Server Edition

USER MANUAL  
For Microsoft Windows

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## 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.*

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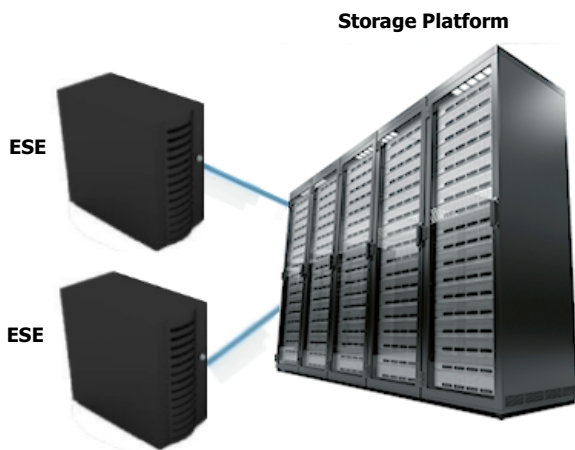
# Introduction

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

For technical support, please go to **Help > About BackupVault ESE**, and then use the contact details provided.

## Product overview

With BackupVault Enterprise Server Edition (ESE), data stored on servers can be backed up to a Storage Platform quickly, securely and automatically.



The following diagram illustrates the scenario:

Data stored on one or more servers running ESE 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 BackupVault Storage Platform Console. For more information, please refer to the

*Storage Platform Console User Manual.*

## WebAccess

The BackupVault WebAccess browser-based application is not compatible with Backup Accounts created by the ESE Backup Client. It can however be used with the Desktop & Laptop Edition (DL) of BackupVault.

# 1. Getting started

Enabling manual or automatic backups is easy with BackupVault Enterprise Server Edition:



## 2. Installation

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

The ESE MSI file contains pre-configured information to make installing ESE quick and easy. For more information on creating MSI files and launching them from the **Run** Command, please refer to the *Storage Platform Console User Manual*.



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

`C:\Program Files\BackupVault\Backup Client ESE`



**Warning:**

- If running antivirus software, please ensure that all BackupVault folders are excluded from antivirus scans 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.
- Windows will check whether you are running the MSI file suited to the installed operating system (i.e. 32-bit or 64-bit) and will not allow you to install the wrong version.
- The CPU of the client machine must support the “AES-NI” to leverage off performance benefits of the AES-GCM encryption algorithm. A message will be logged to indicate whether the client machine supports AES-NI

**To install BackupVault ESE:**

1. Run the MSI file.
2. In the BackupVault ESE Setup Wizard that appears, follow the steps as described below.

## BackupVault ESE Setup Wizard

The BackupVault ESE Setup Wizard typically consists of five steps to guide you through the Setup task in a simple, step-by-step manner.

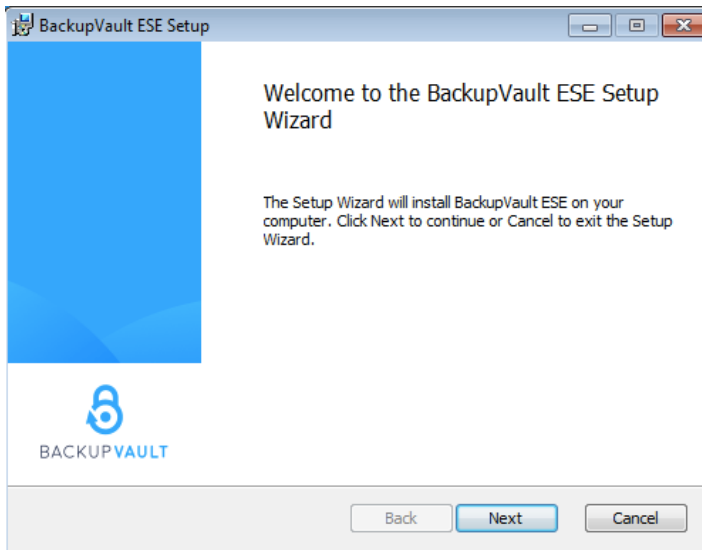


**Note:**

- *Some of the settings described below may have been removed when the MSI was created. Furthermore, the wizard may contain additional steps. Please read each window carefully before continuing.*
- *If you receive a Windows User Account Control message, asking you if you wish to allow the BackupVault installation program to make changes to the computer, click **Yes** to proceed.*

### Step 1 of 5: Start the BackupVault ESE Setup Wizard

To start the BackupVault ESE Setup Wizard:

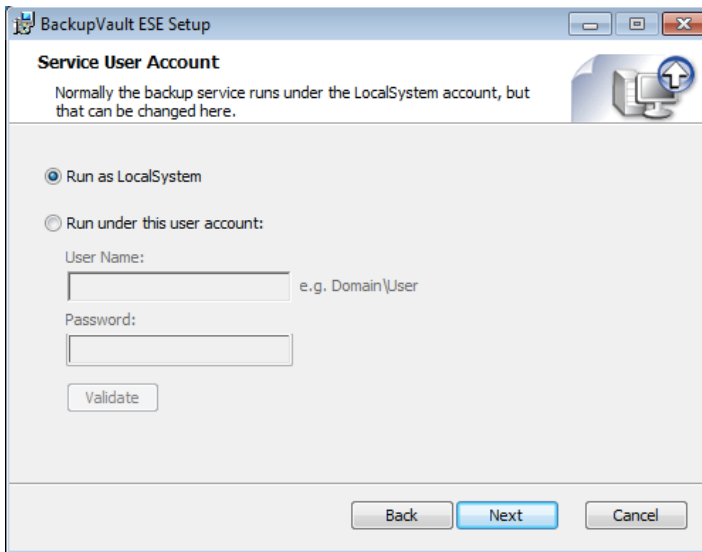


Click **Next**.

### Step 2 of 5: Specify a Windows user account

To enable the Backup Client to read all files that must be backed up, it may be necessary for the Backup Client service to run under a specific Windows account.

To specify which Windows account should run the backup service:



- Select **Run as LocalSystem**.
- Alternatively, specify a specific Windows user account:
  1. Select **Run under this user account**.
  2. In the **User Name** box, type the Windows user name for the account.
  3. In the **Password** box, type the Windows user account password.
  4. Click the **Validate** button.
  5. Once the Windows user account has been validated, click **Next**.

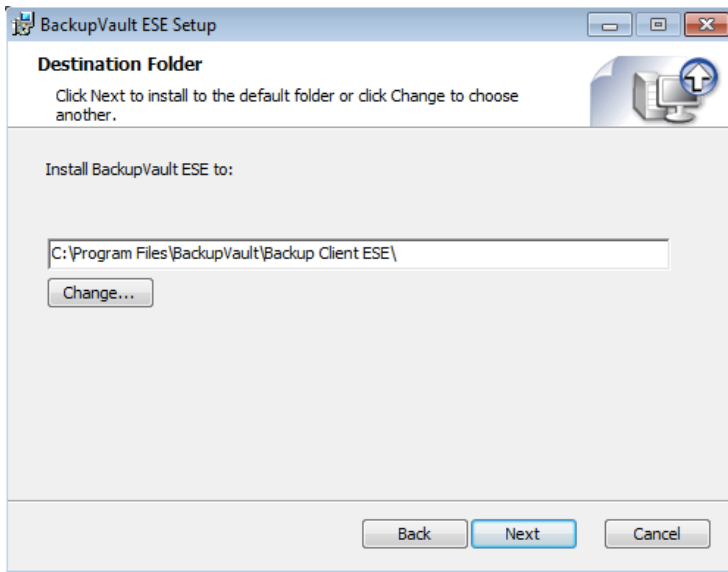


**Warning:** If specifying an account different than “LocalSystem”, please ensure that the user account in this step has full access to all files to be backed up. If files are included for backup that the account does not have access to, a “Some files were skipped” or “files skipped” error message will display in the backup logs.

## Step 3 of 5: Specify an install location

To specify a destination for the ESE application files and folders:



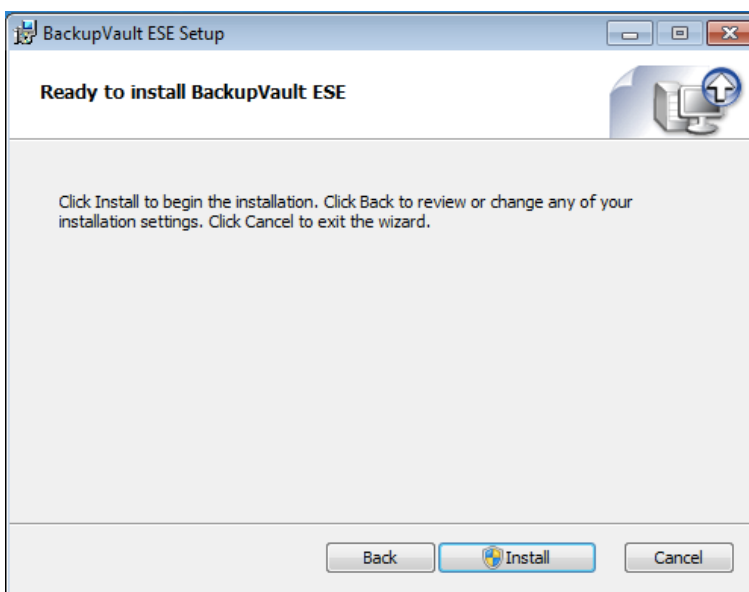


- Click **Next** to accept the default destination folder and continue to the next wizard step.
- Alternatively, specify a new destination folder:
  1. Click the **Change** button.
  2. Browse to the folder.
  3. Click **OK**.
  4. Click **Next** to continue to the next wizard step.

## Step 4 of 5: Begin the installation

Once all the settings are configured, the wizard is ready to begin the installation.

To begin the ESE installation:



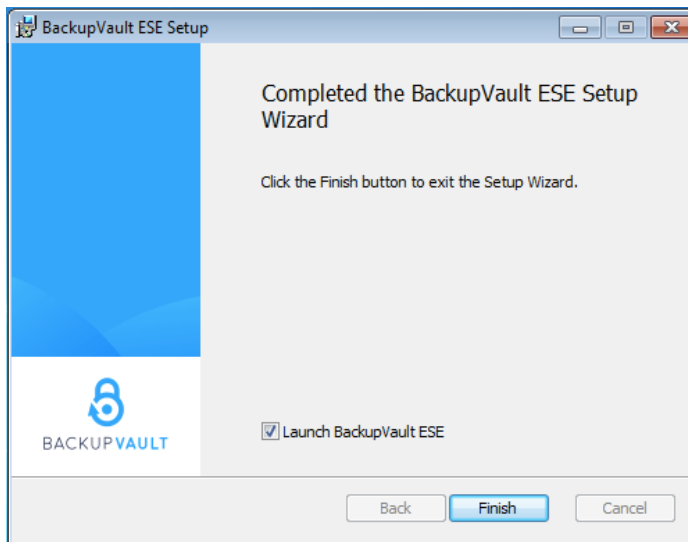
Click **Install**.

## Step 5 of 5: Exit the BackupVault ESE Setup Wizard

The last step of the wizard presents the option to launch the Backup Client.

To launch the Backup Client immediately after the BackupVault ESE Setup Wizard:

1. Ensure that the **Launch BackupVault ESE** check box is selected.



2. Click **Finish**.

If you selected the **Launch BackupVault ESE** check box in the last step of the BackupVault ESE Setup Wizard, the Backup Client will open automatically upon clicking **Finish** and the **Setup Wizard** (which is the Backup Account Wizard and Backup Wizard combined) will launch, enabling you to create a Backup Account and configure your backup settings. Follow the wizard steps as described in Chapter 3, “Setup Wizard”.

If you opted not to launch the Backup Client immediately, you can open the Backup Client at a later stage via the **Start** menu or by following any of the instructions listed under *Opening the Backup Client* in Chapter 5, “Graphical User Interface”.



**Note:** *The Setup Wizard will launch when you open the Backup Client for the first time.*

## 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.

If you selected the **Launch BackupVault ESE** check box in the last step of the BackupVault ESE Setup Wizard (see *The BackupVault ESE Setup Wizard* in Chapter 2, “Installation”), the Backup Client will run and display the Setup Wizard automatically.

If the **Launch BackupVault ESE** check box was not selected in the last step of the BackupVault ESE Setup Wizard, the Setup Wizard will launch when the Backup Client is opened for the first time (for more information, see *Opening the Backup Client* in Chapter 5, “Graphical User Interface”).

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

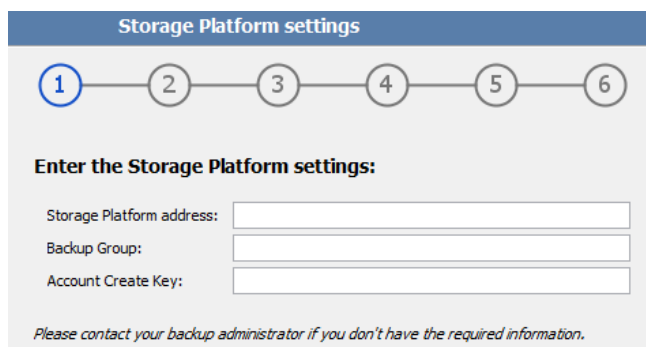


**Note:** Some of the settings encountered in the wizard may have been removed when the MSI was created. Furthermore, the wizard may contain additional steps. Please read each window carefully before continuing.

### Step 1 of 6: 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.



The screenshot shows a wizard window titled "Storage Platform settings". At the top, there is a progress bar with six numbered steps (1-6). Step 1 is highlighted with a blue circle. Below the progress bar, the text "Enter the Storage Platform settings:" is displayed. There are three input fields: "Storage Platform address:", "Backup Group:", and "Account Create Key:". At the bottom of the window, there is a note: "Please contact your backup administrator if you don't have the required information."

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.

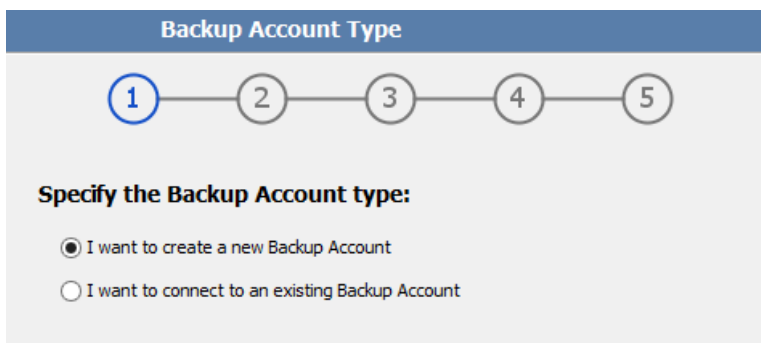
4. Once all the correct settings have been entered, click **Next**.

## Step 2 of 6: 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.

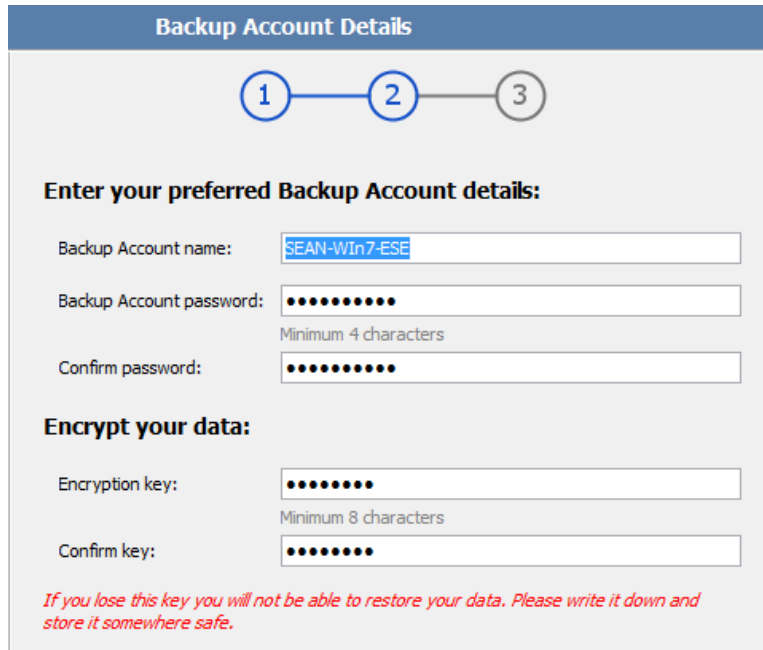
2. Click **Next** to continue.
- 3.

## Step 3 of 6: 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.



**Backup Account Details**

1 — 2 — 3

**Enter your preferred Backup Account details:**

Backup Account name:

Backup Account password:   
Minimum 4 characters

Confirm password:

**Encrypt your data:**

Encryption key:   
Minimum 8 characters

Confirm key:

*If you lose this key you will not be able to restore your data. Please write it down and store it somewhere safe.*

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 **Set up connection settings...** if you'd like to configure your connection to the Storage Platform.
5. Click **Next**.



### If connecting to an SE Account which has been newly converted to ESE

- **Backup Sets.** All your previous SE backup sets will be collapsed into one i.e. all files will be available from a single backup set in ESE.
- **The first backup.** Because existing backup data is preserved, the next backup will only send changes to the Storage Platform. However, this does not apply to WIB. (See the section *Windows Image Backup* in Chapter 9, “Options and Settings”.)
- **Data backed up by plug-ins.** All data backed up by plug-ins, such as “VSS” and “System State (using WSB)” will be available for restore. However, since these plug-ins are no longer available in ESE, new backups will need to be configured for these data sets.

## Step 4 of 6: 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 AccountServer and configure your Backup Account. A message will be displayed confirming that your Backup Account has been successfully configured.

The information will also be distributed to the relevant StorageServer. This is useful in case the AccountServer is unavailable, your backups will be able to continue uninterrupted.

Backup Account Summary

1
2
3
4
5
6

**Storage Platform settings**

Storage Platform address: 192.168.21.126:443  
 Backup Group: MyGroup

**Backup Account settings**

Backup Account name: SEAN-PC  
 Backup Account password: \*\*\*\*\*

**Encryption**

Encryption key: \*\*\*\*\*

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 6: Schedule backup process

BackupVault ESE Backup Client can take backups of included files and folders either upon request (manually) or automatically. This step enables you to set up an automatic backup schedule.



**Tip:** We suggest backing up at night when the server is running but 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.
3. 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.

Backup Schedule

1
2
3
4
5
6

**Set up your automatic backup schedule:**

Daily automated backup @

Advanced schedule (back up at the following times):

Week day		Advanced schedule
Monday Tuesday Wednesday Thursday Friday Saturday Sunday	Backup time: @ <input type="text" value="12h00"/> <input type="button" value="Add"/> <input type="button" value="Delete"/>	

Warning: No automatic backups are specified. It is recommended to enable daily automatic backups.

## Step 6 of 6: 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 to another location.

Click **Finish** to complete the wizard.

## Congratulations

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

### Congratulations

Congratulations on completing this setup wizard successfully.

You may now proceed to select files and folders for backup.

## 4. Updating Backup Clients

Backup Clients are usually set up to be updated automatically but the process can be carried out manually. You'll find a description of Auto Updates and a set of instructions on how to perform manual updates in the following sections.

### Automatic Updates

BackupVault allows you to automate the update process so that the Enterprise Server Edition Backup Client is updated with the latest software version during the backup process.

Update packs are created for brand changes and core program updates respectively, and are distributed to the AccountServer. The AccountServer then distributes these to the different StorageServers from where they are requested during the backup process by the Backup Client.

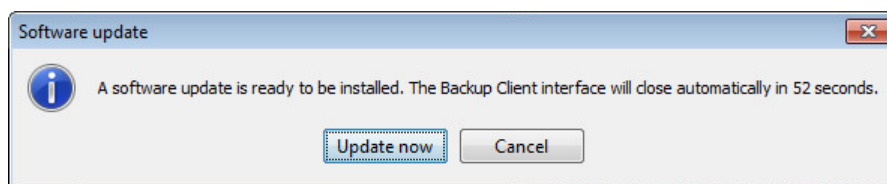


**Note:**

- *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 from the Storage Platform.*

If a Backup Client update is available, one of the following will occur:

1. If the Backup Client is open after a backup process has completed, 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 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.
2. If the Backup Client is not open, an automatic update check occurs in the following instances:
    - When an automated backup occurs, the update will be installed
    - An update is performed 10 minutes after the BackupVault ESE service is restarted and then again every 24 hours after that

After an Auto Update occurs containing core program updates, the BackupVault ESE System Tray icon will display a notification indicating that the update was successfully applied and the new version number.

## Manual updates

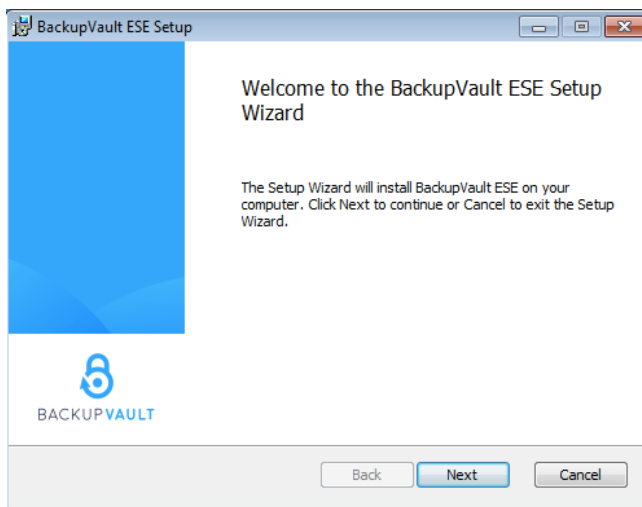
To manually update ESE Backup Clients:

1. Close the Backup Client and click **Exit** on the BackupVault ESE system tray icon.
2. Run the ESE Installer.

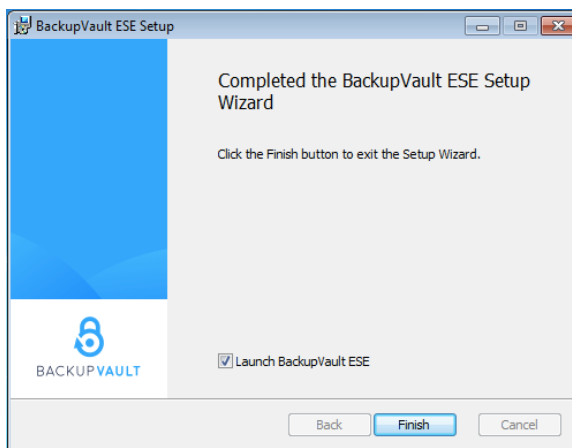


**Note:** The ESE Installer retrieves the install location from the backup service and cannot be changed when you are upgrading an existing ESE Backup Client.

3. On the **Welcome** screen, click **Next**:



4. On the Ready to install BackupVault ESE screen that appears, click **Install**.
5. If the BackupVault ESE service is running, you will be prompted that about **Files in Use**. Click **OK** to have the installer stop the service, update the software and then to restart the service.
6. If the ESE service is not running when the update is being performed, the installer will update the software and start the service automatically thereafter.
7. On the **Completion** screen that displays, **Launch BackupVault ESE** is selected by default. Clear the check box if you do not wish to do so.





8. After the Backup Client updates, click **Finish**.



**Note:** *If prompted to restart the machine, note that it is not essential to do so since the ESE service would have been restarted already.*

9. Confirm that you can open the ESE Backup Client and that you can initiate a manual backup successfully. (see “*Starting a backup manually*” later in this document)

## 5. Graphical User Interface (GUI)

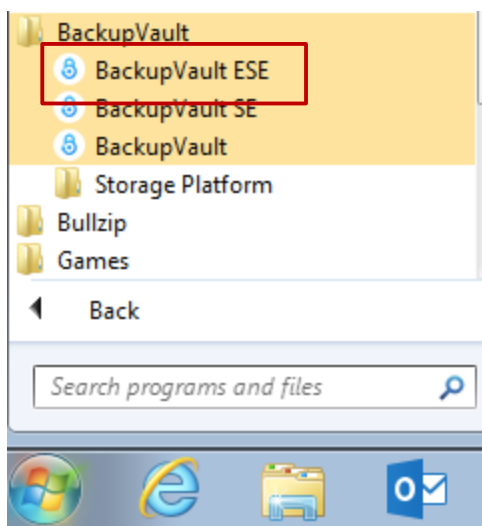
By opening the Backup Client, you can use the Graphical User Interface (GUI) to:

- Select files for backup and restores
- Start backups and restores
- Schedule automatic backups
- Find files in previous backups
- Restore files and folders from previous backups

### Opening the Backup Client

To open the Backup Client:

On the Start menu, click **BackupVault ESE**.



Alternatively, if the Backup Client is closed but the service is still running (the “BackupVault ESE” icon is visible in the System Tray), double-click the **BackupVault ESE** System Tray icon or right-click it, and then click **Open**:

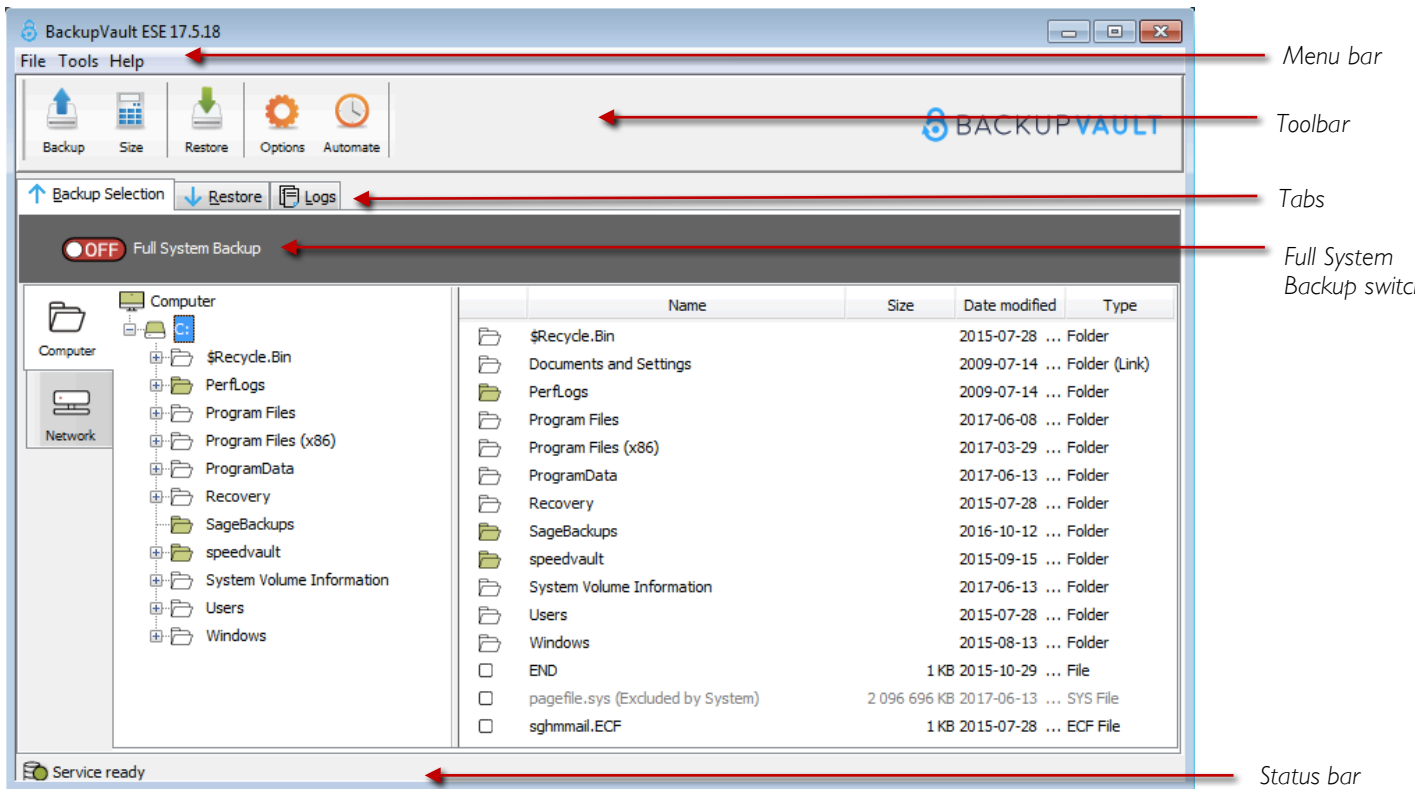


**Note:** The first time you open the Backup Client, the Setup Wizard launches automatically. For more information on creating a Backup Account, see Chapter 3, “Setup Wizard”.

## The GUI explained

You can manage and monitor backups using the Backup Client, the System Tray icon or the notification bubbles that appear when certain processes occur. Below are descriptions of each of these items and the options they provide.

The Backup Client contains the following areas:



The Backup Client will automatically detect installations that will automatically activate different views:

- Microsoft SQL Server – the **SQL** view
- Microsoft Exchange – the **Exchange** view
- Capita SIMS, FMS and Discover – the **SIMS**, **FMS** and **Discover** views, respectively.







## 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 right-click menus.

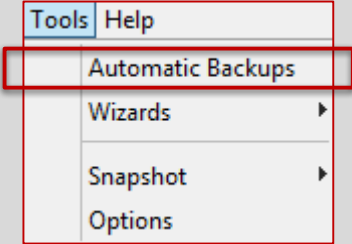
### Menu bar

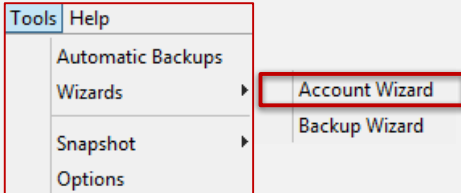
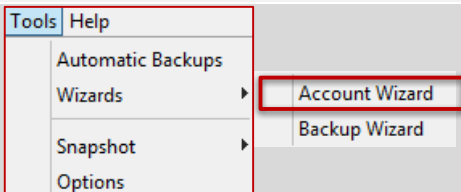
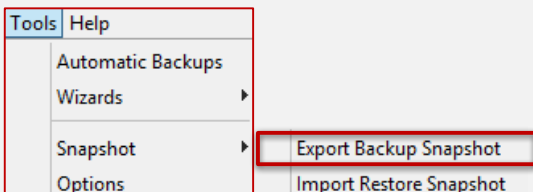
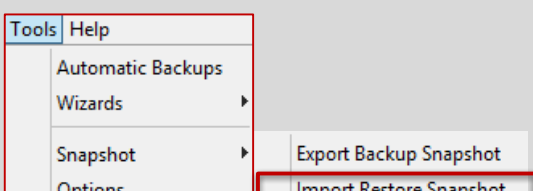

Each menu on the menu bar contains one or more options. The tables below describe the options available.

#### File menu

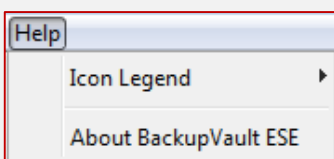
Option	Click the option to...	Button
<b>Backup</b>	Initiate a backup immediately.	 Backup
<b>Restore</b>	Switch to the Restore view in the Backup Client.   <b>Tip:</b> For faster access to the Restore view, click the <b>Restore</b> tab instead of using the <b>File</b> menu.	 Restore
<b>Calculate Size</b>	Determine the total size of the data included in the backup selection. For more information, see <a href="#">Determining the backup selection size</a> in Chapter 6, "Backups".	 Size
<b>Exit</b>	Close the Backup Client.   <b>Tip:</b> You can re-open the Backup Client window at any time via the Windows <b>Taskbar</b> or by double-clicking the icon in the System Tray.	

#### Tools menu

Option	Click the option to...
<b>Automatic Backups</b>	Access the Backup Schedule settings in the <b>Options and Settings</b> 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".  

Option	Click the option to...	
<b>Wizards &gt; Account Wizard</b>	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".	
<b>Wizards &gt; Backup Wizard</b>	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".	
<b>Snapshot &gt; Export Backup Snapshot</b>	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 Snapshots</i> in Chapter 9, "Options and settings".	
<b>Snapshot &gt; Import Restore Snapshot</b>	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".	
<b>Options</b>	Opens the <b>Options and Settings</b> dialog box that enables you to modify a range of settings. For more information, see Chapter 9, "Options and settings".	

## Help menu

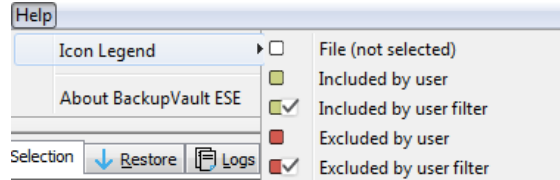
Option	Click the option to...	Menu/Button
<b>Icon Legend</b>	Access a list of the icons used in the Backup Client and their meanings.	
<b>About BackupVault ESE</b>	Access the product information and support contact details. Also displays any plug-in version inconsistencies.	



## Icon legend

On the **Backup Selection** and **Restore** tabs, each file and folder is displayed with an associated icon. The colour of the icon indicates the file or folder's backup selection status.

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



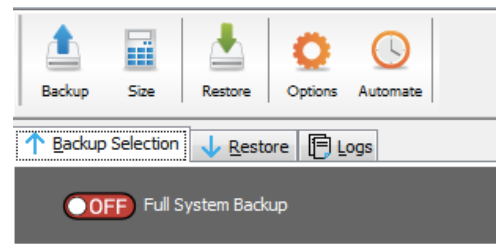
**Note:** For more information on backup and restore selections (inclusions and exclusions), see [Views: The selection mechanism explained](#) earlier in this chapter.

## Full System Backup Switch

A full system backup in Enterprise Server Edition ensures that all disks and therefore all data on the computer in question is included in the backup.

See the section [Performing a full system backup \(for disaster recovery\)](#) in Chapter 6, “Backups”, on how to do this.

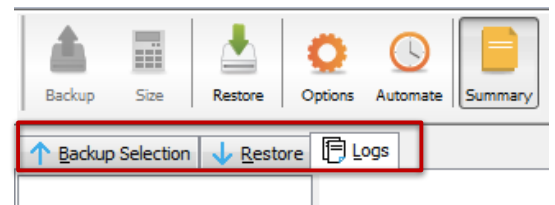
Once the data has been backed up, it can be restored to a virtual machine using the “Full System Recovery” option provided in the InstantData application (see the *InstantData User Manual* for details).



## 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.
- **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.

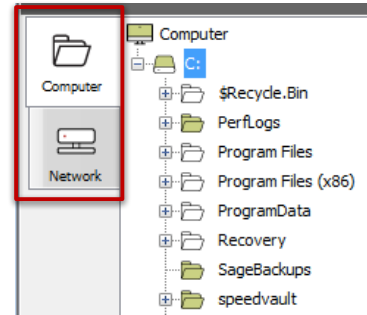


**Tip:** In the right-hand pane on the **Backup Selection** and **Restore** tabs, you can click any of the column headings to sort the list according to their values.

## Views: Where to make selections

Data from different sources is listed under respective views. Views are indicated on the left-hand side in the Backup Client.

These views will automatically be displayed depending on whether the source has been detected on the computer.



**Note:** The names of these views differ slightly between tabs the **Backup Selection** and **Restore** tabs.

## Adding Network Locations

Add shared network locations or network volumes and include files in these locations in the backup selection.

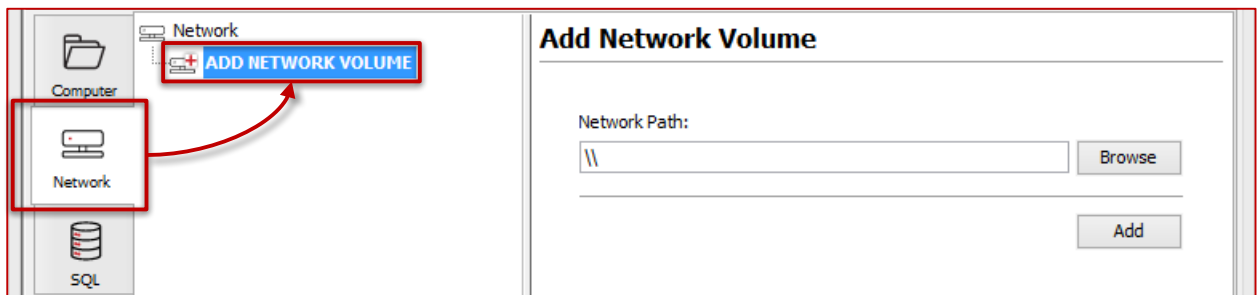
**Warning:** Please ensure that the backup service is started by a user with sufficient permissions to browse and access the network shares to be included in the backup selection.

The Backup Client will only be able to back up files from a network volume after the share has been accessed and authenticated by the server on which the Backup Client is installed.

**Note:** Only fixed and network drives can be backed up. Removable media cannot be backed up.

### To add a network volume:

1. On the **Network** view, click **Add Network Volume**.



2. In the **Network Path** box, type the network path, starting with "\\".



**Example:** \\storageserver\documents

Alternatively, use the **Browse** button to browse for the network location.

Files in the network volume can now be included or excluded. (For more information on how to include and exclude files, see [Selecting files and folders](#) in Chapter 6, "Backups"):

### To remove a network volume from the Backup Client:

1. Right-click on the entry in the left-hand pane.
2. Click **Remove**

The network volume will be removed from the left-hand pane.

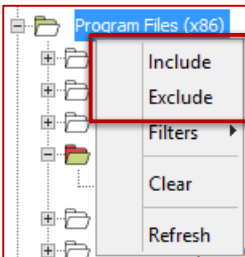
## Views: The selection mechanism explained

This is the main area where selections of data to be included in backups or restores are done inside their respective views as explained below.

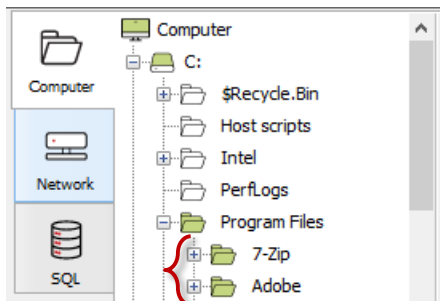
### Implicit inclusions/exclusions

Including or excluding parent-level item will explicitly include it *and* **implicitly include its sub-items** (the same applies to exclusions)

#### Parent-level menu items – Include; Exclude:



**Example:** *Implicitly included sub-level items:*

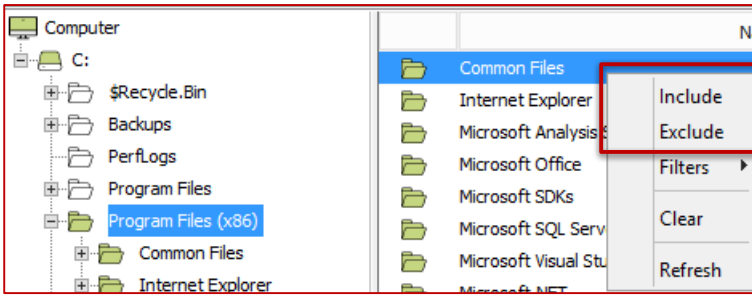


**Note:** *All files in the parent item will be included in the next backup which also means that any changes made within the parent item (such as a folder or database instance node) will automatically be included as well.*

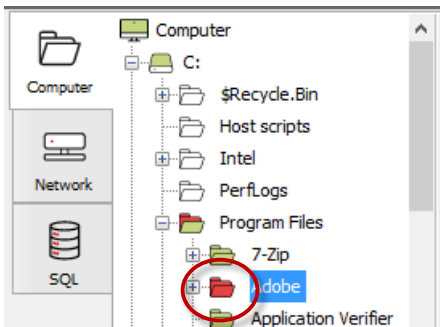
### Explicit inclusions/exclusions

Excluding a child-level item will explicitly exclude it and *its* sub-level items, if any. The parent-level item will be displayed differently to indicate this.

#### Sub-level menu items – Include; Exclude:



**Example:** An explicitly excluded sub-level folder:



### Removing parent-level inclusions/exclusions

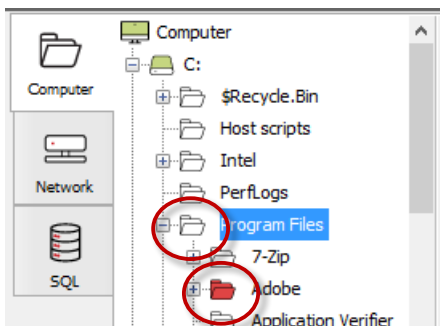
When a parent-level item's inclusion or exclusion is removed, any explicit inclusions or exclusions will remain.



**Note:** This is done by clicking the **Include** menu item on items that have already been included.



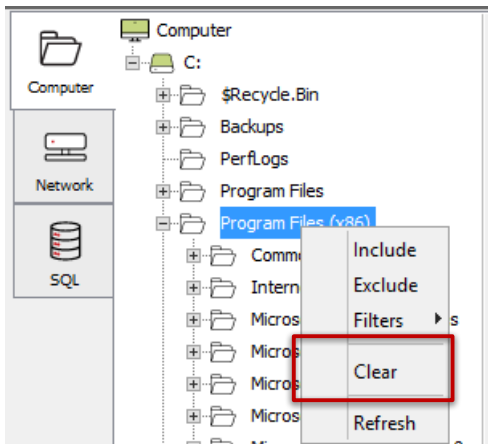
**Example:** Parent-level inclusion removed; sub-level explicit exclusion remains:



### Clearing inclusions/exclusions

Inclusions or exclusions or parent-level item inclusions can be undone by *clearing* them.

**Menu item:** Clear



### Removing offline items

Files, folders and other items that have been backed up before, and are therefore still included in the backup selection, but no longer exist on disk, will be shown as “Offline”. They can’t be backed up any longer and can be removed by using the **Remove** option on the context menu in the Backup Selection tree (as above).



**Note:** Your selection profile will be remembered by the Backup Client unless the **Remove** option was used.

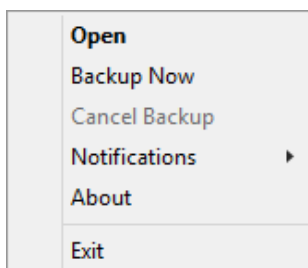
### Status bar

This area displays the status of the Windows service for the Backup Client.





### System Tray icon

- The icon in the System Tray indicates the backup activity status and can be used to perform various tasks.
- An animated icon indicates that the service is busy with a backup process.
- Click or right-click the System Tray icon to view the menu options available:



**Note:** Depending on your Windows taskbar settings, the System Tray icon could be hidden by default. To display the icon, click the **Show hidden icons** arrow, click **Customize notification icons**. In the dialog box that appears, expand the **Behaviours** drop-down next to “Runner”, and then select **Show icon and notifications**.

## System Tray menu

Options	Click the option to...
<b>Open</b>	Opens the Backup Client.  <b>Tip:</b> Users can also double-click the System Tray icon to open the application window. For more information, see “The GUI explained” earlier in this chapter.
<b>Backup Now</b>	Manually initiates the backup process without opening the Backup Client.
<b>Cancel Backup</b>	If the service is busy with a backup (when the icon is animated), <b>Cancel</b> will stop the process.
<b>Notifications</b>	Provides you with options to enable/disable backup notifications. For more information, see “Notifications” later in this chapter.
<b>About</b>	Displays the splash screen. Click anywhere in the window to close it.
<b>Exit</b>	Removes the icon from the System Tray.  <b>Note:</b> This will not stop the BackupVault ESE service from running scheduled backups.  To see the icon in the System Tray again, simply open the BackupVault Backup Client using the Windows Start button. For more information, see “Opening the Backup Client” earlier in this chapter.



**Warning:** The backup service must be running at all times for backups (manual or scheduled) to take place.



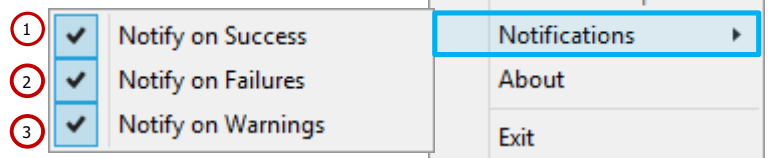
**Note:** To stop or start the Backup Service, open **Administrative Tools** in the **Control Panel**, and then double-click **Services**. In the list of services that appear, select **BackupVault ESE** and select **Stop** or **Start** on the toolbar. The System Tray icon will also indicate when the service is not running.

## Notifications

Notifications of Backup Client activity will appear as pop-ups in the System Tray.

The following notifications will appear by default but can also be disabled:

1. When a backup completed successfully.
2. When a backup failed to complete.
3. When a backup was completed but there were warning or errors.





**Tip:** To view related log file information, click anywhere within the pop-up.



**Note:** You will always be notified when:

- The Backup Client has been upgraded
- After files have been restored

**To enable or disable notifications:**

Right-click the System Tray icon and then select the relevant **Notifications** option.



**Tip:** Since notifications only appear briefly, hover over the System Tray icon to see when the last backup occurred.

## 6. Backups

After creating a Backup Account, you can set the Backup Client to back up or ignore specific files and/or folders by creating a backup selection. You can then start a backup manually or schedule automatic backups.

### How to back up

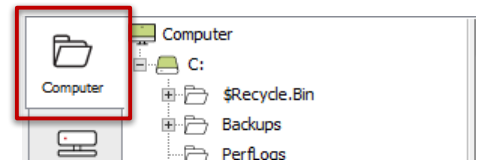
The following sections describe how to:

- Select data to back up (including files, databases and system-critical information)
- Use advanced methods like filters and global exclusions to specify files and/or folders to be excluded from the backup selection.
- Determine the backup selection size
- Start backups – manually or automatically
- Cancel or resume a backup

#### a) Selecting files and folders

All files and folders can be selected for backup from the **Computer** view.

To proceed, perform selections for your backup. Refer to the section [Views: The selection](#) mechanism explained above.



**Tip:**

- Use other views when available for better performance during backups.
- Use filters to automate file selection based on file types. See [Using filters](#) in this chapter



**Warning:**

- If you have limited space on the drive running the Backup Client, it is recommended that you move the Data and Logs folders to another location.
  - For more information, see [Disk Usage](#) in Chapter 9, “Options and settings”.
  - To confirm the size of the next backup, see [Determining the backup selection size](#) later in this chapter.
- For Windows 2012 and above, we recommend disabling volume-level deduplication and compression as it could negatively affect backup performance.

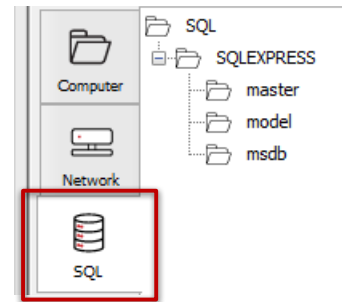


**Note:** Some files and directories are forcefully excluded from the backup selection. On Windows machines, these are the **pagefile.sys** and **hiberfil.sys** files and also the Backup Client’s folders, **data** and **tasks**. For more information about the Backup Client’s **data** folder, see the section [Disk Usage](#) in Chapter 9.



## b) Selecting SQL Server databases

Microsoft SQL Server® databases can be backed up (using the **SQL** view). Virtual Shadow Copy (VSS) technology is used to achieve this by reading files locked or occupied by other applications – such as an active database.



**Note:** The **SQL** view is only visible if a running “SQL Server VSS Writer” service has been detected.

To proceed, perform selections for your backup. Refer to [Views: The selection mechanism explained](#) above.



**Warning:** Offline databases included will cause the backup to fail. Exclude the database to ensure the backup completes.

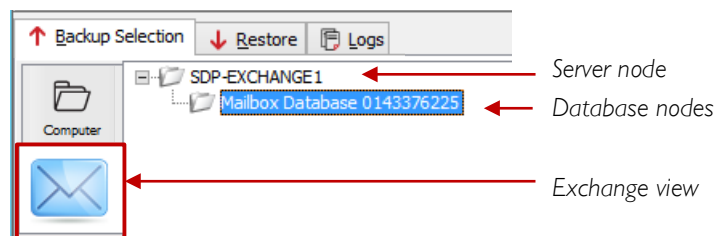


**Note:**

- Databases detached from the SQL Server instance will not be displayed in the Backup Selection and need to be backed up from the **Computer** view.
- Files associated with SQL Server databases can be backed up individually. If databases files are also selected from the **Computer** view and an existing selection of a database exists in the **SQL** view, only one copy of the database will be backed up.

## c) Selecting Exchange mailbox databases

Microsoft Exchange® mailbox databases are backed up using Virtual Shadow Copy (VSS) technology which is able to reading files typically locked by an application – such as databases.

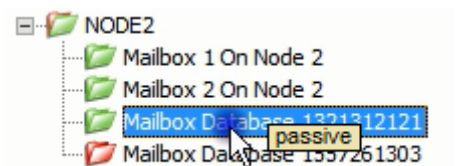


**Note:** The **Exchange** view will only be visible if the “Microsoft Exchange Information Store” (for Exchange 2010) and the “Microsoft Exchange Replication” (for Exchange 2010 & 2013) Windows services are running.

### An overview of database states in the Backup Client

#### Active and passive databases

The replicated databases in Database Availability Group (DAG) will be indicated as “passive” in the Backup Selection tree. For stand-alone Exchange servers, all databases are indicated as “active”.



**Example of a passive database**

To view:

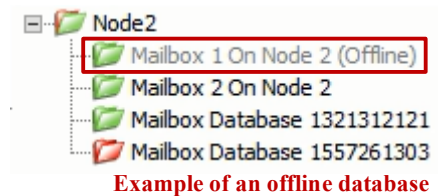
Just hover the mouse pointer over the Mailbox node to distinguish active mailbox databases from passive ones.

### Online and offline databases

Mailbox databases can appear as “Offline” in the **Backup Selection** tree for different reasons, such as a stopped Exchange Windows service or if the database has been dismantled.

When offline databases are included in the backup selection, they will be skipped during the backup process. The result is also reflected in the backup log.

However, if the Server node is included, the skipped database will be backed up if it is online at the next backup.



**Note:** Dismounted mailbox databases will be seen as **offline** by the Backup Client on a Microsoft Exchange 2010 server.



**Tip:**

- If **Full System Backup** has been enabled, you can exclude all databases of a SQL server to prevent those from being backed up.
- While in the **Backup Selection** tab, press F5 to refresh your view of the backup selection.

## d) Including system-critical information (for disaster recovery)

To perform Windows Image Backups (WIB), this setting needs to be enabled. To enable WIB, refer to the section [Windows Image Backup](#), in Chapter 9, “Options and Settings”.

## e) Selecting Capita SIMS, FMS & Discover data

For more information about backing up Capita components with ESE, refer to

[Capita SIMS, FMS, and Discover](#) in Chapter 10, “Advanced tools”.

## f) Performing a full system backup (for disaster recovery)

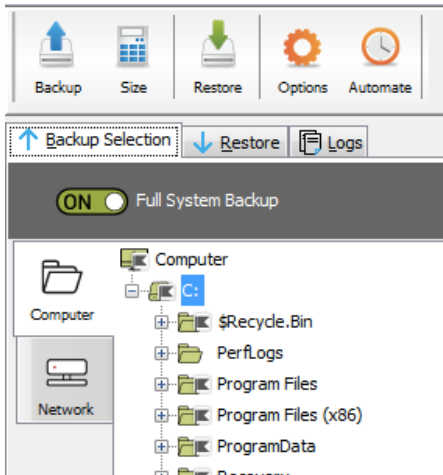
A full system backup in Enterprise Server Edition ensures that all disks and therefore all data on the computer in question is included in the backup.

Once the data has been backed up, it can be restored to a virtual machine using the “Full System Recovery” option provided in the InstantData application (see the *InstantData User Manual* for details).

### Turning on Full System Backup

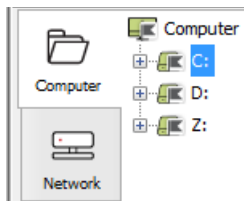
### To turn on Full System Backup:

On the **Backup Selection** tab, click the switch to **ON**.



The following will happen:

1. All files and folders in the **Backup Selection** tab are now marked as *included* (through icon colouring) for a *full system backup* (by the “flag” icon):



2. Data from other views such as **Network**, **Exchange** and **SQL**, will also be included automatically.

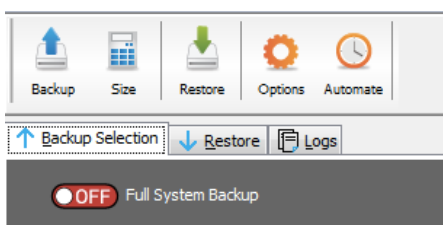


**Note:** For more information, see [Views: The selection mechanism explained in Chapter 5, “Graphical User Interface”](#).

### Turning on Full System Backup

#### To turn off Full System Backup:

On the **Backup Selection** tab, simply click the switch again to **OFF**.



Any backup selections made before enabling **Full System Backup** will be applicable again i.e. all files and folders previously included and excluded will be part of the next backup.

## Other selection methods (advanced)

### Using filters

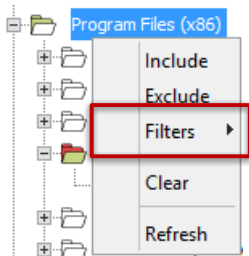
You can use filters to automate file inclusions or exclusions within a folder, based on file types.



**Example:** A **\*.docx** filter will include or exclude all Word documents within a folder, as well as any new Word documents that are added to that folder later.

To apply a predefined filter to a specific folder:

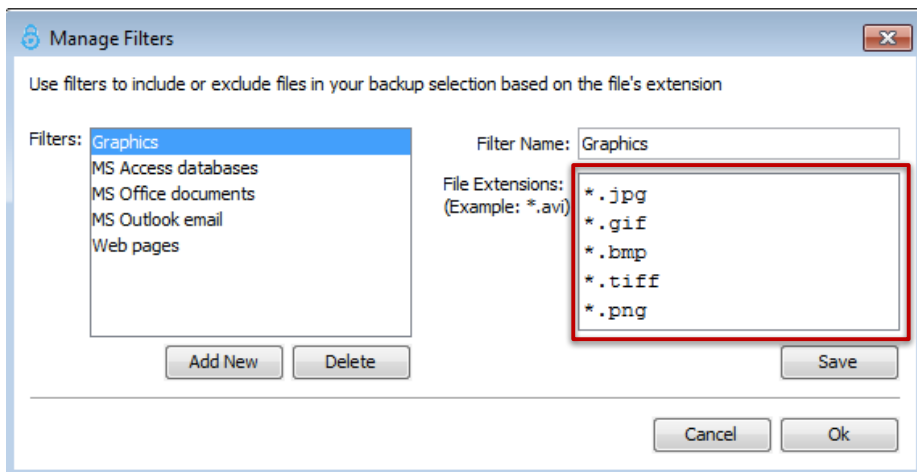
1. In the Backup Selection tree, right-click the folder icon.
2. Select **Filters**.



3. Select 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, right-click the folder icon, select **Filters**, then click **Manage filters**.
2. Select one of the filters and then modify its properties in the **File Extensions** box.



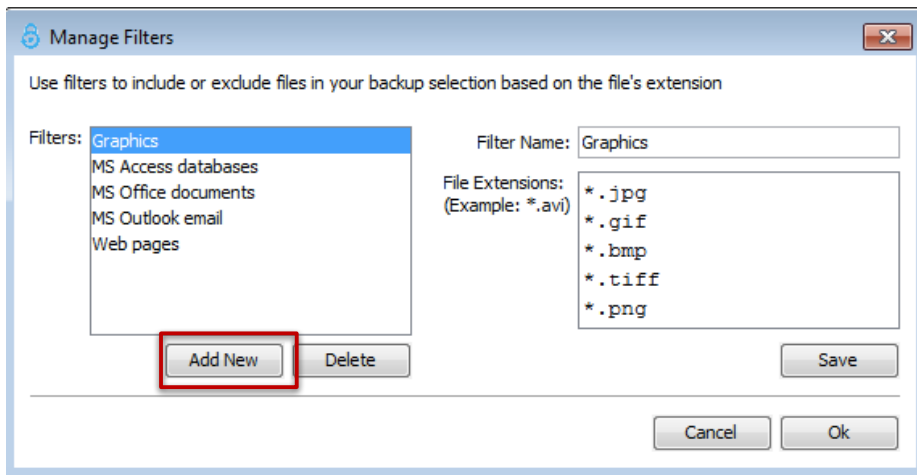
3. Click **Save**.
4. Click **OK**.



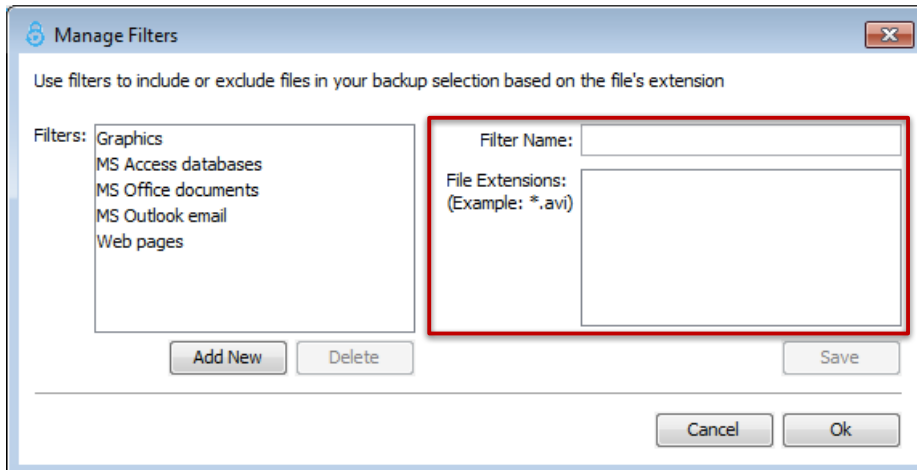
**Tip:** To add a new filter from within the **Edit filters** dialog box, click the **New** button, supply a name that describes the filter, enter the file type(s), and then click **OK**.

**To add a new filter via the Backup Selection tree:**

1. In the Backup Selection tree, right-click the folder icon, select **Filters**, then click **Manage filters**.
2. Click **Add New**.



3. In the **Filter name** box, type a name to be used in the Filters menu.
4. In the **File Extensions** box, specify the file extensions to which the filter will apply.



5. Click **Save**.
6. 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. Right-click the folder icon.
2. Select **Filters**.
3. Select 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 check marks. See the section [Icon legend](#) above for details.

#### Inclusions and exclusions by “profiling”

Some inclusions and exclusions are enforced by a Backup Administrator 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 corresponding icons. For more information, see the [Icon legend](#) section later in this chapter.



**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.*

#### Global exclusions

Global exclusions enable you to specify files and/or folders to be excluded from the backup selection.

#### To add Global Exclusions:

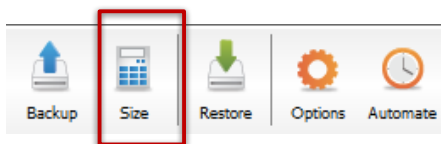
1. Click the **Options** button on the toolbar, and then click **Global Exclusions**.
2. Select the type(s) of filters to apply and then specify their values. (For more information, see [Global Exclusions](#) in Chapter 9, “Options and settings”.)
3. Click **OK**.

#### Determining the backup selection size

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

#### 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).



**Note:** If Microsoft SQL Server databases are included in the backup selection on the instance level from the **SQL** view, the calculation only considers databases that are online.



**Warning:**

- The Backup Client will log a warning if your backup selection size exceeds your Backup Account limit during a backup. You should remove some items from the selection or ask your backup administrator to increase your Account limit.
- Disks with less than 10% space available for a restore will be indicated by a warning in the Backup Log at the start of each backup process.
- 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, right-click the file's icon.

The icon will turn red to indicate that it is excluded.



**Note:** To exclude multiple files at once, click a file name in the list, hold down the **Shift** key and drag the mouse pointer to highlight the files. Right-click the selection, and then click **Exclude**.

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

**To cancel the backup selection size calculation:**

- A. In the **Size** dialog box, click the **Cancel** button.

## Starting a backup manually



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



**Tip:** Run a backup manually after creating the 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.

The backup log will indicate whether it was started manually or automatically via schedule.

### To start a backup manually:

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



2. 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.



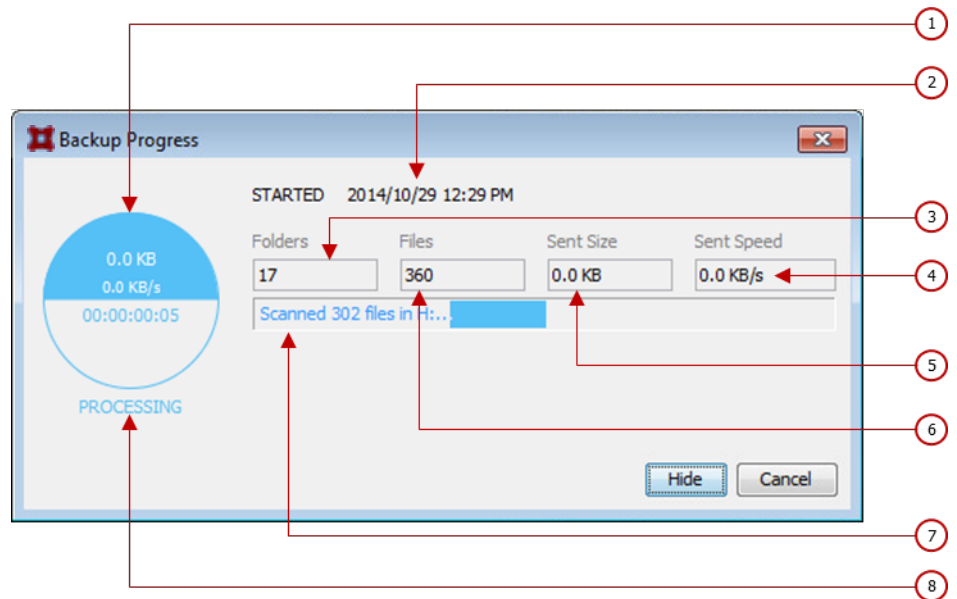
**Tip:** To view backup logs, click the **Logs** tab. Backup log dates are displayed in blue.

### Backup Status window

The Backup Status window displays relevant information about backups that are either in progress or completed. The numbered elements indicated in this diagram are explained below.



**Note:** The title of the Backup Status window changes according to the status of the backup process.



### Backup Progress: PREPARING

The initial phase of a backup process has the following information displayed:



1. No data is being transferred therefore the speed is shown as zero
8. Status of the current backup process i.e. "PREPARING"

### Backup Progress: PROCESSING

A backup process in progress has the following information displayed:

1. Total size of backup items processed thus far; backup processing speed; backup processing duration (dd:HH:mm:ss)



**Note:** Size and speed indicators 4 and 5 are of data transferred to the Storage Platform only and do not relate to actual backup processing i.e. disk scanning, file encryption, etc.

2. Backup start time
3. Number of changed and unchanged folders already processed for backup
4. Data transfer speed to Storage Platform
5. Data already transferred to the Storage Platform (excluding the backup index)
6. Number of changed and unchanged files already processed for backup
7. Progress bar indicating processing progress per file



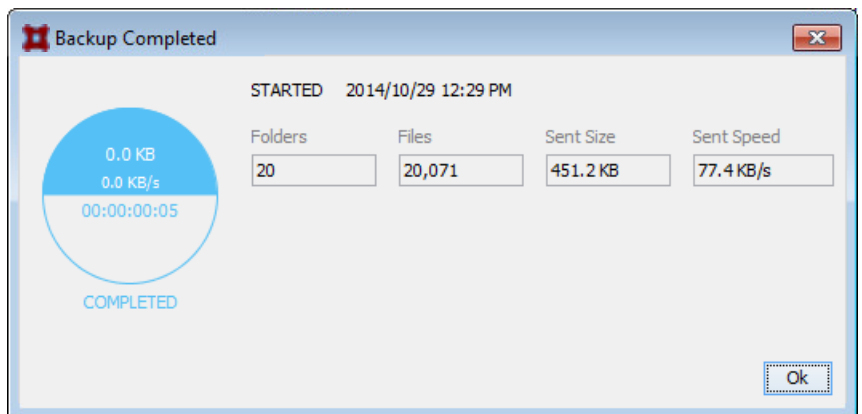
**Note:** Additional progress bars will be displayed for each volume included in the backup e.g. D:, E:, F:, etc. except where volumes span across multiple disks, volumes on these disks will be processed afterwards.

8. Status of the current backup i.e. "PROCESSING"

### Backup Progress: COMPLETED

A completed backup process displays the following (as per the points indicated in the diagram above):

1. Total size of backup items processed thus far; average processing speed during the backup; backup duration (dd:HH:mm:ss)
2. Backup start time
3. Total number of folders processed for backup
4. Average data transfer speed to Storage Platform
5. Data transferred to the Storage Platform (including the backup index)
6. Total number of files processed for backup



7. (No progress bars are displayed)
8. Status of the current backup i.e. “COMPLETED”

### Other Statuses

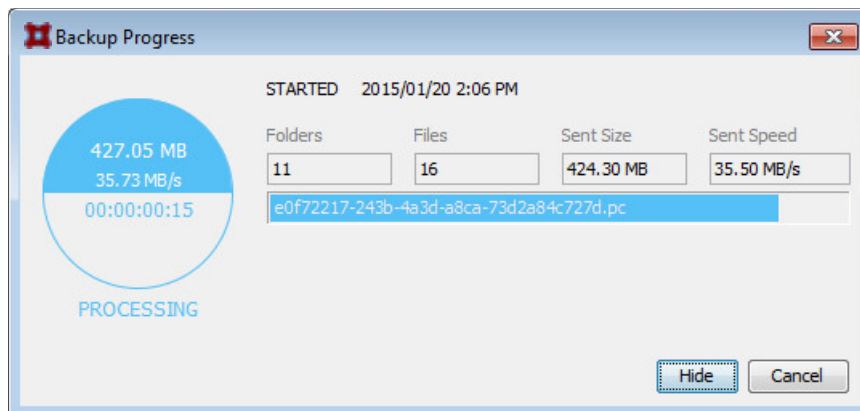
- The status will also briefly be indicated as “DUMPING” if Windows Image Backup has been enabled. See the section *Windows Image Backup*, Chapter 9, “Options and Settings”.
- The status will briefly be indicated as “RUNNING SCRIPT” if any scripts have been enabled on the Backup Scripts page. See the section *Backup Scripts*, Chapter 9, “Options and Settings”.

## Cancelling a backup

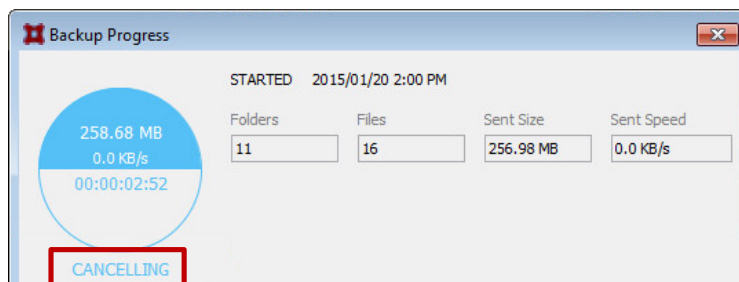
Once a backup is in progress, you can cancel the process via the **Backup Status** window or by using the System Tray icon.

To cancel a backup:

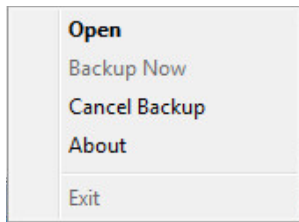
1. In the **Backup Status** window, click the **Cancel** button.




The status will change to “CANCELLING” while the Backup Client attempts to cancel the backup process.

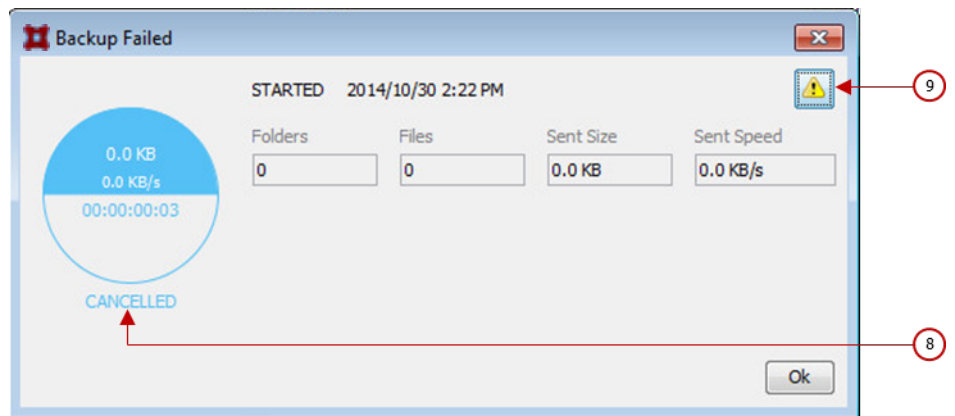


2. Alternatively, right-click the icon in your System Tray, and then click **Cancel Backup**.



3. In the confirmation dialog box that appears, click **Yes**.

The backup will be cancelled and the status will be indicated as “CANCELLED” in the Backup Status window. This will be reflected in the backup Logs accordingly. Click the  button (pt. 9 in the image) to view the Logs.



 **Note:**

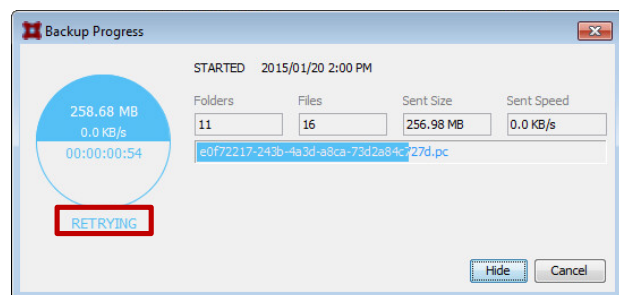
- When a backup is cancelled by a user, it is considered a failed backup.
- When a backup is cancelled by the Backup Administrator via the Storage Platform Console, this will be visible in the Backup Log.

## Resuming a backup




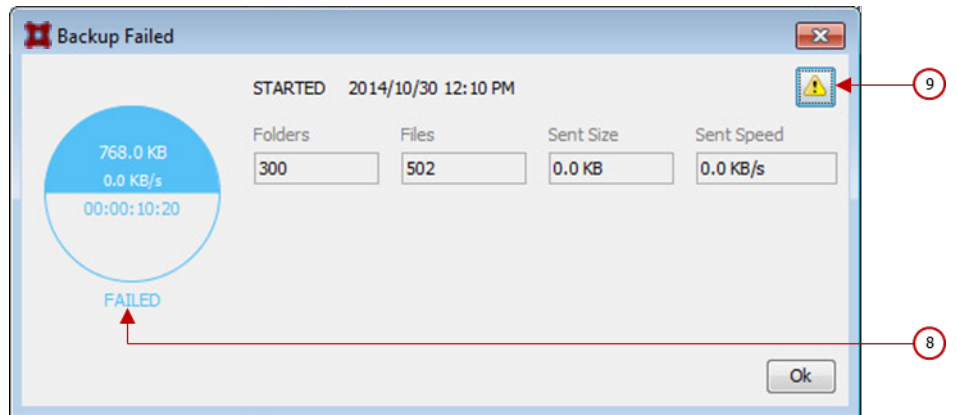
**Note:** Once a backup process has been cancelled, it cannot be resumed. A new backup needs to be initiated.

By default, the Backup Client tries to connect to the Storage Platform 10 times every 60 seconds in the case of a connection to the Storage Platform being lost. The status will be indicated as “RETRYING”.



If a connection cannot be re-established, the backup process is automatically cancelled. The status of the backup will then be indicated as “FAILED” on the Backup Status dialog:

When a backup fails unexpectedly, the details of a possible cause can be found in the backup Log. Click the  button (pt. 9 in the image above) to view the Logs.



## 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.



**Note:** The backup log will indicate whether it was started manually or automatically.

### To schedule a daily automated backup:

1. On the **Tools** menu, click **Options**. Alternatively, click the **Options** button on the toolbar.
2. In the Options and Settings dialog box, click **Backup Schedule**.
3. Select the **Daily automated backup** check box, and then specify a backup time in the associated box.
4. Click **OK**.

### To create an advanced backup schedule:

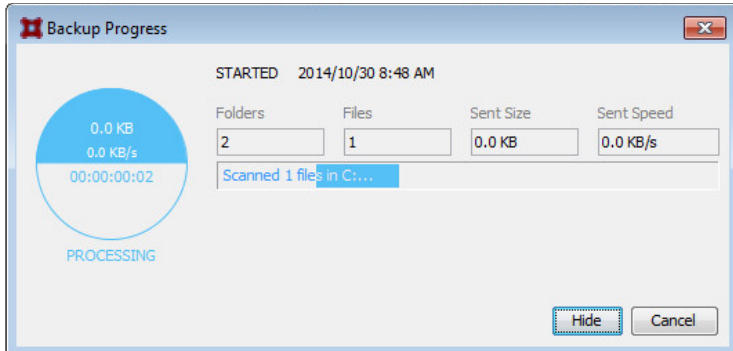
1. Select the **Advanced schedule (back up at the following times)** check box.
2. In the **Week day** box, select the day on which a backup should be initiated.
3. Specify the time in the **Backup time** box.
4. Click the **Add** button to add the day and time to the **Advanced schedule** box.
5. Repeat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



**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 Windows 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 more reliable than manual backups.

Backups will initiate at the scheduled times and if the Backup Client is open the **Backup Status** window will also appear displaying the progress of the backup:



**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.
- To view backup logs, click the **Logs** tab. Backup log dates are displayed in blue.

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

## 7. Restores

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

### How to restore

The following sections describe how to:

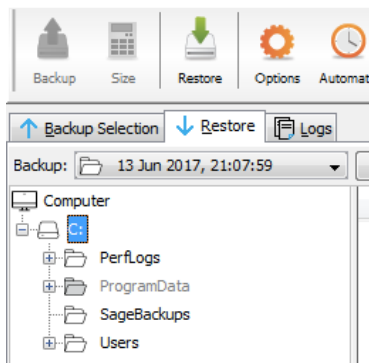
- Select the backup date
- Select data to restore
- Start the restore process
- Cancel the restore process

### Selecting your data to restore

#### Selecting the backup date

To select the desired backup

1. First, select the relevant view based on the type of data you need. In this example, the **Files** view contains the relevant data:



**Note:** If a backup contains Microsoft SQL Server or Exchange mailbox databases, for instance, additional views will be visible.

2. Then select the date on which your files were backed up.



Proceed by selecting the appropriate data to be restored. Based on the type of data you need, follow the procedures described below.

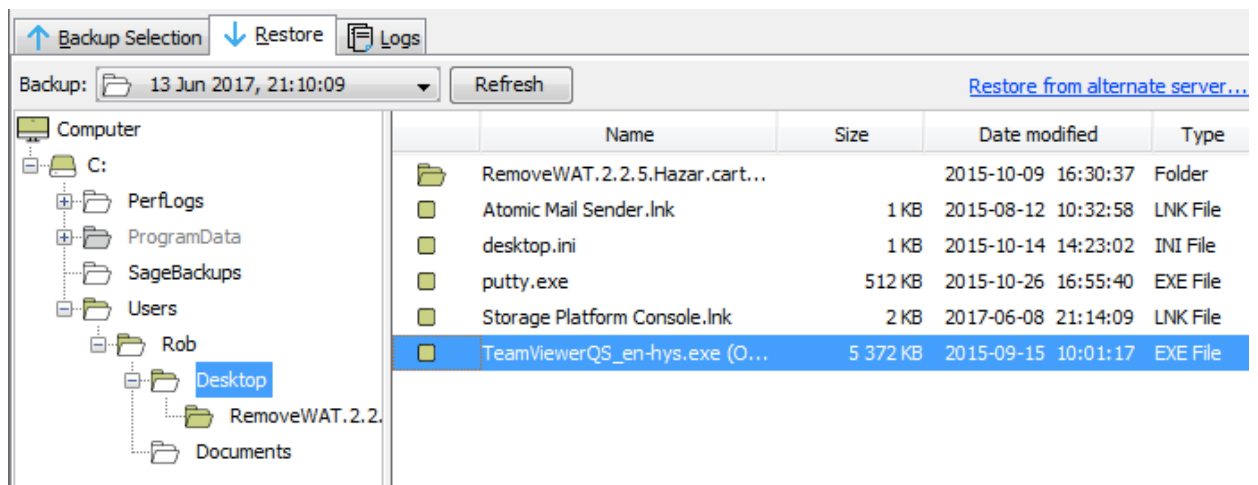
## a) Selecting files and folders

On the **Restore** tab, the tree structure gives you access to backed up files relevant to the selected backup date. Be sure to navigate to the **Files** view.

### Including files and folders

To include your data from the backup:

1. Include a single file or an entire folder by clicking the icon next it or by right-clicking the file/folder name and then clicking **Include**. Each included item is displayed with a green icon.

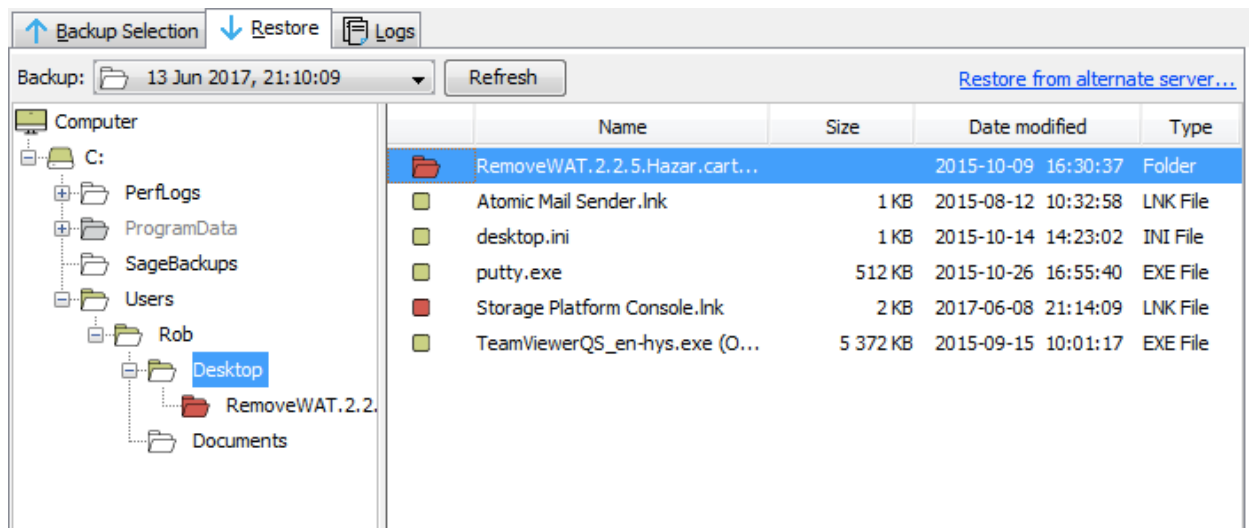


2. Once all the files and folders to be restored are selected, start the restore process by clicking **Restore** on the **File** menu or the **Restore** button on the toolbar. For information on the restore options available, see [Starting the restore process](#) later in this chapter.

### Excluding files and folders

To exclude certain files and folders from being restored:

1. If an entire folder is included but you wish to exclude a particular file or subfolder, right-click the file or folder icon, and then click **Exclude**.



Excluded items are displayed with red icons. Included folders that have some files or subfolders excluded are green with a red accent.

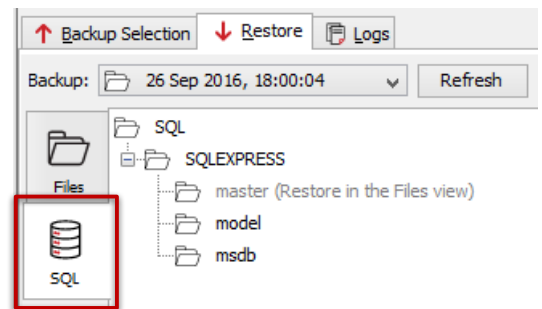
2. Once all the files and folders to be restored are selected, start the restore process by clicking **Restore** on the **File** menu or the **Restore** button on the toolbar. For information on the restore options available, see [Starting the restore process](#) later in this chapter.

## b) Selecting SQL Server databases

Microsoft SQL Server® databases are restored within an active SQL Server instance with the necessary metadata intact. Follow the steps below, while in the **SQL** view on the **Restore** tab, to select the appropriate databases to be restored.



**Note:** The SQL view is only visible if a running “SQL Server VSS Writer” service has been detected.



### Including databases and instances

Database selections can be done individually or on instance level.

#### To select a database or instance:

1. Right-click the folder icon of the database or instance.
2. Click **Include**.

The icon of the database or instance will change to green. If an instance was selected, the subordinate databases will also be included implicitly (see the section below, [Excluding databases included implicitly](#)).

### Excluding databases

#### To clear the database or instance inclusion:

1. Right-click the green folder icon of the included database
2. Click **Include** again.

The database or instance icon will change to back to an unshaded icon.

### Excluding databases included implicitly

#### To exclude databases included implicitly on instance-level:

1. Right-click the green folder icon of the included database
2. Click **Exclude**.

The database icon will change to red and the instance's icon will change to green with a red accent.



**Note:** The “master” database can only be restored from the **Files** view. For more information, see [Selecting files and folders](#) in Chapter 7, “Restores”.



## c) Selecting Exchange mailbox databases

To select the files and folders of an Exchange server:

Open the **Files** view to restore files of the Exchange server and relevant mailbox databases. Browse for the files as you would normally, as described in [Selecting files and folders](#).



**Note:** Files restored that were not backed up in the last backup will be indicated as such in the Restore log.



**Warning:** Unless a mailbox database is inactive at the time of being restored, its files should be restored to a location different from the original backup location.

## d) Restoring system-critical data from a Windows Image Backup (disaster recovery)

If Windows Image Backup (WIB) was enabled, all critical information for the system to function properly would have been backed up. This backup can be restored to gain access to all disk volumes required to restore a server to operational capability – especially to assist in disaster recovery.

To enable WIB, see the

[Enabling Windows Image Backups](#) in Chapter 9, “Options and Settings”.



**Note:** The process described below assumes that, if used in a disaster recovery scenario, the Backup Client has been reconnected to the appropriate Backup Account (using the Account Wizard).

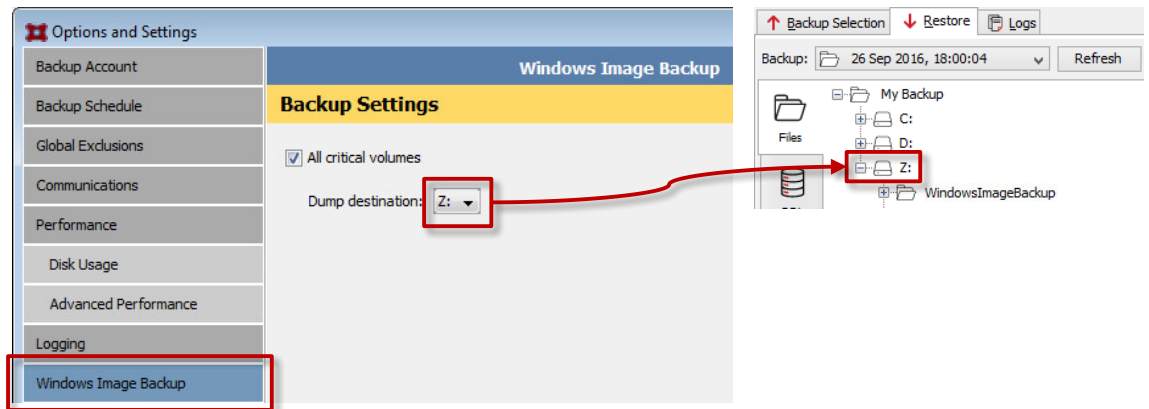
### Include the WindowsImageBackup folder

To include the WIB folder for restore:

1. In the **Restore** tab, identify the appropriate backup to be restored i.e. **Last Backup** or **Previous Backup**.
2. Select the drive letter where the Windows Image Backup has been stored - this corresponds to the **Dump destination** specified in the **Options and Settings** of the Backup Client under **Windows Image Backup**.
3. Include the entire **WindowsImageBackup** folder by right-clicking the folder and then clicking **Include folder**. The included folder is displayed with a green folder icon.



**Example:** Include the corresponding drive letter in your Restore selection:



### Starting the restore process

In order for the **WindowsImageBackup** folder to be restored to a desired location, follow the steps as per *Starting the restore process* in Chapter 7, “Restores”.



**Note:** If restoring to a location different to what was used during backup, the original **Dump destination** will be name of the folder on the new drive. For example: **Dump destination** volume “Z:” restored to volume “F:” will result in “F:\Z\_\WindowsImageBackup”.

After restoring, move the WIB folder to the root. For example: “F:\WindowsImageBackup”

Once the folder has been restored, Microsoft’s Windows Server Backup and the Windows installation program can be used to perform various recovery methods. Two options are described below.

#### Post-restore option 1: Recovery using Windows Server Backup (WSB)

- Perform a full system recovery (a Bare Metal Restore/Recovery) from a network share, mobile storage media or local disk.
- Perform a system state recovery i.e. it restores primarily the operating system components to their previous functioning states and not a full system recovery.
- Perform component-level recovery e.g. Active Directory, IIS, etc. This does not perform a full system recovery.

#### Post-restore option 2: Recovery using the Windows installer

Perform an image-based recovery from a network share or mobile storage media where the **WindowsImageBackup** folder is located.



**Tip:** If it is not possible to reconnect a server to the original backup account, the InstantData’s Temporary File Access option available on the Storage Platform Console allows an entire backup to be mounted as a virtual drive. Providing access to the data it contains, this drive letter can be shared and accessed remotely. Consult the InstantData User Manual for details.



**Note:** Please refer to the Knowledge Base for details on executing the above procedures.

## e) Selecting Capita SIMS, FMS, and Discovery information

To select the files and databases of Capita components:

Open the **Files** view to restore files of the Capita components and related databases. Browse for the files as you normally would, as described in [Selecting files and folders](#).



**Note:** To find the database files of the Capita components, check your Backup Configuration used when the databases were selected for backup. See [SIMS databases](#) in Chapter 10, “Advanced tools”.

For information about backing up SIMS, FMS and Discover information, refer to

[Capita SIMS, FMS, and Discover](#) in Chapter 10, “Advanced tools”.

## f) Recovering an entire server (disaster recovery)

For more information on how to recover an entire server as a virtual disk for use in a virtual machine, refer to the [InstantData User Manual](#).

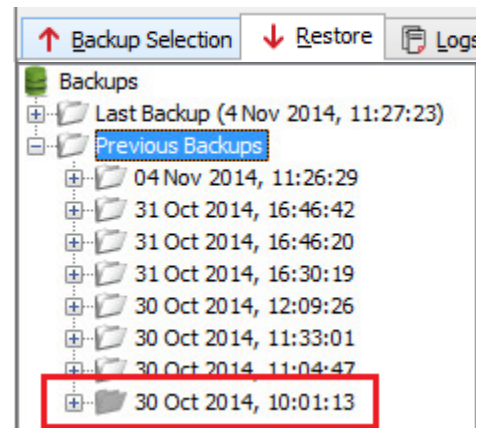
## g) Restoring archived data

BackupVault 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.



**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 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.



## Starting the restore process

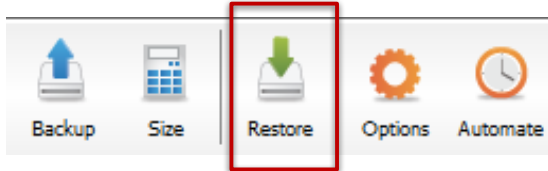
After you have selected the data to restore, start the restore process as described below, either for files and folders or for databases.



**Note:** Disks with less than 10% space available will be indicated by a warning in the Backup Log at the start of each backup process.

To start the restore process:

1. While on the **Restore** tab, from the **File** menu, click **Restore**. Alternatively, click the **Restore** button on the toolbar:



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



3. 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.



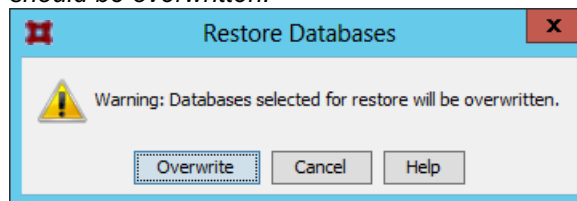
**Warning:**

- If **Original location** is selected, the restored files will overwrite any existing files with the same name in that location.
- Data backed up from folders that reference mounted volumes, will not be restored unless the appropriate volume is mounted and the referencing folder is intact.



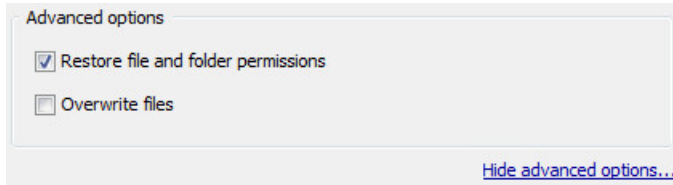
**Note about restoring SQL Server databases:**

- The **Restore Databases** dialog box will prompt you whether existing databases should be overwritten:



- You can view restore logs on the **Logs** tab. Restore log dates are displayed in green.
- Databases can only be restored to machines with the same name as they were backed up from.
- Database files restored from the **Computer** view which were detached since backup will need to be attached to the SQL Server instance manually.

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. **Restore file and folder permissions** – Clear this check box if you do not wish to restore the file and folder permissions and ownership settings. You would typically only select this option after a complete server failure (to restore files before user accounts are re-created).
- b. **Overwrite files** – If this option is not selected, files that already exist will merely be skipped and will not be overwritten. This will be reflected in the restore Logs accordingly.

5. Click **Restore**.



**Note:**

- You can view Restore logs on the **Logs** tab. Restore log dates are displayed in green.
- The folder structure will automatically be recreated.



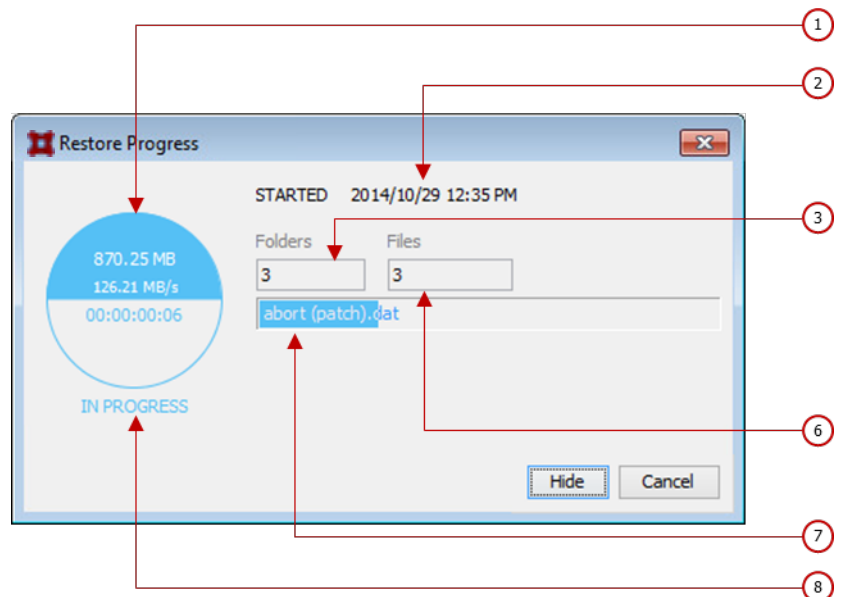
**Tip:** To close the Backup Client after the restore process has started, click the **Hide** button on the Restore Status window. This will not cancel the restore process and you can re-open the Backup Client at any time to view the progress of the restore.

**Restore Status window**

The Restore Status window displays relevant information about restores that are either in progress or completed. The numbered elements indicated in this diagram are explained below (as with the Backup Status window but with the exception of points 4 and 5).



**Note:** The title of the Restore Status window changes according to the status of the restore process.



**Restore Progress: PREPARING**

The initial phase of a restore process has the following information displayed:

1. No data is being transferred therefore the speed is shown as zero
8. Status of the current restore i.e. "PREPARING"

**Restore Progress: IN PROGRESS**

A restore process in progress has the following information displayed:

1. Total size of restored thus far; restore speed; restore duration (dd:HH:mm:ss)

2. Backup start time
3. Number of folders already restored
6. Number of files already restored
7. Progress bar indicating restoration progress of the current file
8. Status of the current restore i.e. "IN PROGRESS"

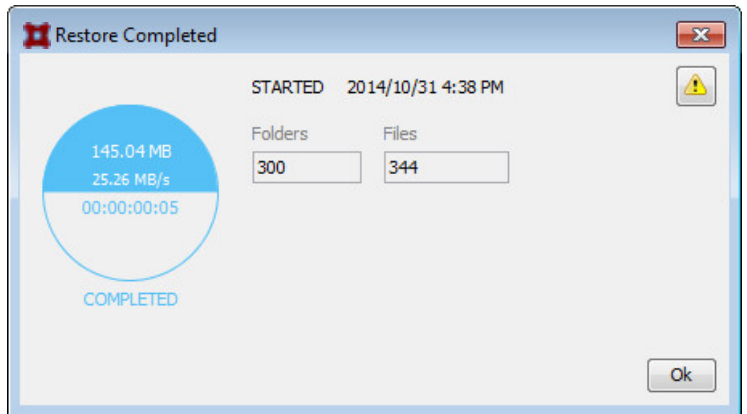


**Note:** If the restore process is interrupted or a connection to the Storage Platform is lost, the status will be indicated as "RETRYING" while the Backup Client attempts to re-establish a connection and resume the restore process.

### Restore Progress: COMPLETED

A completed restore process has the following information is displayed (as per the points indicated in the diagram above):

1. Total size of the restore; average processing speed during the restore process; restore duration (dd:HH:mm:ss)
2. Restore start time
3. Total number of folders restored
6. Total number of files restored
7. (No progress bars are displayed)
8. Status of the restore process i.e. "COMPLETED"



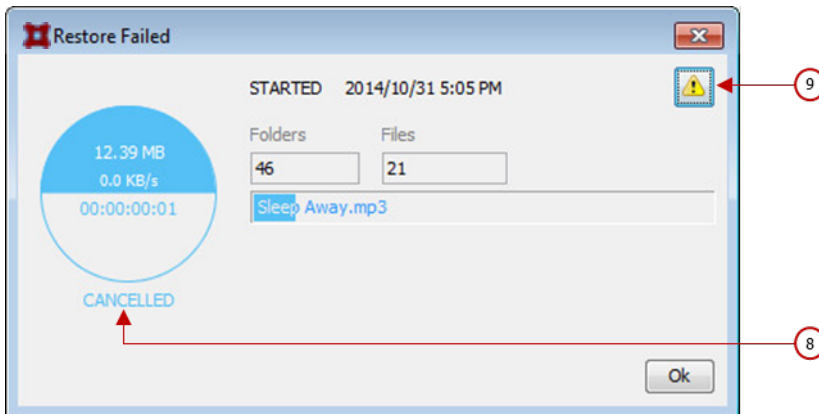
## Cancelling a restore


Once a restore is in progress, you can cancel the process via the **Restore Status** window.

### To cancel a restore:

In the Restore Status window, click the **Cancel** button.

The status will initially be indicated as "CANCELLING" while the Backup Client attempts to cancel the restore process.



Once the restore is cancelled, the status will be indicated as “CANCELLED” in the Restore Status window. This will be reflected in the restore Logs accordingly. Click the  button (pt. 9 in the diagram) to view the Logs.



**Note:**

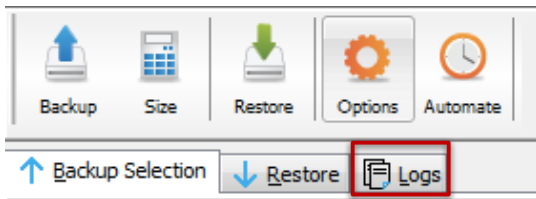
- *When a restore is cancelled by a user, it is considered a failed restore.*
- *When a restore fails unexpectedly, the details of a possible cause can be found in the restore Log.*

## 8. Logs

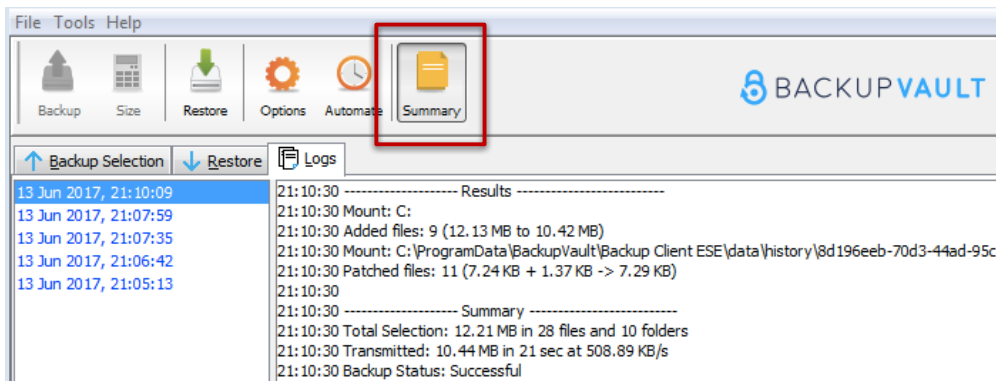
The Backup Client logs all backup and restore processes and their results in log files that you can view on the **Logs** tab. The following sections describe how to access log files and modify their settings.

### 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 few 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:

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

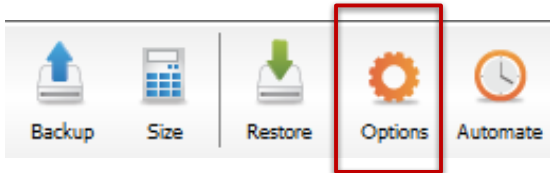
For information on configuring the log file settings, see *Logging* in Chapter 9, “Options and settings”.



# 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

Account Settings	Backup Account
Backup Account	<b>Details</b>
Email Notifications	Backup Account: SDP-W2012-ESE1
Backup Schedule	Backup Group: COLLECTION\GROUP
Backup Scripts	Storage Platform: SEAN-WIN2012-SP
Global Exclusions	Backup Account limit: 1024 MB
Communications	<input type="button" value="Retrieve settings"/>
Connection	<b>Security</b>
Network Utilisation	<input type="button" value="Change password"/>
Performance	<input type="button" value="Change encryption key"/>
Disk Usage	
Advanced Performance	
Logging	
Windows Image Backup	

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.*

## Email Notifications

You can use the Email Notifications page in the **Options and Settings** dialog box to receive email notifications after a backup has taken place.

Account Settings	Email Notifications
Backup Account	<b>Email Settings</b>
<b>Email Notifications</b>	<b>Notification Preferences</b>
Backup Schedule	<input type="radio"/> Never
Backup Scripts	<input type="radio"/> Failed backups only
Global Exclusions	<input type="radio"/> Failed backups, errors or warnings
Communications	<input checked="" type="radio"/> All Backups

You can select one of three conditions for when this will occur:

1. **Failed backups only:** only when a backup has failed

2. **Failed backups, errors or warnings:** when a backup has failed or when it has completed but some warnings or errors were detected
3. **All backups:** with any backup, whether it was successful or not (as in 1 and 2 above)
4. **Never:** don't send any email notifications

Account Settings	<b>Email Notifications</b>
Backup Account	<b>Email Settings</b>
<b>Email Notifications</b>	
Backup Schedule	
Backup Scripts	
Global Exclusions	
Communications	
<b>Notification Preferences</b>	
<b>4</b>	<input type="radio"/> Never
<b>1</b>	<input type="radio"/> Failed backups only
<b>2</b>	<input type="radio"/> Failed backups, errors or warnings
<b>3</b>	<input checked="" type="radio"/> All Backups

## Message Settings area

**Message Settings**

To:

From:

Attach these files:

Summary, warnings and errors

Entire log file (as per Advanced Options log level setting)

Specify the recipient in the **To** field and change the **From** address based on your requirements. Enter multiple addresses by separating them with semicolons:

**Message Settings**

To:

From:

## Attaching Backup Log information

**Message Settings**

To:

From:

Attach these files:

Summary, warnings and errors

Entire log file (as per Advanced Options log level setting)

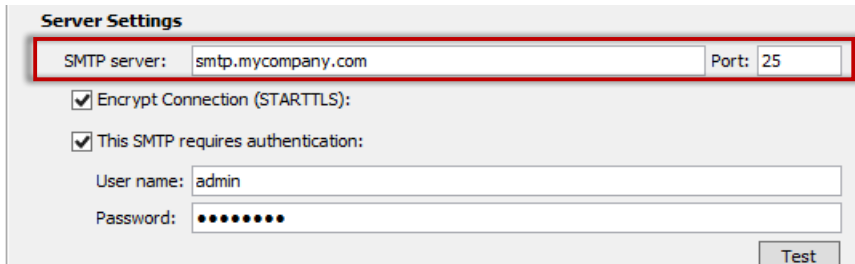
Attach Backup Logs to the email by selecting either of the two options provided:

- A summary: select **Summary, warnings and errors**
- A full log: select **Entire log file**



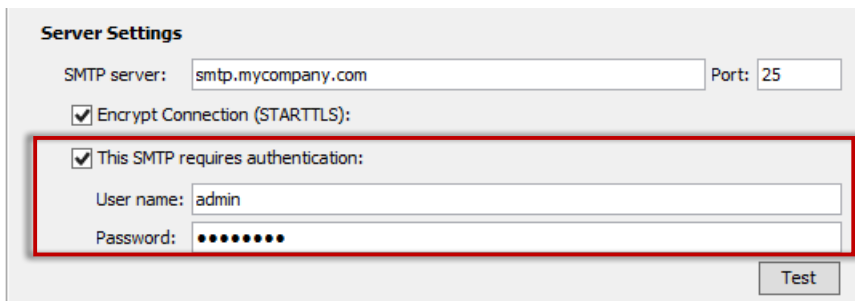
**Warning:** SMTP servers might have limits on attachment sizes, in which case attachments will not be received. This will be indicated in the email though.

## Server Settings area



In order to send any email from the Backup Client, a valid SMTP server and port number must be specified.

## Additional settings



- Enable encryption by selecting **Encrypt Connection (STARTTLS)**.
- If the SMTP server requires authentication, enable the option and specify the **username** and **password**.

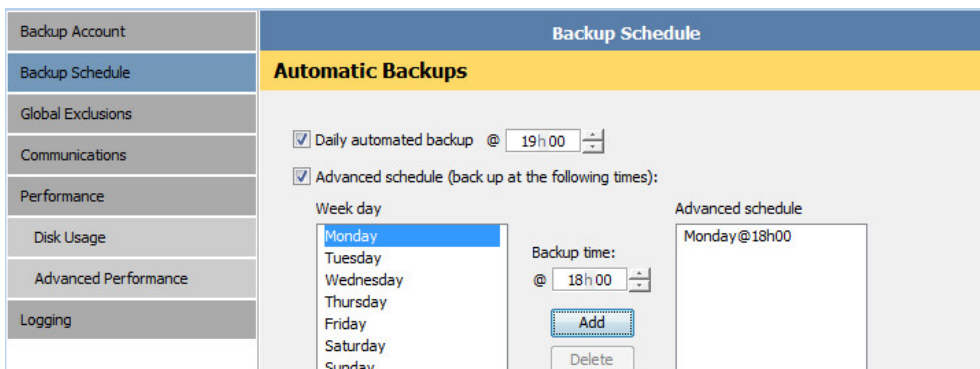


**Tip:** Test the connection to the SMTP server by using the **Test** button. A positive or negative result will be displayed depending on whether a connection could be established to the server.

## 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



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 instructions on how to schedule backups, see *Scheduling automatic backups* in Chapter 6, “Backups”.

## Backup Scripts

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

- Run a script before data is backed up
- Run a script after data has been backed up

Backup Account	<b>Backup Scripts</b>
Backup Schedule	<b>Before Backup</b>
Backup Scripts	<input type="checkbox"/> Run this script before each backup: <input style="width: 100%;" type="text"/> <input type="button" value="Browse"/>
Global Exclusions	<input type="checkbox"/> Abort the backup if the exit code is not 0
Communications	
Performance	

Disk Usage	<b>After Backup</b>
Advanced Performance	
Logging	
Windows Image Backup	

Run this script after each backup:  
   
*Note: Will not run if the backup is cancelled*

The Backup Scripts page consists of the following areas:

- Before Backup
- After Backup



**Tip:** Scripts such as batch files (with possible Power Shell cmdlets) and EXEs can be executed by the Backup Client before and after the backup process. This allows you to get an application ready for backup, like stopping or starting services or to prepare data files.

## Run a Script Before Backup

Specify a single script to be run at the start of a backup, before any data is backed up.

To enable this option:

1. Tick the box **Run this script before each backup**
2. Enter/Browse for the full path of the script and file name



**Note:** Any file type can be used. We suggest testing a script prior to using it here.

3. Click **OK** to save your changes

### Automatically stop the backup if the script fails

This option is intended for use when the preparation by running the script before the backup, fails, to prevent the backup from going ahead.

To enable this option:

1. Tick the box **Abort the backup if the exit code is not 0**
2. Click **OK** to save your changes



**Note:**

- The Backup Status window will indicate when a script is running i.e. "RUNNING SCRIPT"
- Take note of the Backup Logs to see the exit code and verify the success of your backup and scripts



**Warning:** The backup process will wait for the script to complete before continuing.

## Run a Script After Backup

Specify a single script to be run at the end of a backup.

To enable this option:

1. Tick the box **Run this script after each backup**
2. Enter/Browse for the full path of the script and file name



**Note:** Any file type can be used. We suggest testing a script prior to using it here.

3. Click **OK** to save your changes



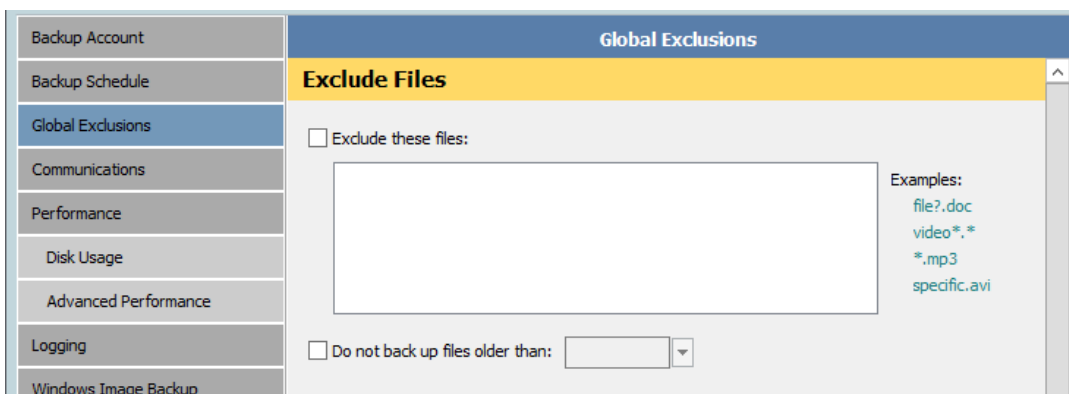
**Note:**

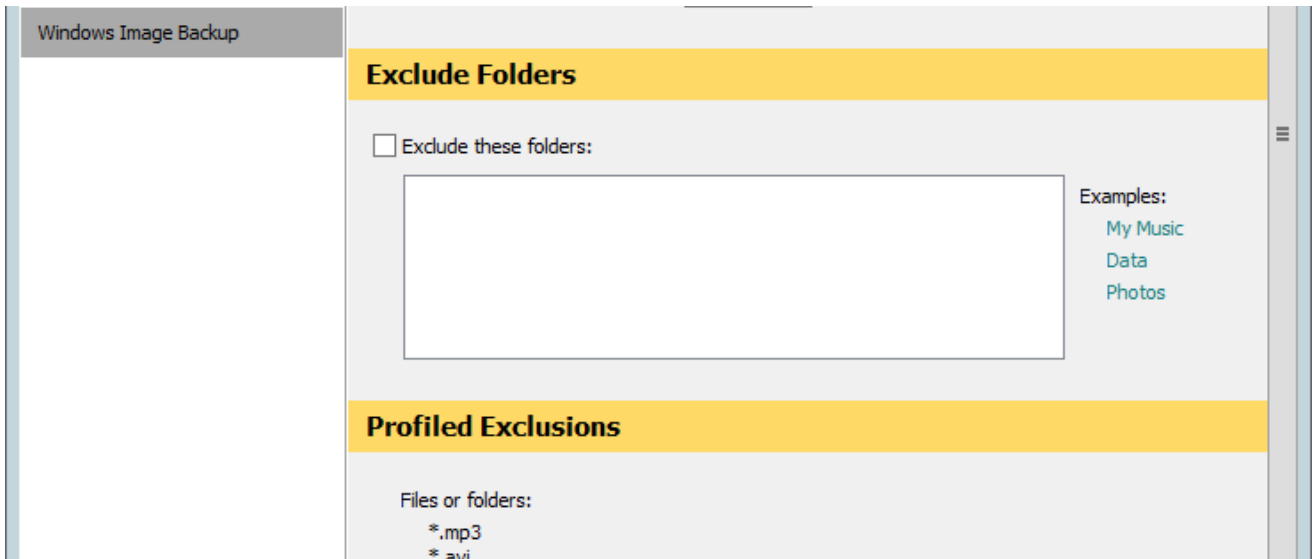
- The status in the Backup Status window will indicate when a script is running i.e. "RUNNING SCRIPT"
- Take note of the Backup Logs to see the exit code and verify the success of your backup and scripts

## 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.



**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 Chapter 10, "Advanced Tools".

## Connection

On the Connection page in the **Options and Settings** dialog box to configure communication settings, such as:

- How to handle connection delays and disruptions
- Using a proxy server to connect to the Storage Platform

Backup Account	<b>Communications</b>	
Backup Schedule		
Backup Scripts		
Global Exclusions		
<b>Communications</b>		
Performance		
Disk Usage		
Advanced Performance		
Logging		
Windows Image Backup		
		<b>Retries and Timeouts</b>
		Number of backup or restore retries: <input type="text" value="10"/>
		Duration before connection retries: <input type="text" value="60"/> seconds
	Socket timeout: <input type="text" value="60"/> seconds	
	<b>Proxy Server</b>	
	<input type="radio"/> No proxy	
	<input checked="" type="radio"/> Use HTTP proxy	
	Proxy host: <input type="text"/> Proxy port: <input type="text" value="8080"/>	
	<input type="checkbox"/> Proxy server requires authentication:	
	Username: <input type="text"/>	
	Password: <input type="text"/>	

The Connection page consists of the following areas:

- Retries and Timeouts.
- Proxy Server

### Retries and Timeouts area

#### Number of backup or restore retries

By default, the Backup Client tries to connect to the Storage Platform ten 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.

## Proxy Server area

Here you can specify whether the Backup Client should connect to the Storage Platform through a proxy server.

To set your Backup Client up to use a proxy server, do the following:

1. Enable the option **Use HTTP proxy**



**Proxy Server**

No proxy

Use HTTP proxy

Proxy host:  Proxy port:

Proxy server requires authentication:

Username:

Password:

2. Enter the proxy server's details in the boxes provided:
  - a. **Proxy host**
  - b. **Proxy port**
3. If the server requires authentication, enable the option, **Proxy server requires authentication**, and enter the appropriate credentials:
  - a. **Username**
  - b. **Password**



**Note:**

- Connecting through the proxy server will be indicated in the Logs when the backup occurs.
- An HTTPS connection will be used.

## Network Utilisation

Network bandwidth usage restrictions can be applied to the Backup Client for when backups take place. To do this, you'll need to:

1. Define a set of usage limits
2. Apply those limits to a timetable

## Defining the limits

Network Utilisation

Limits

Define the limits (0 equals unlimited):

Limit 1	<span style="display: inline-block; width: 15px; height: 15px; background-color: #c00000; border: 1px solid #ccc;"></span>	<input style="width: 80%;" type="text" value="0"/>	kB/s	Limit 4	<span style="display: inline-block; width: 15px; height: 15px; background-color: #6a3d9a; border: 1px solid #ccc;"></span>	<input style="width: 80%;" type="text" value="0"/>	kB/s
Limit 2	<span style="display: inline-block; width: 15px; height: 15px; background-color: #70ad47; border: 1px solid #ccc;"></span>	<input style="width: 80%;" type="text" value="0"/>	kB/s	Limit 5	<span style="display: inline-block; width: 15px; height: 15px; background-color: #ff9900; border: 1px solid #ccc;"></span>	<input style="width: 80%;" type="text" value="0"/>	kB/s
Limit 3	<span style="display: inline-block; width: 15px; height: 15px; background-color: #0056b3; border: 1px solid #ccc;"></span>	<input style="width: 80%;" type="text" value="0"/>	kB/s	Limit 6	<span style="display: inline-block; width: 15px; height: 15px; background-color: #330066; border: 1px solid #ccc;"></span>	<input style="width: 80%;" type="text" value="0"/>	kB/s

Six limits can be set and are in kilobytes per second (KB/s). Each limit (using the corresponding colour) can then be applied to the timetable.

## Applying the limits to the timetable

Timetable

Apply this limit to the timetable:  Limit 1 v

*Tip: Use your mouse as a "paintbrush"*

	Time																								
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Monday																									
Tuesday																									
Wednesday																									
Thursday																									
Friday																									
Saturday																									
Sunday																									

Apply limits by doing the following:

1. Select a limit from the list. Alternatively, select the limit with "ALT + number of corresponding limit", e.g. ALT + 1-6 ("hotkeys").
2. Click the allotted timeslot in the diagram provided. Alternatively, also navigate the timetable using the arrow keys and pressing SPACE to paint a block.



**Note:** Timeslots are in segments of **an hour in the day**, marked from 0 to 24

3. Repeat the process until all allotted timeslots have been filled with the appropriate colours.

4. Click OK.



**Tip:** When an arrangement of limits in the timetable becomes too complex to maintain, the grid can be reset to its default state by clicking the **Default** button, so that new limits can be applied more easily.

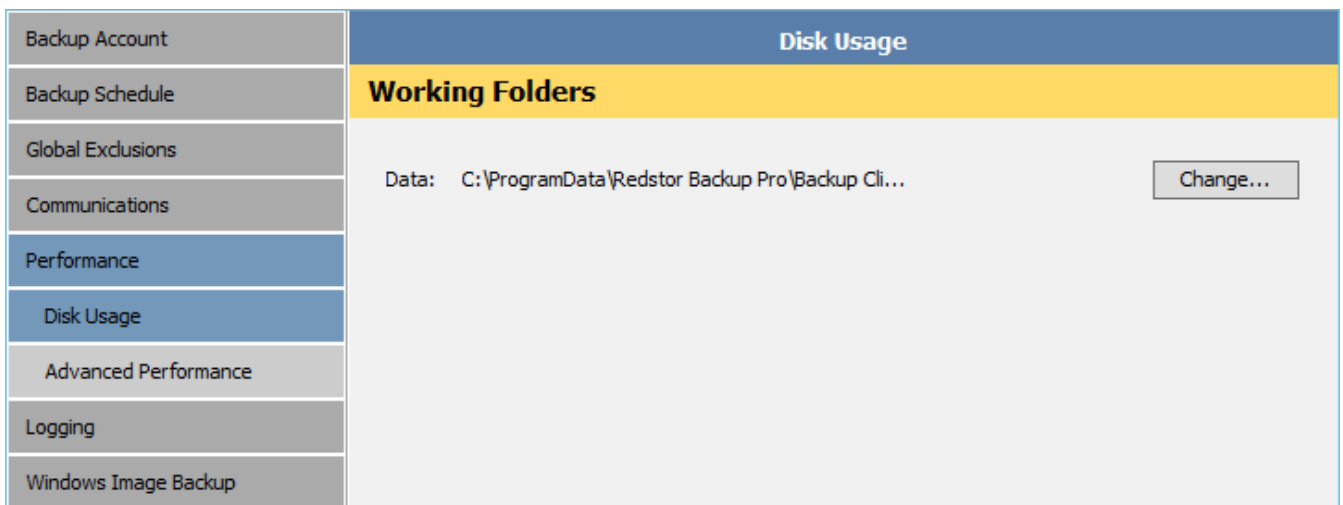
These limits will be used when the next backup is performed within an affected timeslot.

## Performance

You can use the Performance page in the **Options and Settings** dialog box to change settings that influence disk and memory usage.

### Disk Usage

You can use the Disk Usage page in the **Options and Settings** dialog box to specify the location of working folders.



#### Working Folders area

The Data folder is used for storing temporary information used during backup and restore processes. The location of the folder is set by default, for example: C:\ProgramData\BackupVault\Backup Client ESE\data

If you have limited space on the drive where the Backup Client is installed, you can specify a different location.



**Note:**

- The default location for the Data folder is determined by the “ProgramData” environment variable.
- Performance will be degraded if the data folder is on a network share.
- If you move this folder to a network share, ensure that the Backup Client has the correct permissions to reconnect and write to that share.

## Advanced Performance

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

- Using VSS
- Exchange database integrity checking
- Memory allocation of the Backup Client and related Windows service

Backup Account	<b>Advanced Performance</b>
Backup Schedule	<b>VSS</b>
Backup Scripts	<input checked="" type="checkbox"/> Use Volume Shadow Copying (VSS) to back up locked files
Global Exclusions	
Communications	<b>Exchange</b>
Performance	<input checked="" type="checkbox"/> Check Exchange mailbox database integrity during backup
Disk Usage	
Advanced Performance	<b>Memory Allocation</b>
Logging	Backup service: <input type="text" value="512"/> MB
Windows Image Backup	Backup Client interface: <input type="text" value="1,024"/> MB
	<i>Note: Changing these settings requires a Backup Service and/or Backup Client Interface restart.</i>

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

- VSS
- Exchange (if applicable)
- Memory Allocation

### VSS area

Use **Volume Shadow Copying (VSS)** to back up locked files

Microsoft Volume Shadow Copy Service (VSS) provides a solution by creating a snapshot of data at any given point in time without any interruption to any applications. Using this option enables the backup of open or locked files.



**Note:**

- For files under heavy use, VSS may increase disk usage during backup. The larger the files, the greater the disk usage.
- If the backup process was unable to read a file using VSS, the Backup Client will continue backing up other files. Please review the backup log to identify any files that could not be read.
- Even if this setting is disabled, VSS will still be used when backing up Microsoft SQL Server databases.

### Exchange area

**Check Exchange mailbox database integrity during backup:** By selecting the box in the **Exchange** area, the integrity of the Exchange mailbox databases will be verified during the backup process while data is processed and not afterwards – without negatively affecting performance. This check includes the “.edb” database files and file headers, as well as whether associated logs are corrupt or missing.



**Note:** Should a mailbox database fail any of these checks. The result will be reported in the Backup Log. We recommend keeping this setting on in order to identify corrupt mailbox database backups.

### 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
- Log file retention period
- Debug message inclusion/exclusion in service log

Backup Account	<b>Logging</b>
Backup Schedule	<b>Backup Logs</b>
Global Exclusions	Location: C:\ProgramData\Redstor Backup Pro\Backup Cli... <span style="float: right;">Change...</span>
Communications	Level of detail: <input type="text" value="Suppress detail"/> ▾
Performance	<input type="checkbox"/> Delete log files older than (days): <input type="text" value="30"/> <span style="float: right;">Delete older logs now</span>
Disk Usage	
Advanced Performance	<b>Service Log</b>
Logging	<input type="checkbox"/> Log debug messages
Windows Image Backup	

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

- Backup Logs
- Service Log

## Backup Logs area

You can specify where to store the backup and restore logs in the **Location** box.



**Note:** The default location for the “logs” folder is determined by the “ProgramData” environment variable.

You can also specify the level of detail to be displayed in the logs by selecting one of these options:

- **All information:** Displays all file-level errors, warnings and informational (non-errors/warnings) entries. This could cause some informational to be repeated. All skipped, missing or unreadable files will be recorded.
- **Suppress detail:** Will display all errors, warnings and purely informational log entries. Only errors and warnings could be repeated.

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.

## Windows Image Backup

With Windows Image Backup (WIB) enabled all the critical volumes on a Windows machine will be backed up. (A volume being a single accessible storage area resident on one or more partitions of one or more physical disks.) These volumes contain the operating system and other system-critical data for the operating system to function properly (also known as “system” volumes).



**Note:** Please refer to the “System Compatibility Matrix” document for the earliest supported version of Windows Server before using WIB.

## How it works

The Backup Client leverages off the *Windows Server Backup* technology. WIB implements the command-line usage of WSB’s “wbadmin” command with the “–allCritical” parameter set in order to perform critical volume backups. When the backup occurs, all files, including non-system files on critical volumes are temporarily stored in consolidated format in a central “dump” destination i.e. a “WindowsImageBackup” folder on the same machine, before being transferred to the Storage Platform. Because of this, when the backup is transferred to the Storage



Platform, no deduplication is performed (see “SIS behaviour” in the *Configuring Group Settings* section of the *Storage Platform Console User Manual*).

## Prerequisites for using WIB

### Use a non-system volume

The dump destination cannot also be a system volume. When selecting the **Dump destination** drive letter, ensure that an additional volume is available where no system information is stored. (see

*Enabling Windows Image Backups* below)

### Enable Windows Server Backup (WSB)

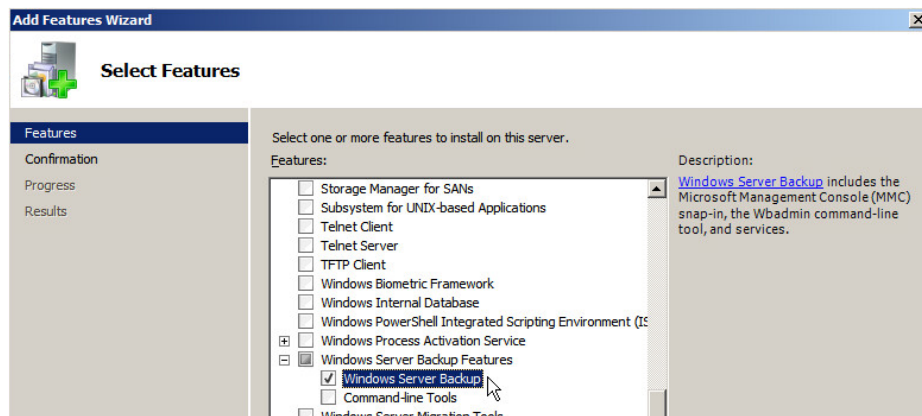
To enable WSB:

1. Open the Server Manager on your Windows server.
2. For Windows 2008:

In the selection tree on the left-hand pane, right-click on **Features** and click **Add Features**. The **Add Features Wizard** will appear.

For Windows 2012:

- a. Click **Add roles and features** while in the Server Manager Dashboard. The **Add Roles and Features Wizard** will appear.
  - b. Continue the wizard by following the prompts up to the **Features** step.
3. In the **Features** list, scroll to **Windows Server Backup Features**, expand the item, and check the **Windows Server Backup** box.



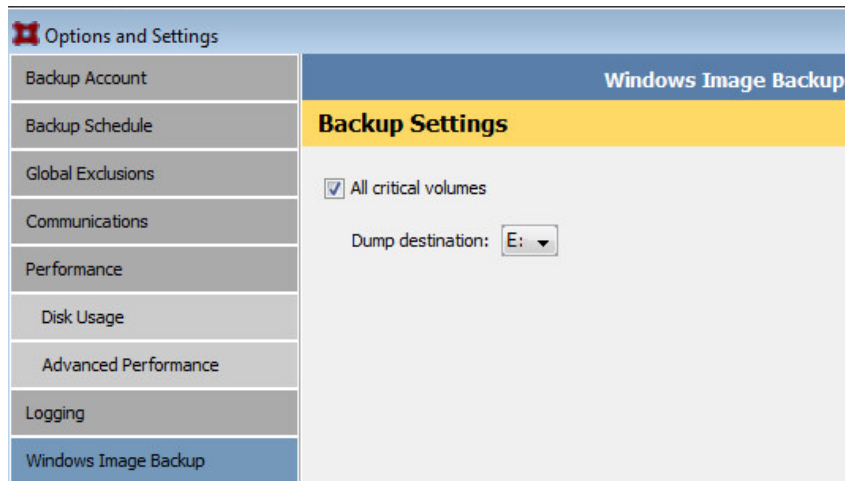
4. Click **Next**.
5. Click **Install** to complete the process.

A message will indicate that the “Installation succeeded”. You may close the wizard thereafter.

## Enabling Windows Image Backups

To enable Windows Image Backup:

1. In the **Options and Settings** window, select **Windows Image Backup**.



2. Check the **All critical volumes** box.
3. Select a valid **Dump destination** drive letter.



**Note:** Ensure that the prerequisites mentioned above have been fulfilled.

4. Click **OK**.

The next backup will include the critical volumes for this machine.



**Note:** Subsequent backups with WIB enabled will update the Storage Platform with incremental changes as with normal file and folder backups.

## 10. Advanced tools

Enterprise Server Edition includes tools that allow advanced users to modify, enhance and streamline the Backup Client and also to perform specialised selections of data for backup and restore.

### Backup Snapshots

The Backup Snapshot feature enables you to create a backup of all items included in your backup selection. This snapshot data can then be transferred 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 256-bit AES 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**.
3. Specify a destination in the box provided (**C:\Backups\Export\Snapshot-Backup** is specified by default on Windows Server 2008 machines.)
4. In order to do a full backup, select **Force a full backup**.



**Note:** A full backup contains the latest full copies of all files included in the backup selection. This facilitates a full recovery off all files when restoring this Snapshot.

5. Click **Backup Now**.

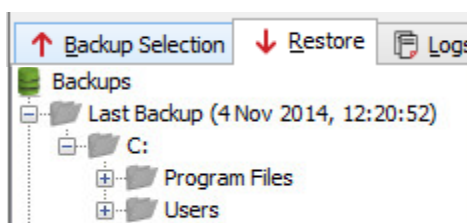
Alternatively, if you click **OK**, the next backup you initiate will be a snapshot backup.

(A “Snapshot” backup will also be indicated in the Backup Log.)

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



**Note:** The **Last Backup** on the **Restore** tab will display grey folders. This means that the data cannot be restored until it has been imported on the StorageServer.



The Backup Account will be disabled at this point preventing any further backups to ensure that the Snapshot data is the most recent although other data can still be restored. Once the data has been successfully imported to the Storage Platform, the Backup Account will be enabled automatically and backups can proceed as usual.



**Tip:** If, for some reason, the Snapshot will not be imported, the account can be enabled manually. Please see Knowledge Base [article 562](#) for this workaround.

## Restore Snapshots

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

Before you can perform the steps outlined below, the Snapshot data needs to have been exported from the StorageServer to a mobile storage device by a Backup Administrator. For more information, please refer to the “Exporting a Backup Snapshot” section in the Storage Platform Console User Manual.



**Note:** A snapshot restore uses 256-bit AES encryption and the backup encryption key to encrypt the data.



**Tip:**

- An HSM backup folder can be imported directly by the ESE Backup Client using the Snapshot Restore capability. Note that the Snapshot Location will differ when following the steps below.
- If the Snapshot backup was a “Full” backup, it can be used to restore all files included in the backup selection instead of only the modified ones.

### 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 the **Show Restore Snapshot(s) in Restore panel** check box.
4. Specify the path to the data in the **Snapshot location** box.



**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.

5. 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 settings relevant to your Backup Client from the Storage Platform.

It can be used to enforce the following settings:

- Backup schedules
- Inclusions and exclusions
- Filters
- Most options and settings accessible via the **Tools** 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 **Tools** menu, click **Options**.
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.

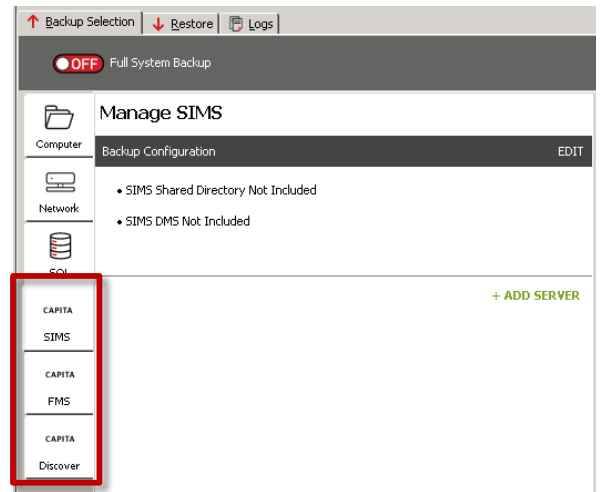


**Note:** *Profiled settings are greyed out, and cannot be modified from within the Backup Client.*

Inclusions /exclusions applied by profiling are displayed with specific icons in the Backup Client. See the [Icon legend](#) section in Chapter 6, “Backups”, for details on identifying profiled files and folder inclusions and exclusion.

## Capita SIMS, FMS, and Discover

The Backup Client provides specialised backups for educational institutions in the United Kingdom that make use of the Capita Schools Manager Information System (SIMS). Components used by Capita are automatically detected in which case new views will be displayed to facilitate related data backups.



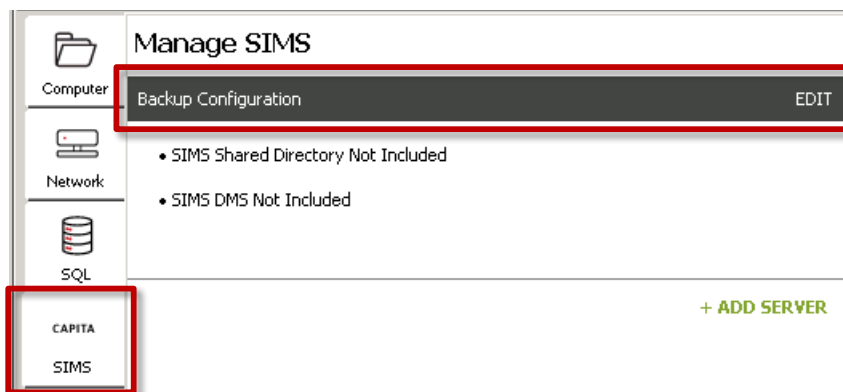
## Backing up SIMS information

The **SIMS** view is displayed in the **Backup Selection** tab when SIMS is installed on the computer.

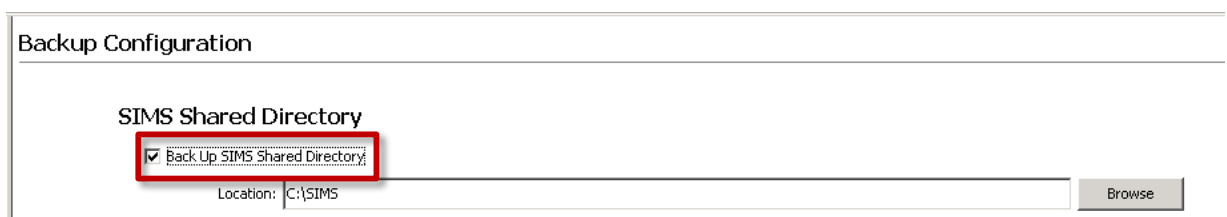
### SIMS Shared Directory

To include the Shared Directory in the backup selection:

1. Activate the **SIMS** view.
2. In the **Manage SIMS** section on the left-hand side, click **EDIT** next to “Backup Configuration” to change the SIMS components included in the backup.

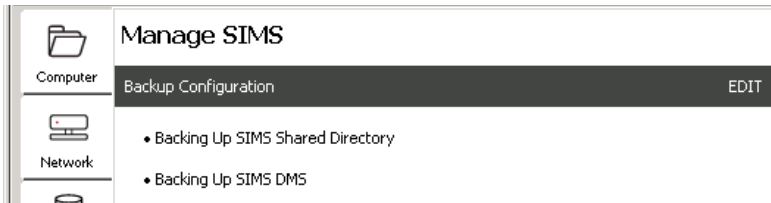


3. In the **Backup Configuration** section that appears on the right-hand side, select the **Back Up SIMS Shared Directory** option.



4. Browse for the folder where the Shared Directory is installed.
5. Click **Save**.

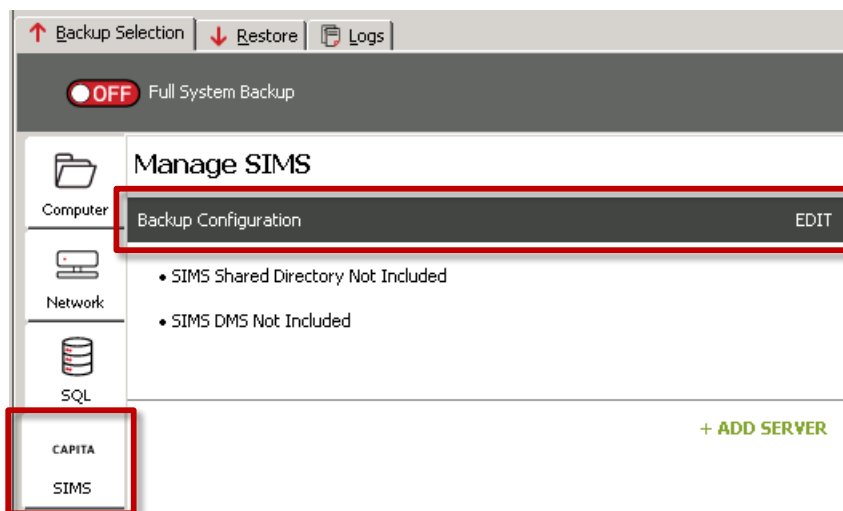
The Backup Configuration section on the left will be updated to indicate “Backing Up SIMS Shared Directory”. The data will be included in the *next backup*.



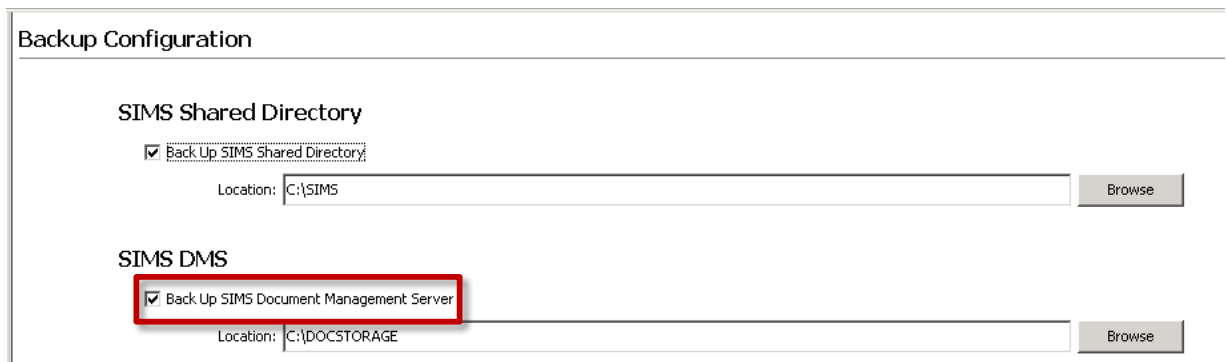
### SIMS Document Management Server (DMS)

To include the Document Management Server in the backup selection:

1. Activate the **SIMS** view.
2. In the **Manage SIMS** section on the left-hand side, click **EDIT** next to “Backup Configuration” to change the SIMS components included in the backup.



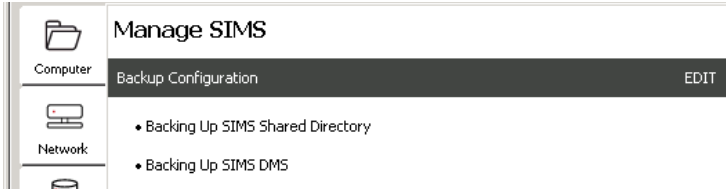
3. In the **Backup Configuration** section that appears on the right-hand side, select the **Back Up SIMS Document Management Server** option.



4. Browse for the folder where the DMS is installed.

5. Click **Save**.

The Backup Configuration section on the left will be updated to indicate “Backing Up SIMS DMS”. The data will be included in the *next backup*.



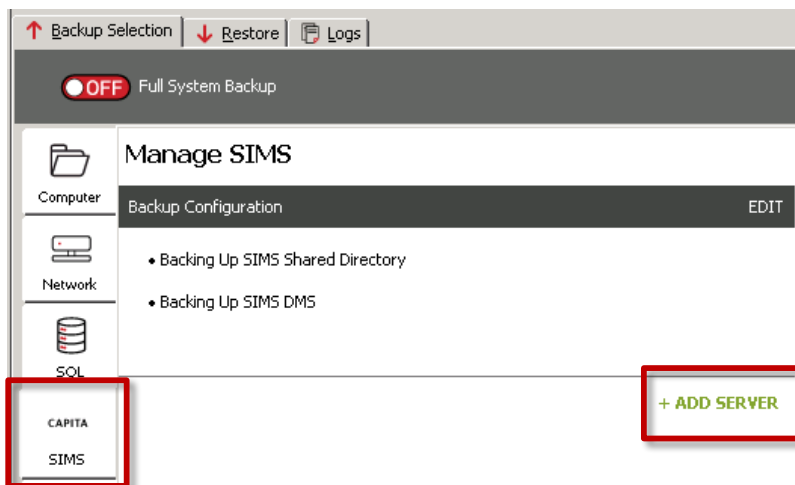
### SIMS databases

Since the SIMS modules relies on SQL Server databases, those have to be included/excluded explicitly from the SIMS view. The process is two-fold:

- a) Add the SIMS SQL Server to the Backup Configuration
- b) Add any database for the server to the Backup Configuration

#### a) To add the SIMS SQL Server:

1. Activate the **SIMS** view.
2. In the **Manage SIMS** section on the left-hand side, click **ADD SERVER**.



3. In the Add SIMS Server section that appears on the right-hand side, enter the details of the SQL Server that hosts the SIMS databases.

#### Add SIMS Server

Server Name:	<input type="text" value="JONO-SIMS\SIMS"/>
SQL Username:	<input type="text" value="sims"/>
SQL Password:	<input type="password" value="*****"/>

4. Also enter the desired folder where database data is to be saved prior to being backed up.

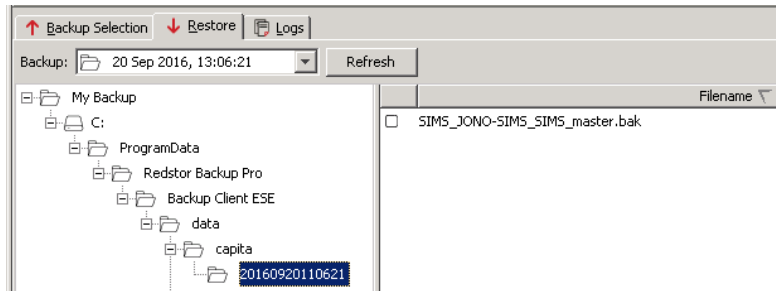




**Note:**

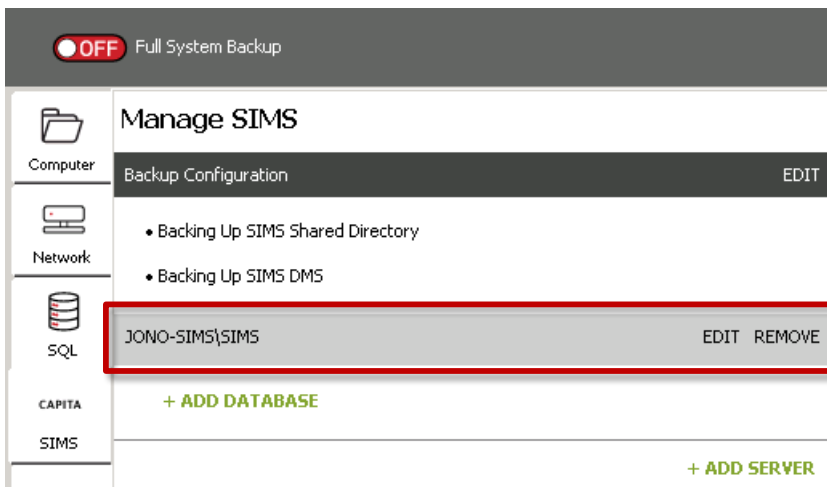
- A “capita” subfolder will automatically be created in the specified location.
- This is the folder where all database files will be backed up from which means this location will be used when data is searched for in the Restore tab when restoring files.

Example:



5. Click **Save**.

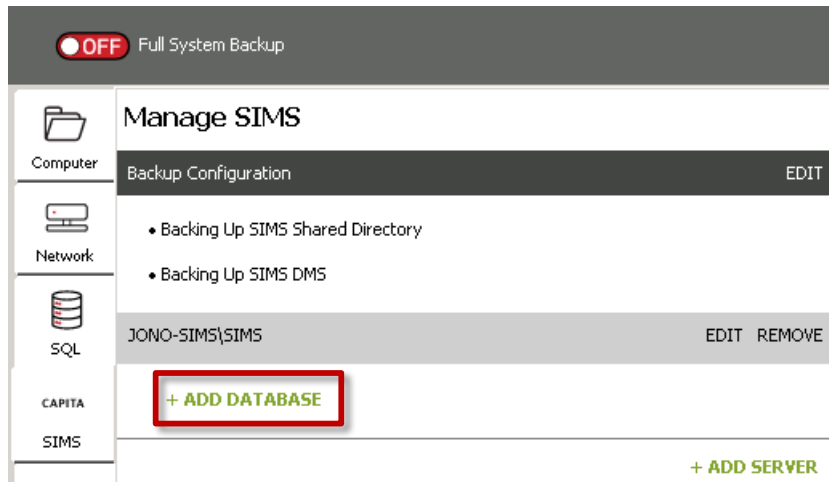
The Backup Configuration section on the left will be updated to indicate that the server has been added. Proceed to add databases (described directly below) that should be included in the next backup.



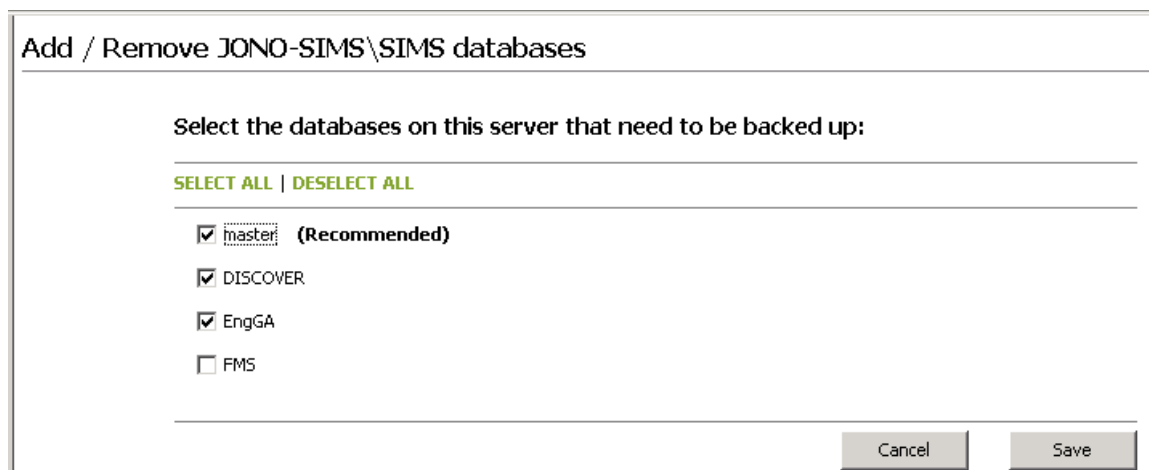
**Note:** Additional servers can be added at this point. Just repeat the process described above.

b) To include database associated with the SIMS SQL Server:

1. In the **Manage SIMS** section on the left-hand side, directly below the relevant server entry, click **ADD DATABASE**.



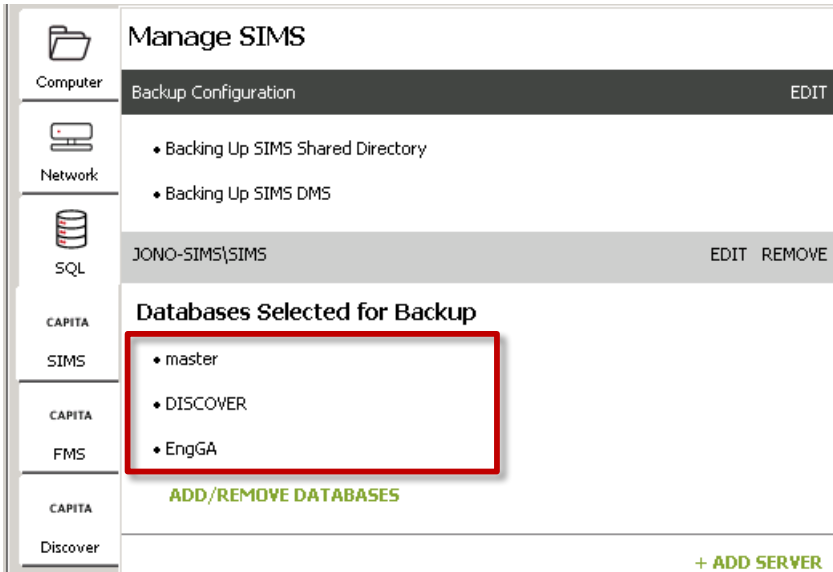
2. In the **Add/Remove...** section that appears on the right-hand side, select (to include) or deselect (to exclude) databases from the backup selection.



**Note:** We suggest including the “master” database since foundational information about your databases is usually kept there.

3. Click **Save**.

The Backup Configuration section will be updated to reflect the “Databases Selected for Backup”, listing the included databases.



**Manage SIMS**

Computer Backup Configuration EDIT

- Backing Up SIMS Shared Directory
- Backing Up SIMS DMS

JONO-SIMS\SIMS EDIT REMOVE

**Databases Selected for Backup**

- master
- DISCOVER
- EngGA

**ADD/REMOVE DATABASES**

**+ ADD SERVER**



**Note:** Additional database selection changes can be done at this point. Just repeat the process described above.

## Backing up FMS and Discover information

The process for including and excluding information of the FMS and Discover components is the same as that of SIMS. Follow the steps as described under [SIMS databases](#) earlier in this chapter.

# 15. Reference

## Keyboard shortcuts and hotkeys

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