

Backing up to hosted storage



The SQL Backup Pro Hosted Storage service will be closing down at the end of 2017. We will assist customers who use the service to migrate to storing backups in Amazon S3.

- SQL Backup Pro 9 includes integration with Amazon S3. This was released in early May 2017.
- The Hosted Storage service has stopped accepting new backups on 14th August 2017. Existing backups will still be available to restore until December 2017.
- The Hosted Storage service will close down and existing backups will be removed at the end of December 2017.

Email support@red-gate.com for further information.



Backing up to hosted storage is only available in SQL Backup Pro 7.3 and later.

What is hosted storage?

Hosted storage is a service provided by Redgate which allows you to store backups created with SQL Backup Pro off-site and access them online.

You can upload a copy of a backup to hosted storage as part of a backup job. Using the SQL Backup Pro Hosted Storage website, you can access your backups whenever you need them.

For more information, see the [SQL Backup Pro Hosted Storage website](#).

Creating and linking an account

In order to upload backups to hosted storage, you need to:

1. Create a SQL Backup Pro Hosted Storage account on the [SQL Backup Pro Hosted Storage website](#).
2. For each SQL Server you want to upload backups from, link the server to your account. You can do this when creating a backup job, on [step 3 of the Back Up wizard](#) ([step 4 of the Schedule Backup Jobs wizard](#)). Under **Hosted storage**, click **Link Account**. Enter your account email address and password and click **Link Account**.

The screenshot shows the 'Back Up' wizard window, specifically 'Step 3 of 6: Configure backup file settings'. The window is divided into three main sections: 'Backup location', 'Hosted storage', and 'Network copy location'.
1. **Backup location**: A dropdown menu is set to 'Single backup file'. Below it, the 'Folder' is 'C:\Program Files\Microsoft SQL Server\MSSQL.2\MSSQL\Backu...' and the 'Name file automatically' checkbox is checked, with a filename of '<AUTO>...sqb'. There are checkboxes for 'Overwrite existing backup files of the same name' and 'Delete existing backup files in this folder for the selected databases'. Below these are radio buttons for retention policies: 'All files older than: 30 days' (selected) and 'All files except the latest: 5'. A 'Delete prior to start of backup' checkbox is also present.
2. **Hosted storage**: A checkbox 'Copy backup to hosted storage' is unchecked. A note says 'To enable this option, [create an account](#) and link it to the SQL Server.' A 'Link Account...' button is to the right.
3. **Network copy location**: A checkbox 'Copy backup to network' is unchecked. Below it is a 'Folder:' field with a browse button '...'. There are 'Test', 'Overwrite existing backup files of the same name', and 'Delete existing backup files in this folder for the selected databases' checkboxes. The same retention policy radio buttons as in the first section are shown.
At the bottom of the window are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

Alternatively, from the **Tools** menu, select **Server Options**. Open the **Hosted Storage Settings** tab and select the SQL Server that you want to link to your account. Enter your account email address and password and click **Link Account**.

The 'Server Options' dialog box is shown with the 'Hosted Storage Settings' tab selected. At the top, 'SQL Server:' is set to 'PRODUCTION'. Below this, there are three tabs: 'File Management', 'Email Settings', and 'Hosted Storage Settings'. The 'Hosted Storage Settings' tab contains the following elements:

- A message: "Link your Hosted Storage account to the SQL Server to be able to upload your backups to hosted storage. ?"
- Input fields for 'Email address:' and 'Password:'.
- A 'Link Account' button.
- A link: "Don't have an account? [Create one now.](#)"
- At the bottom right, there are 'OK', 'Cancel', and 'Apply' buttons.

If you have multiple SQL Server instances, you will need to link each one to an account. This can be the same account, or a different account for each server.
Once your account is linked, you can copy backups to hosted storage using either the SQL Backup Pro wizards, or a SQL Backup Pro script.

Note: Your password is not stored on your machine.

Using the wizards

On step 3 of the Back Up wizard (step 4 of the Schedule Back Up Jobs wizard), select **Copy backup to hosted storage**.

The 'Back Up' wizard is shown at 'Step 3 of 6: Configure backup file settings.' The 'Single backup file' dropdown is selected. Below it, the 'Backup location' section is active:

- 'Name file automatically' is checked.
- 'Folder:' is set to 'C:\Program Files\Microsoft SQL Server\MSSQL.2\MSSQL\Backu...'.
- 'File name' is set to '<AUTO>-.sqb'.
- Options for file management:
 - ☐ Overwrite existing backup files of the same name
 - ☐ Delete existing backup files in this folder for the selected databases
 - ☒ All files older than: 30 days
 - ☐ All files except the latest: 5
 - ☐ Delete prior to start of backup

The 'Hosted storage' section is also active:

- ☒ Copy backup to hosted storage. Server linked to account: dba@example.com

The 'Network copy location' section is inactive:

- ☐ Copy backup to network
- 'Folder:' is empty.
- 'Test' button is present.
- Options for file management (same as above) are present but not selected.

At the bottom, there are '< Back', 'Next >', 'Finish', and 'Cancel' buttons.

Complete the wizard to create the backup or schedule the job. All other backup options, including copying to a network share, encryption, and compression, are available when backing up to hosted storage.

Once the backup has been written to disk, SQL Backup Pro starts uploading a copy of the backup to hosted storage. See [Viewing the progress of uploads to hosted storage](#) below.

Writing a backup script

To copy a backup to hosted storage, add `COPYTO_HOSTED` to the `WITH` clause of a backup script, and run it from the command line or extended stored procedure.

For example, using the extended stored procedure:

```
EXECUTE master..sqlbackup '-SQL "BACKUP DATABASE [pubs] TO DISK = ''C:\Backups\pubs.sqb'' WITH COPYTO_HOSTED " '
```

Using the command line:

```
-SQL "BACKUP DATABASE [pubs] TO DISK = 'C:\Backups\pubs.sqb' WITH COPYTO_HOSTED
```

The other backup options in SQL Backup Pro, including `COPYTO = <network location>`, `KEYSIZE = 128|256`, and `COMPRESSION = 1|2|3|4`, can be used in conjunction with `COPYTO_HOSTED`.

For more details, see [The BACKUP command](#).

Editing an existing job to copy to hosted storage

If you already have backup jobs set up, you can edit them to copy the backups to hosted storage as part of the job.

1. In the SQL Backup Pro GUI, open the **Jobs** tab and double-click the backup job you want to edit. The Edit Backup Job wizard is displayed.
2. Go to step 3 and select **Copy backup to hosted storage**.
3. Continue through the wizard and click **Finish** to save your changes to the job.

Alternatively, edit the job in SQL Server Management Studio, adding `WITH COPYTO_HOSTED` to the SQL Backup job step.

Backing up multiple files

When backing up to hosted storage, you can both split backups into multiple files and back up multiple databases at the same time.



- If you split a backup into multiple files, all files will be written to disk before SQL Backup Pro starts uploading a copy of the first file.
- If you back up multiple databases at the same time, each backup is written in sequence. SQL Backup Pro will start uploading the first backup as soon as it has been written to disk.



For more information on backing up multiple databases, see [Backing up all databases on an instance](#).

Viewing the progress of uploads to hosted storage

Once the backup has been written to the disk location you specified, SQL Backup Pro starts uploading a copy of the backup to your Hosted Storage account.


You can view the status of the upload from the **In Progress** tab:

- Each file is listed as  *Pending* when it is added to the upload queue.
- Each file is listed as  *Uploading* during upload attempts.

The backup is listed in the **Activity History** as  *Successful (awaiting copy to hosted storage)* while the upload is in progress. Right-click the row and select **Properties** to view the status of each file. Once the upload has completed, the backup is listed as  *Successful*.

To cancel an upload that is in progress, open the **In Progress** tab, right-click the row and select **Cancel**. This will not affect the backup written to local disk. It is not possible to restart an upload after it has been cancelled.


Retrying after a failed upload

If an upload attempt fails, for example because the network connection was interrupted, SQL Backup Pro will attempt to upload the file again at regular intervals. In between attempts, files will be listed in the **In Progress** tab as  *Pending*. For information about the cause of the failure, right-click the row and select **Show Log**, or in the **Activity History**, right-click and select **Properties**.

SQL Backup Pro will continue retrying the upload at increasing intervals for 24 hours.

- Attempt 1: immediately
- Attempt 2: 2 minutes after attempt 1 failed
- Attempt 3: 4 minutes after attempt 2 failed
- Attempt 4: 6 minutes after attempt 3 failed
- Attempt 5: 8 minutes after attempt 4 failed
- All subsequent attempts: 10 minutes after the preceding attempt failed

To prevent any further upload attempts, open the **In Progress** tab, right-click the upload and select **Cancel**. This will not affect the backup written to local disk.

If the backup fails to upload after 24 hours, or the upload is cancelled, the backup will display in the **Activity History** as  *Successful (with warnings)*. Right-click and select **Properties** to see details of the problem.

To try uploading again, take a new backup of the database and select **Copy backup to hosted storage**. Alternatively, use `SQBHostedStorageClient.exe` to upload the backup manually. For more information, see [SQBHostedStorageClient.exe](#).


For more about the upload schedule and changing the behavior of it, see [The In Progress tab](#).

Managing your backups in hosted storage


You can manage your backups in hosted storage using the SQL Backup Pro Hosted Storage website.


You can view your backups in the [My backups](#) page, organised by SQL Server instance and by upload date.

To download a backup file, click the download button  on the right of the file you want to download.

To delete individual backup files, click the delete button  on the right.


To delete all backups older than a specified age automatically, set a retention policy on the [Backup retention page](#). The retention period for each file is calculated from the date and time the file was uploaded. When you apply a retention policy, any files older than the retention period are deleted immediately and cannot be recovered. Remaining files are automatically deleted at the end of the retention period.

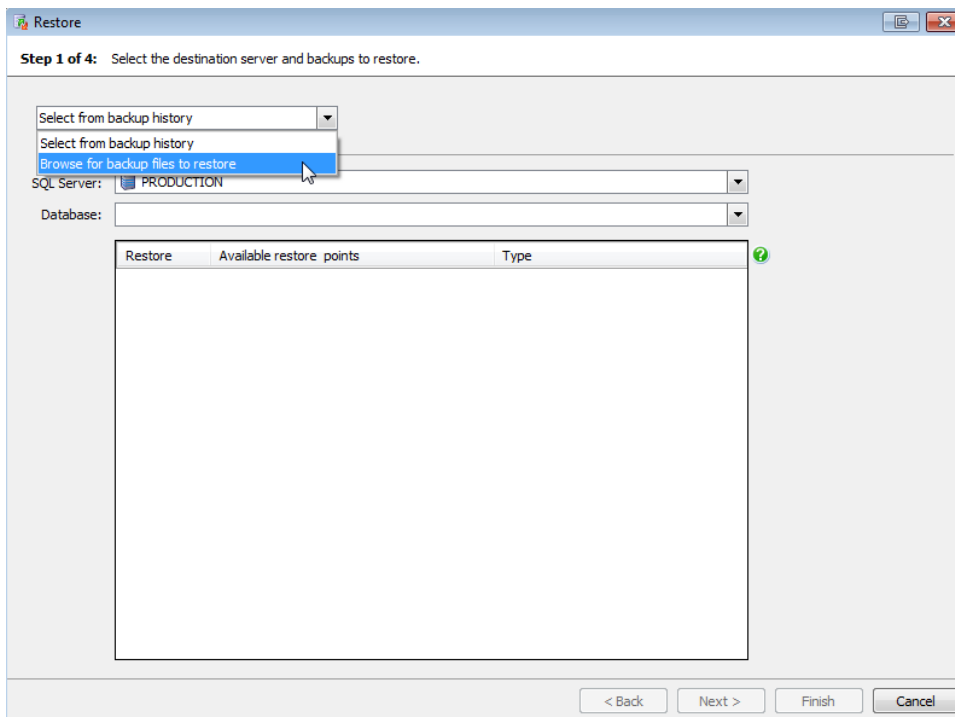
 A day is calculated as a period of 24 hours from when the retention policy was applied and takes no account of calendar date

 Check that you no longer need a backup before deleting it or setting a retention policy: there is no way to retrieve a backup once it has been deleted from hosted storage.

Restoring a backup from hosted storage

To restore a database from a backup in hosted storage:

1. Find the backup you want to restore in the [My backups](#) page of the SQL Backup Pro Hosted Storage website.
2. In the **Actions** column, click  to download the backup.
3. In SQL Backup Pro, open the **Restore** wizard. On step 1, from the drop-down list, select **Browse for backup files to restore**.



4. Click **Add Files** and select the backup file you downloaded.
5. Continue through the wizard to restore the database from the backup file.