

Scheduling backups - processing and encryption settings

[Scheduling backup jobs](#) > [Specify SQL Server](#) > [Select backup type and database](#) > [Create backup schedules](#) > [File settings](#) > **Processing and encryption settings** > [Verification options](#) > [Review summary](#)

On step 5 of the wizard, specify the compression, encryption, and optimization options for your backups.

The screenshot shows the 'Schedule Backup Jobs' wizard window, titled 'Step 5 of 7: Configure compression, encryption and optimization settings.' The window is divided into two main sections: 'Backup processing' and 'Optimization'.

Backup processing:

- Compress backup**: A check box with a green question mark icon. To its right is a slider for compression level, ranging from 'Minimum compression Highest speed' (1) to 'Maximum compression Lowest speed' (4). A 'Compression Analyzer...' button is located to the right of the slider.
- Encrypt backup**: A check box. To its right is a dropdown menu for 'Encryption strength:' set to '256-bit key'. Below this are two text input fields for 'Password:' and 'Confirm password:'.

Optimization:

- Use multiple threads**: A check box with a green question mark icon. To its right is a spin box for 'Number of threads:' set to '3'.
- Network resilience**: A section with two spin boxes: 'On failure, retry after:' set to '30 seconds' and 'Retry up to:' set to '10 times'.
- Maximum transfer size:** A dropdown menu set to '1024 KB'.
- Maximum data block:** A dropdown menu set to '2048 KB'.

At the bottom of the window are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

Backup processing

To compress the backup, select the **Compress backup** check box and select the compression level by moving the slider. For more information about compression levels, see [Compression levels](#).

For full database backups, you can click **Compression Analyzer** to perform a test on the databases to check which compression level will produce the best result for your requirements. For more information about the Compression Analyzer, see [Compression analyzer](#).

To encrypt the backup, select the **Encrypt backup** check box, then type a password for the backup in **Password**, and again in **Confirm password**.

Choose 128-bit or 256-bit encryption. **You must remember your password**; if you do not, you will not be able to access the encrypted backup.

Optimization

If you are backing up to a **Single file** or **Single backup file, mirrored to second location**, SQL Backup Pro can use multiple threads to create the backups. This can speed up the backup process. Select the **Use multiple threads** check box, and type or select the number of threads up to a maximum of 32. For more information about using multiple threads, see [Optimizing backup speed](#).

Maximum transfer size specifies the maximum size of each block of memory to be used when SQL Backup Pro stores backup data. The default value is 1024 KB; you may want to change this value if a SQL Server reports that it has insufficient memory to service requests from SQL Backup Pro.

Maximum data block specifies the maximum size of data blocks to be used when SQL Backup Pro stores backup data. The default value is 4096 KB.

Note that if you want to specify the network transfer packet size, change the connection properties for the SQL Server. For more information, see [Connection Properties](#).

The **Network resilience** settings control retry behavior following a read/write error whenever SQL Backup Pro:

- writes a backup file to disk
- copies a backup file to another disk location

Read/write errors are most likely to occur when SQL Backup Pro is processing files through a network connection.

In most circumstances, you can leave **On failure, retry after** and **Retry up to (n) times** at their default values (30 seconds, and 10 times). To disable retries completely, specify **Retry up to 0 times**.

[Next: verification and completion](#)