

## Configuring options

The **Options** tab of the SQL Safe Backup Policy Wizard allows you to enter the backup types and options for each operation included in the backup policy.

For each backup operation you include in the backup policy, you can select compression, encryption, verification options, and set additional advanced options.

What types of backup can you choose?


You can specify one, two, or the three types of backup: **Full**, **Differential**, **Log**.

Select which backup types you want for your policy and provide the respective settings. Take into account that the options for each backup type are hidden until the backup type is selected. For more information about backup types, view [understand backup types](#).


What types of compression algorithms are available?

SQL Safe provides the following compression algorithms:

- None.
- IntelliCompress, optimize for size (iSize).
- IntelliCompress, optimize for speed (iSpeed).
- Levels 1, 2, 3, 4.

 Backup operations using Level 1 complete fastest but achieve the least amount of compression. Level 4 achieves maximum compression but the backup operation may take longer.

For more information about backup compression, see [how to choose compression and encryption](#).

 When performing a backup under the SQL Server format, the compression options available changes to an option to use compression.

What types of encryption algorithms are available?

SQL Safe provides the following encryption algorithms:

- None.
- AES (128-bit).
- AES (256-bit).

**If your SQL Server environment requires FIPS compliance**, use the AES encryption option. For more information, see [ensure FIPS compliance](#).

❗ When you choose to encrypt an archive, you must designate a password. For security reasons, SQL Safe does not store this password. Ensure you remember or take note of the password you select.

✅ When performing a backup under the SQL Server format, the encryption options are not available.

What additional options are available?

SQL Safe Backup provides additional options that can be applied to SQL Safe Backup Policies.

The following list describes options that are available depending on the backup format (SQL Safe or SQL Server) chosen on the General tab.

Options	SQL Safe	SQL Server	Description
Use compression	Available	Available	<ul style="list-style-type: none"> <li>You designate the compression rate necessary to match your storage needs.</li> </ul>
Encryption	Available	Not available	<ul style="list-style-type: none"> <li>Select the level of encryption you need to ensure data security within your environment.</li> </ul>
Verify the integrity of the backup when complete	Available	Available	<ul style="list-style-type: none"> <li>Verifies the integrity of the backup set data files created by this backup.</li> <li>Verifying the backup helps identify potential issues that could occur when restoring these data files.</li> </ul>

Generate maps	Available	Not available	<ul style="list-style-type: none"> <li>Generates maps containing metadata for each database included in your backup file. This option is selected by default.</li> <li>Depending on the number of transactions completed since your last backup, generating maps may impact the performance of the backup operation.</li> <li>Generating maps is optional, but it should exist in the backup file for InstantRestore to accept and restore that file.</li> <li>SQL virtual database can attach SQL Safe backup files without the metadata, but the data files improve SQL VDB performance during tcreation of the virtual database.</li> <li>For more information, see <a href="#">recover objects using Virtual Database</a>.</li> </ul>
Report T-Log operations that are skipped as SUCCESS	Available	Available	<ul style="list-style-type: none"> <li>Allows SQL Safe to report SKIPPED T-Log operations as SUCCESS.</li> <li>Avoids backup policies from reporting a warning status when T-Log operations are skipped for databases that are in simple recovery.</li> </ul>
Include database logins in backup file	Available	Not available	<ul style="list-style-type: none"> <li>Copies SQL login information for the selected databases, including credentials and privileges, when the backup files are written.</li> <li>To help ensure the security of your SQL Server database, SQL Safe encrypts the login information. This option is available for full backups only.</li> </ul>
Thread Count	Available	Not available	<ul style="list-style-type: none"> <li>Allows you to specify how many threads you want SQL Safe to use to distribute the backup operation across multiple processors on the target SQL Server computer. Use this setting to optimize backup performance.</li> <li>When the resultant backup file is restored, SQL Safe uses the same thread setting to ensure consistent performance.</li> <li>Select <b>Auto</b> to have SQL Safe determine the optimal thread count for your environment.</li> </ul>

Transaction Log	Available	Available	<ul style="list-style-type: none"> <li>Removes all completed transactions and inactive entries from the transaction log after SQL Safe finishes the backup.</li> </ul>
Checksum: Generate	Available	Available	<ul style="list-style-type: none"> <li>Generates a checksum for the backup file.</li> <li>It must be enabled to allow the Checksum: Ignore Errors availability.</li> </ul>
Checksum: Ignore Errors	Available	Available	<ul style="list-style-type: none"> <li>If the Checksum: Generate option is enabled, then either format is available.</li> <li>If checksum errors are encountered, this option determines that SQL Safe should continue to backup process.</li> </ul>
Backup: Copy only	Available	Available	<ul style="list-style-type: none"> <li>Specifies a copy-only backup. This is a copy of the database and cannot be used as part of a restore strategy.</li> <li>Allows to take a "snapshot" backup of your database without interfering the LSN (log sequence number) order of your backup strategy.</li> </ul>
Backup: Read-write filegroups	Available	Available	<ul style="list-style-type: none"> <li>Specifies a partial backup, which includes the primary filegroup and any read-write secondary filegroups.</li> <li>If this option is selected, the <b>Generate metadata</b> option (Generate maps for InstantRestore and SQL virtual database) will be disabled.</li> <li>Backups created with the read-write filegroups option cannot be used by SQL virtual database to create virtual databases.</li> </ul>

Once you configure options for your backup, click **NEXT** to [select your backup location](#).