

Scheduling backups - verification, AlwaysOn and completion

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On step 6 of the wizard, specify the level of verification of your backup. You can also set up email notification.

The screenshot shows the 'Schedule Backup Jobs' wizard window, titled 'Schedule Backup Jobs'. It is on 'Step 6 of 7: Configure backup checks, AlwaysOn Availability Groups and email notification.' The window is divided into several sections:

- Backup checks:** This section has a header with a question mark icon. It contains two options:
 - ☒ **CHECKSUM**: Tests existing page checksums and generates a backup checksum (SQL Server 2005 & later).
 - ☐ **VERIFY (equivalent to RESTORE VERIFYONLY)**: Checks that the file is readable; if CHECKSUM is selected, tests page and backup checksums.
- Backup verification reminders:** This section has a header with a question mark icon. It contains a text box explaining that to fully verify backups, a restore job with a database integrity check (DBCC CHECKDB) should be scheduled. Below this is a checkbox labeled ☒ **Create reminder** with a reminder icon.
- Availability group settings:** This section has a header with a question mark icon. It contains two options:
 - ☐ **CHECK_PREFERRED_AG_REPLICA**: Checks whether replica is the backup preference for the availability group.
 - ☐ **SECONDARY_REPLICA_COPY_ONLY**: Automatically applies COPY_ONLY for full backups, if required by replica.
- On completion:** This section has a header with a question mark icon. It contains a checkbox labeled ☐ **Send email notification**. Below this is a text box for 'Recipient email address:' and a dropdown menu for 'Send on:' set to 'Error only'.

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

Backup checks

You can select checks to run on the backup file after the backup has been created. These checks are most effective when used together.

- Select **CHECKSUM** to validate any existing page checksums in the database and generate a backup checksum. The backup checksum is validated on restore. This option is not available with SQL Server 2000 and earlier.
- Select **VERIFY** to run RESTORE VERIFYONLY on the backup after it has been created. This checks that the backup file is complete and can be read. If **CHECKSUM** is also selected, the backup checksum and page checksums are validated as part of the check.

These checks do not verify the structure of the data in the backed up database; it is possible for these checks to succeed and for the backup to be unusable because the data is corrupt.

Backup verification reminders

The most reliable test of a backup is to:

1. Restore the database from the backup.
2. Run a database integrity check (DBCC CHECKDB) on the restored database to check the data is not corrupt.

You can use the [Schedule Restore Jobs wizard](#) to schedule regular restores of a database from the most recent backup and run a database integrity check as part of the restore job. The results of the backup verification are then displayed in the [Activity History](#).

To manage verification of your backups, you can create a reminder to schedule a regular restore job for your databases. Select the **Create reminder** check box to add a reminder for each database included in the backup job to the [Reminders](#) tab on the user interface. For each database, the details of the backup schedule are listed. When you launch the Schedule Restore Jobs wizard from the Reminders tab, the wizard is populated with details from the backup job.



The **Create reminder** option is only available if you selected the backup type **Full** on step 2 of the wizard. If you also selected Differential or Transaction log backups, details of those scheduled backup jobs are also included in each reminder.

The **Create reminder** option is not available if you selected file or filegroup backups, or when editing a backup job.

For more information, see [Backup verification](#).

Availability group settings

You can select support for AlwaysOn Availability group. These options are most effective when used together and placed on all replicas for the Availability Group.

- Select **CHECK_PREFERRED_AG_REPLICA** to ignore backing up on non-preferred replicas. No backup will be taken on non-preferred replicas, however the backup job will succeed.
- Select **SECONDARY_REPLICA_COPY_ONLY** to apply the COPY_ONLY flag for full backups on a secondary replica..

On completion

If you want to receive an email with a copy of the completion log, select the **Send email notification** check box, and enter the recipient's email address. This option is available only if you have entered your email settings. For more information about setting up email notification, see [Email settings](#).

To send the log to multiple email addresses, type each address separated with a semi-colon (;). For example:

dba01@myco.com;dba02@myco.com

By default, email notifications are sent only when there are errors during the backup process (**Error only**). If you want to receive an email when an error or warning occurs, select **Error or warning**; to always receive an email on completion of the backup process (on success or failure), select **Any outcome**.

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