■ NetApp

Restore SQL Server database backups

SnapCenter Software

Nirupama Sriram, Archana, Soumik Das June 16, 2021

This PDF was generated from https://docs.netapp.com/us-en/snapcenter/protect-scsql/task_restore_sql_server_database_backups.html on June 18, 2021. Always check docs.netapp.com for the latest.

Table of Contents

Restore SQL Server database backups		
-------------------------------------	--	--

Restore SQL Server database backups

You can use SnapCenter to restore backed-up SQL Server databases. Database restoration is a multiphase process that copies all of the data and log pages from a specified SQL Server backup to a specified database.

About this task

 You can restore the backed-up SQL Server databases to a different SQL Server instance on the same host where the backup was created.

You can use SnapCenter to restore the backed-up SQL Server databases to an alternate path so that you do not replace a production version.

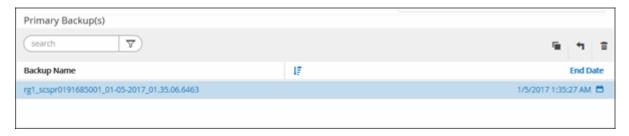
- SnapCenter can restore databases in a Windows cluster without taking the SQL Server cluster group offline.
- If a cluster failure (a cluster group move operation) occurs during a restore operation (for example, if the node that owns the resources goes down), you must reconnect to the SQL Server instance, and then restart the restore operation.
- You cannot restore the database when the users or the SQL Server Agent jobs are accessing the database.
- · You cannot restore system databases to an alternate path.
- Most of the fields on the Restore wizard pages are self-explanatory. The following information describes fields for which you might need guidance.

Steps

- 1. In the left navigation pane, click **Resources**, and then select the appropriate plug-in from the list.
- 2. In the Resources page, select either Database or Resource Group from the View list.
- 3. Select the database or the resource group from the list.

The topology page is displayed.

- 4. From the **Manage Copies** view, select **Backups** from the storage system.
- 5. Select the backup from the table, and then click the icon.



6. On the **Restore Scope** page, select one of the following options:

Option	Description
Restore the database to the same host where the backup was created	Select this option if you want to restore the database to the same SQL server where the backups are taken.
Restore the database to an alternate host	Select this option if you want the database to be restored to a different SQL server in the same or different host where backups are taken. Select a host name, provide a database name (optional), select an instance, and specify the restore paths. The file extension provided in the alternate path must be same as the file extension of the original database file. If the Restore the database to an alternate host option is not displayed in the Restore Scope page, clear the browser cache.
Restore the database using existing database files	Select this option if you want the database to be restored to an alternate SQL Server in the same or different host where backups are taken. Database files should be already present on the given existing file paths. Select a host name, provide a database name (optional), select an instance, and specify the restore paths.

7. On the **Recovery Scope** page, select one of the following options:

Option	Description
None	Select None when you need to restore only the full backup without any logs.
All log backups	Select All log backups up-to-the-minute backup restore operation to restore all of the available log backups after the full backup.
By log backups until	Select By log backups to perform a point-in-time restore operation, which restores the database based on backup logs until the backup log with the selected date.

Option	Description
By specific date until	Select By specific date until to specify the date and time after which transaction logs are not applied to the restored database. This point-in-time restore operation halts the restoration of transaction log entries that were recorded after the specified date and time.
Use custom log directory	If you have selected All log backups, By log backups, or By specific date until and the logs are located at a custom location, select Use custom log directory, and then specify the log location.
	The custom log directory is not supported for availability group database.

- 8. On the **Pre Ops** page, perform the following steps:
 - a. On the **Pre Restore Options** page, select one of the following options:
 - Select Overwrite the database with same name during restore to restore the database with the same name.
 - Select Retain SQL database replication settings to restore the database and retain the existing replication settings.
 - Select **Create transaction log backup before restore** to create a transaction log before the restore operation begins.
 - Select Quit restore if transaction log backup before restore fails to abort the restore operation
 if the transaction log backup fails.
 - b. Specify optional scripts to run before performing a restore job.

For example, you can run a script to update SNMP traps, automate alerts, send logs, and so on.

- 9. On the **Post Ops** page, perform the following steps:
 - a. In the Choose database state after restore completes section, select one of the following options:
 - Select Operational, but unavailable for restoring additional transaction logs if you are restoring all of the necessary backups now.

This is the default behavior, which leaves the database ready for use by rolling back the uncommitted transactions. You cannot restore additional transaction logs until you create a backup.

 Select Non-operational, but available for restoring additional transactional logs to leave the database non-operational without rolling back the uncommitted transactions.

Additional transaction logs can be restored. You cannot use the database until it is recovered.

 Select Read-only mode, available for restoring additional transactional logs to leave the database in read-only mode. This option undoes uncommitted transactions, but saves the undone actions in a standby file so that recovery effects can be reverted.

If the Undo directory option is enabled, more transaction logs are restored. If the restore operation for the transaction log is unsuccessful, the changes can be rolled back. The SQL Server documentation contains more information.

b. Specify optional scripts to run after performing a restore job.

For example, you can run a script to update SNMP traps, automate alerts, send logs, and so on.

10. On the **Notification** page, from the **Email preference** drop-down list, select the scenarios in which you want to send the emails.

You must also specify the sender and receiver email addresses, and the subject of the email.

- 11. Review the summary, and then click Finish.
- 12. Monitor the restore process by using the **Monitor > Jobs** page.

Find more information

Restore and recover resources using PowerShell cmdlets

Restore an SQL Server database from secondary storage

Copyright Information

Copyright © 2021 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system- without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

Trademark Information

NETAPP, the NETAPP logo, and the marks listed at http://www.netapp.com/TM are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.