aptean

Traverse Global/Standard

SQL Server Optimization

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User Guide

Contents

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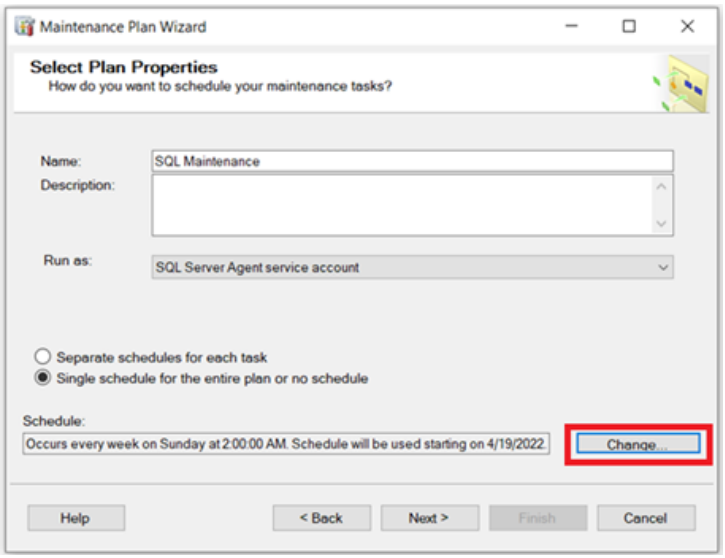
Introduction

This document provides the information on how to optimize the SQL Server Database.

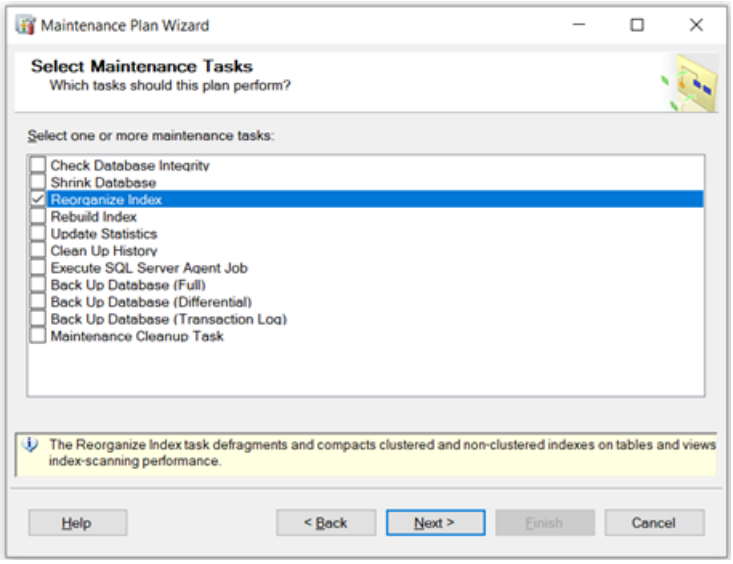
SQL Server Optimization

To optimize SQL server, perform the following steps:

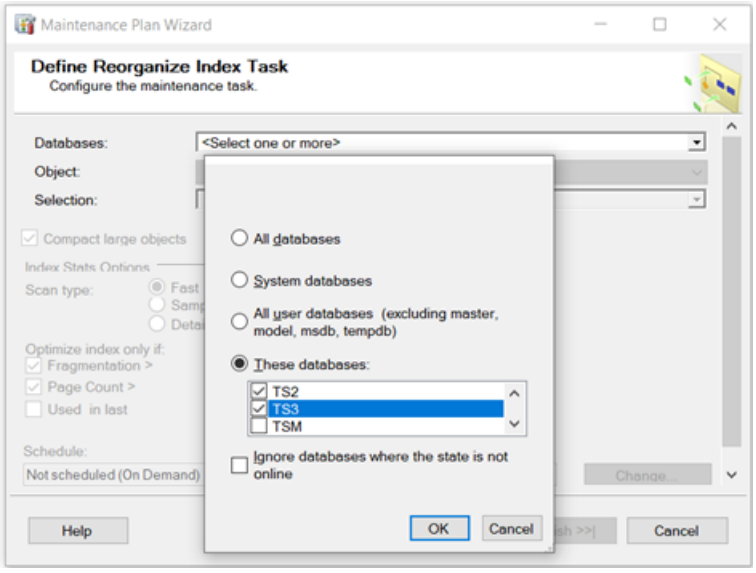
1. Open **SQL Server Management Studio**.
2. Expand **Management**.
    a. Right-click **Maintenance Plans** and select **New Maintenance Plan Wizard**.
    b. Change the scheduling to be Weekly on Sunday at 2:00 AM.



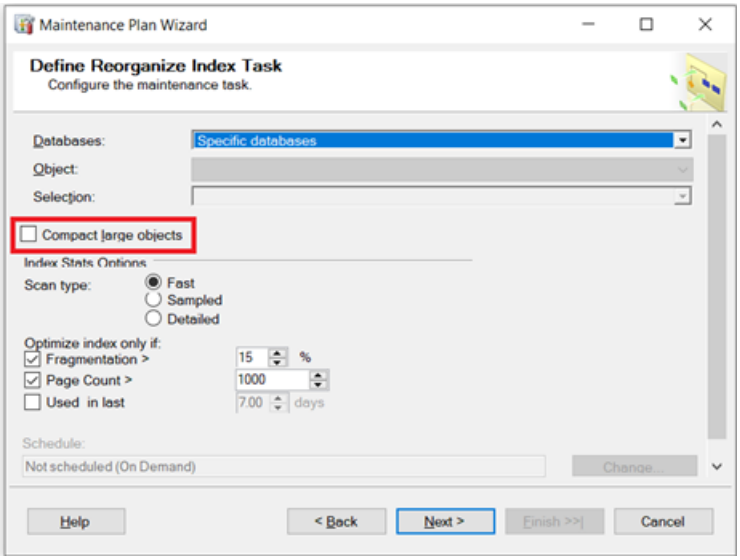
c. Check **Reorganize Index**.



d. Select the databases.



e. Clear the **Compact large objects** check box.

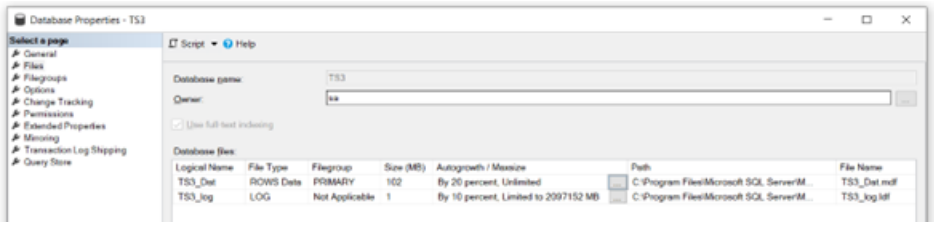


f. Click **Next** until you can **Finish**.

3. It is recommended to set a fixed database size. However, this would require manual management of database growth. It is important to note that if the size is not properly monitored and there isn't sufficient space to perform operations, it will prevent the use of the database and applications reliant upon it. If Autogrowth is enabled, it is recommended to set the Autogrowth/Maxsize property to twenty percent (20%). Autogrowth operations are expensive in terms of resource utilization and can impact database performance. Too frequent Autogrowth operations can contribute to fragmentation and reduced performance.

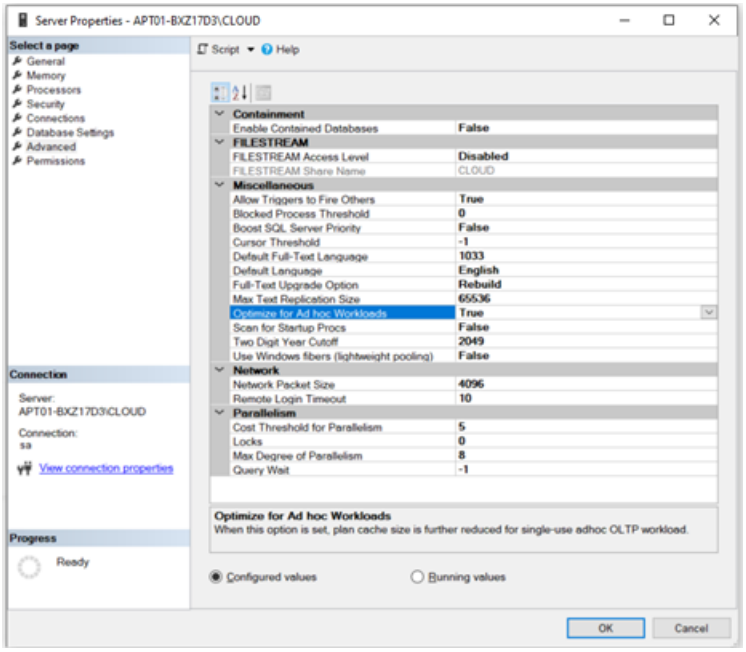
   a. Right-click the database name and select **Properties**.

   The image below depicts setting Autogrowth/Maxsize to a growth rate of 20%.



4. Enable Optimize for Ad Hoc Workloads.

   a. From **Object Explorer**, right-click the SQL instance and select **Properties**.

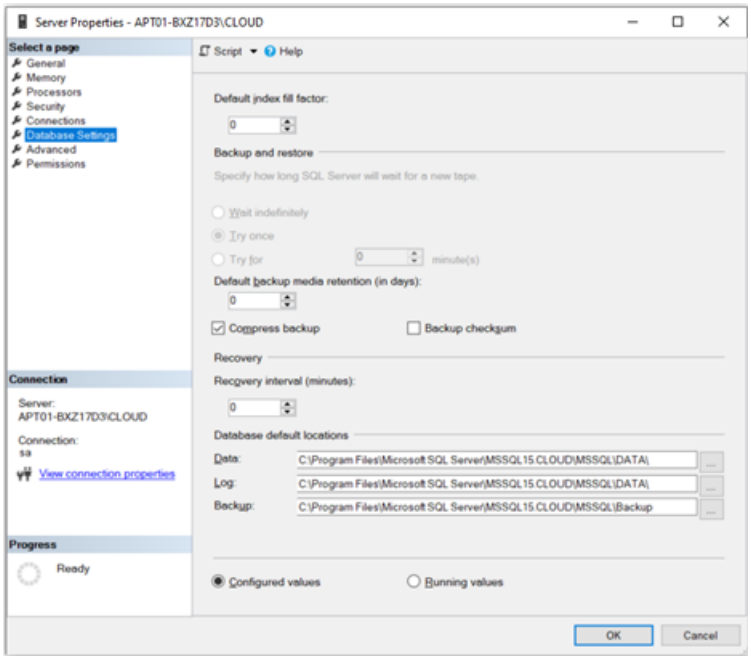


5. This step is optional. Set the Compress Backup setting.

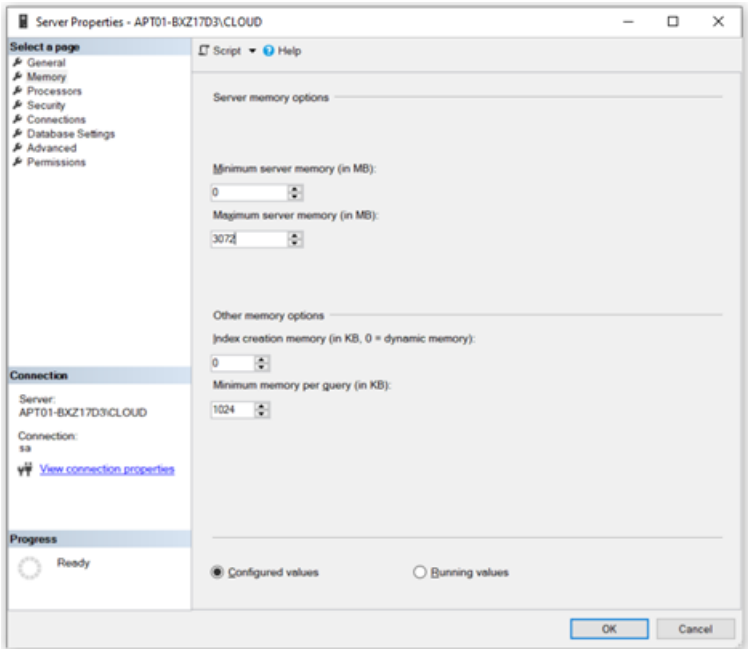
   Please note the following restrictions:

   - Compressed and uncompressed backups cannot co-exist in a media set.
   - Previous versions of SQL Server cannot read compressed backups.
   - NTbackups cannot share a tape with compressed SQL Server backups.

Please consult additional documentation before setting this option.

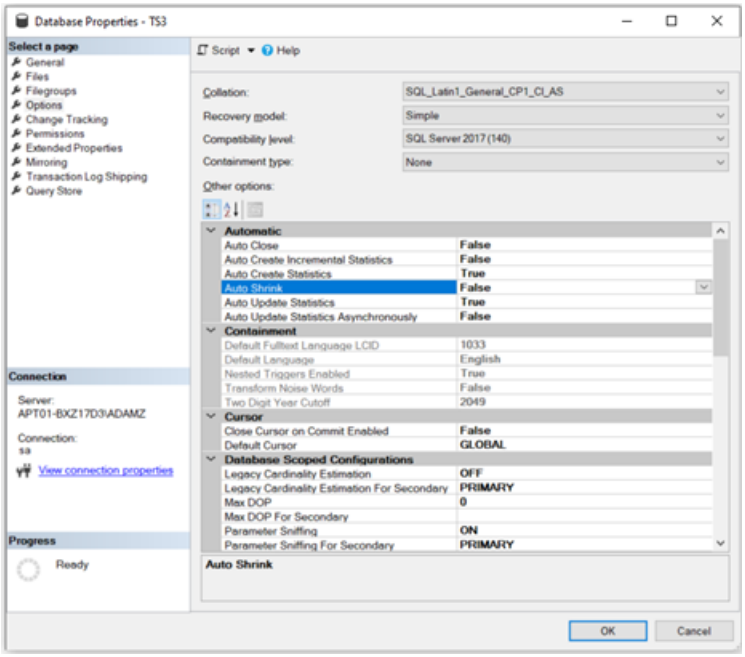


6. Set maximum SQL Server Value (This needs to be setup in relationship to OS/Other program use and total available memory).



7. Turn off Auto-Shrink on the databases.

8. Right-click the database name and select **Properties**.



9. Set initial tempdb size to 1 GB = 1024 MB.

   a. Under **Databases** > **System Databases**, right-click **tempdb** and select **Properties**.