

How to Create a SQL Database Maintenance Plan

02/07/2024 1:38 pm EST

Description of Issue:

How can the indexes on a SQL Database be rebuilt to try and improve the performance of the application, views, or reports?

Solution:

You should have an SQL maintenance plan in place to take care of the regular maintenance that needs to be performed on your databases to keep things running at an optimal level.

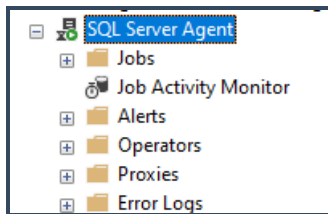
This can easily be done using the SQL Maintenance plans within the SQL Management Studio application.

You can pick tasks like reindexing and reorganizing indexes or backing up the database.

Open SQL Server Management Studio (SSMS).

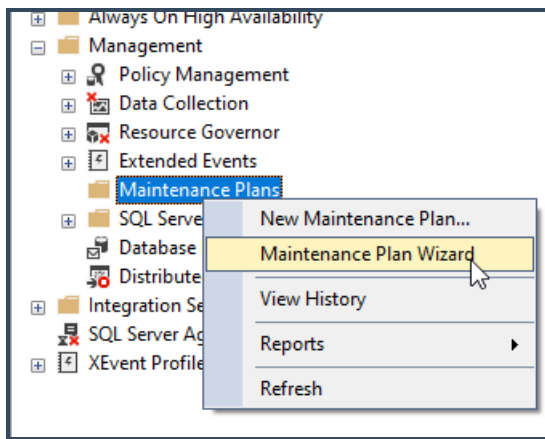
To use Maintenance Plans SQL server Agent needs to be running.

If it is not right click on the SQL Server Agent and select Start.



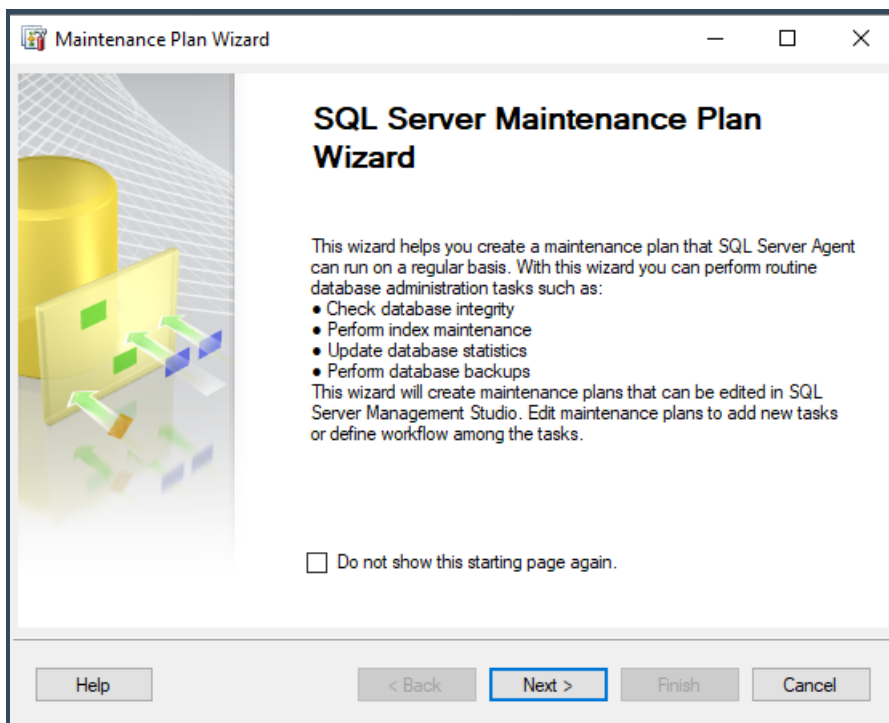
Right-click on Maintenance Plans.

Select Maintenance Plan Wizard.



The Wizard screen will open.

Click Next.



Give your plan a name and description.

This is also where you can set the schedule for when the plan will run and how often.

The screenshot shows the 'Maintenance Plan Wizard' window, specifically the 'Select Plan Properties' step. The window title is 'Maintenance Plan Wizard'. Below the title bar, the text 'Select Plan Properties' is displayed, followed by the question 'How do you want to schedule your maintenance tasks?'. In the top right corner, there is a small icon of a folder with arrows. The main area contains several input fields and options: a 'Name' field with the text 'Sedona Database Maintenance Plan', a 'Description' field which is empty, a 'Run as:' dropdown menu showing 'SQL Server Agent service account', and two radio button options: 'Separate schedules for each task' (unselected) and 'Single schedule for the entire plan or no schedule' (selected). Below these is a 'Schedule:' section with a text box containing 'Not scheduled (On Demand)' and a 'Change...' button. At the bottom of the window, there are five buttons: 'Help', '< Back', 'Next >', 'Finish', and 'Cancel'.

Maintenance Plan Wizard

Select Plan Properties
How do you want to schedule your maintenance tasks?

Name: Sedona Database Maintenance Plan

Description:

Run as: SQL Server Agent service account

☐ Separate schedules for each task
☒ Single schedule for the entire plan or no schedule

Schedule:
Not scheduled (On Demand) [Change...](#)

Help < Back Next > Finish Cancel

Click the Change button to set up a schedule.

Here you will pick the frequency of when the plan will run and what time.

Once finished click OK.

New Job Schedule

Name: Jobs in Schedule

Schedule type: ☒ Enabled

One-time occurrence

Date: Time:

Frequency

Occurs:

Recurs every: week(s) on

☐ Monday ☒ Wednesday ☐ Friday ☐ Saturday
☐ Tuesday ☐ Thursday ☒ Sunday

Daily frequency

☒ Occurs once at:

☐ Occurs every: hour(s) Starting at: Ending at:

Duration

Start date: ☐ End date: ☒ No end date:

Summary

Description:

Click the Next button.

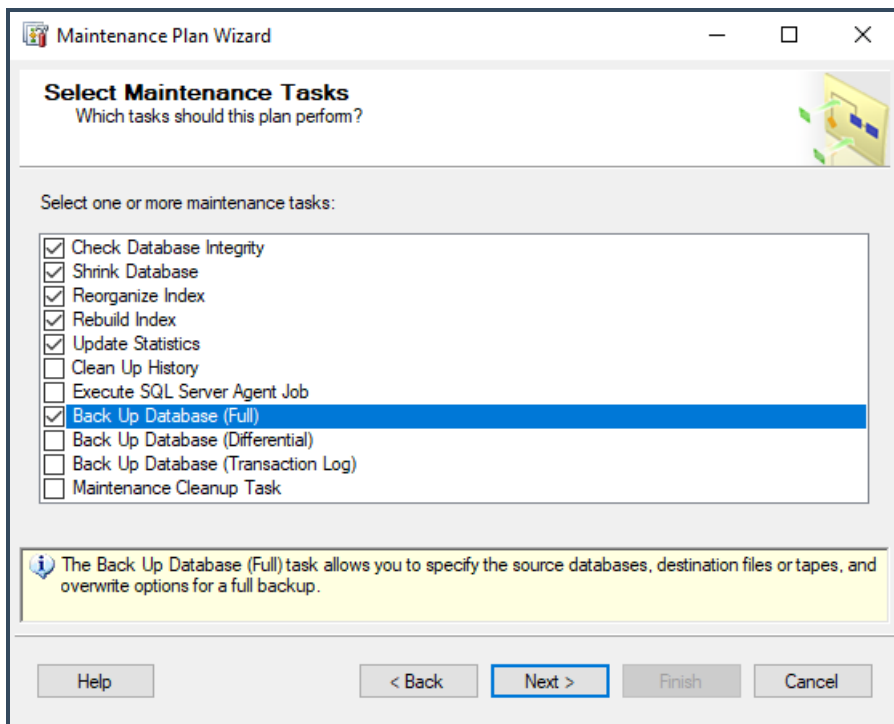
Run as:

☐ Separate schedules for each task
☒ Single schedule for the entire plan or no schedule

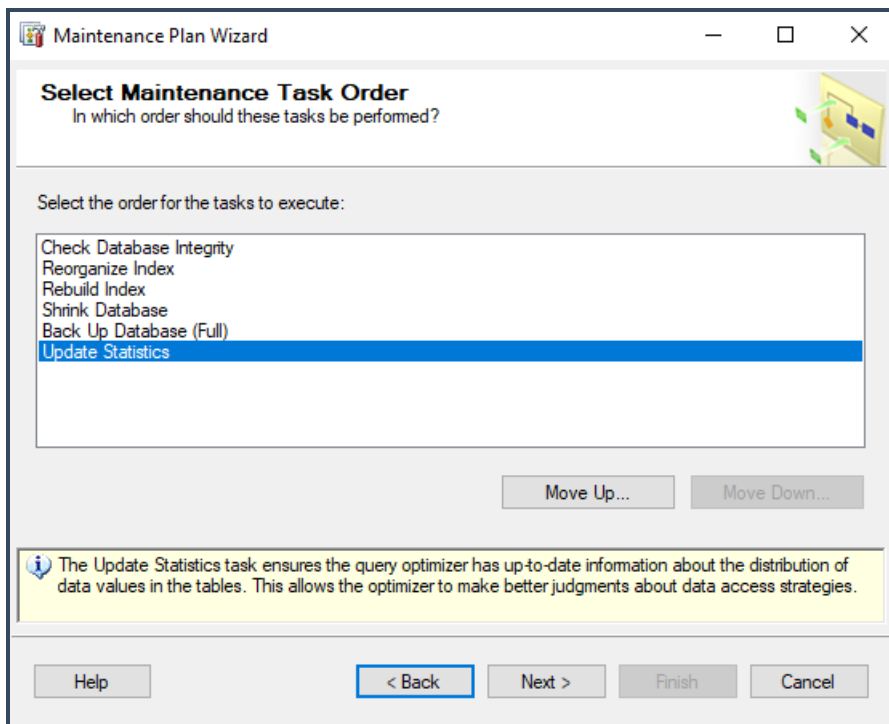
Schedule:

Now you will select the tasks you want to perform in this plan.

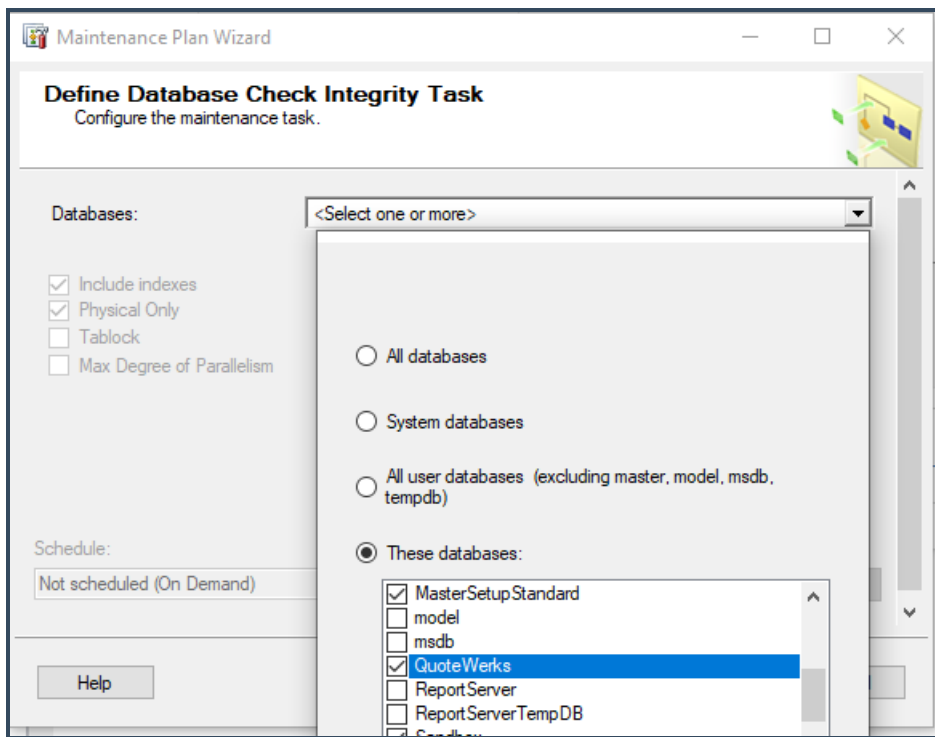
You can select one or more to run in the plan.



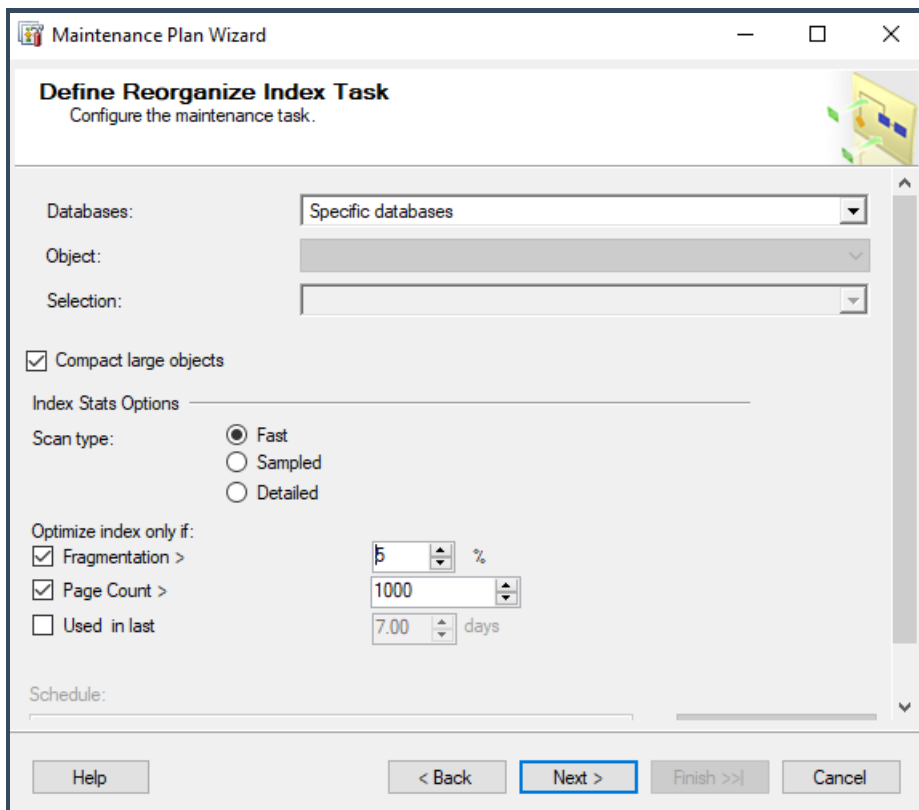
If you select more than one task you next will select the order you want these tasks to run.



Each task will have options that need to be selected like which databases you want to run the task on.

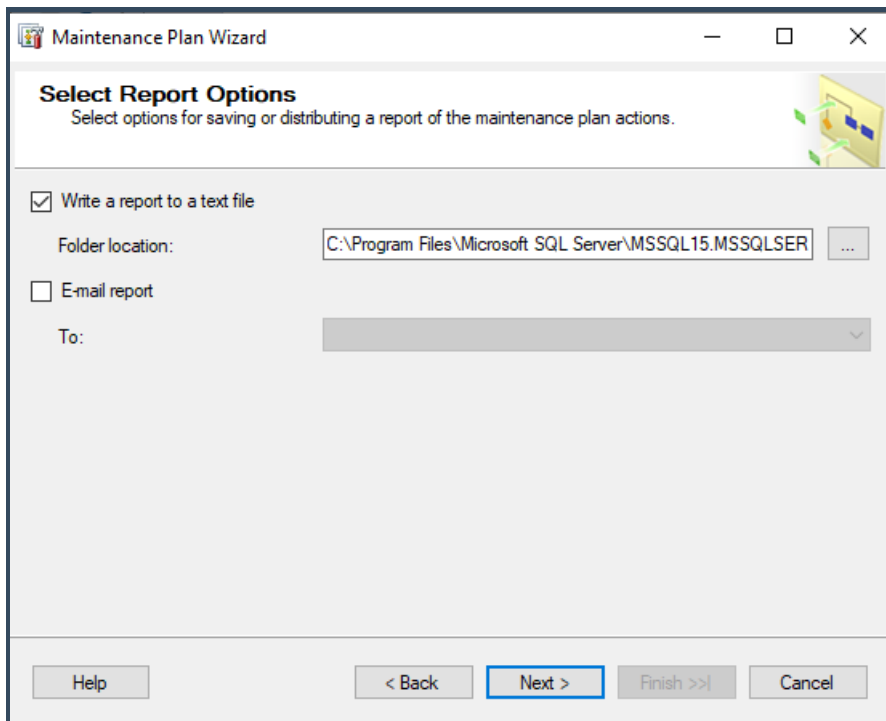


The Reorganize task will ask for options on what databases and when to run the process.



After you have completed the setup for the various tasks in your plan you will select where to save the report created when the plan finishes.

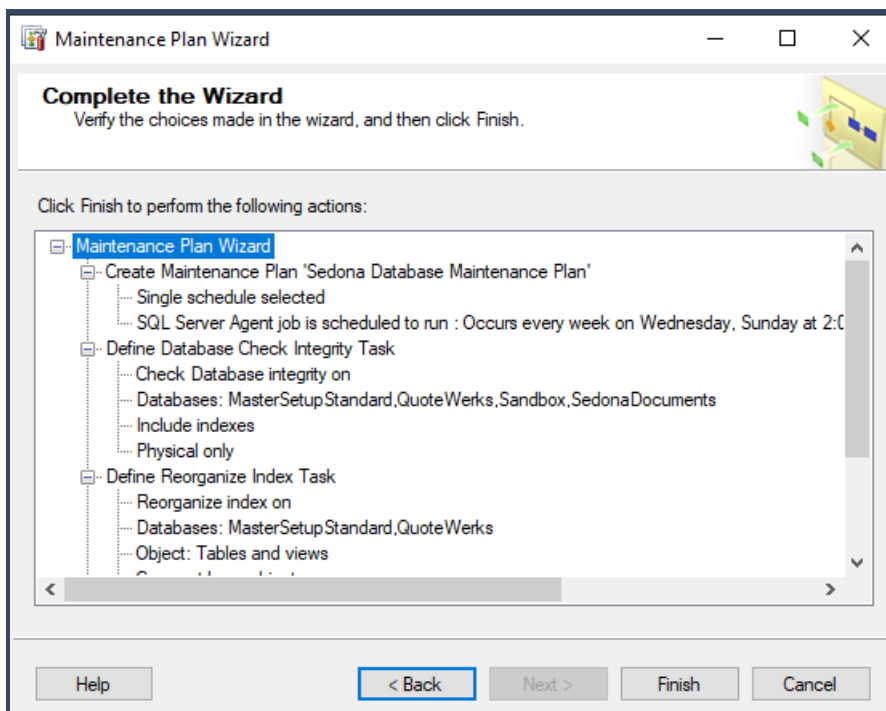
You can also select to email the report to someone on completion.



The screenshot shows the 'Select Report Options' window of the Maintenance Plan Wizard. The title bar reads 'Maintenance Plan Wizard'. The main heading is 'Select Report Options' with the instruction 'Select options for saving or distributing a report of the maintenance plan actions.' Below this, there are two options: 'Write a report to a text file' (checked) and 'E-mail report' (unchecked). Under 'Write a report to a text file', the 'Folder location' is set to 'C:\Program Files\Microsoft SQL Server\MSSQL15.MSSQLSER'. Under 'E-mail report', the 'To:' field is empty. At the bottom, there are buttons for 'Help', '< Back', 'Next >' (highlighted with a blue border), 'Finish >>', and 'Cancel'.

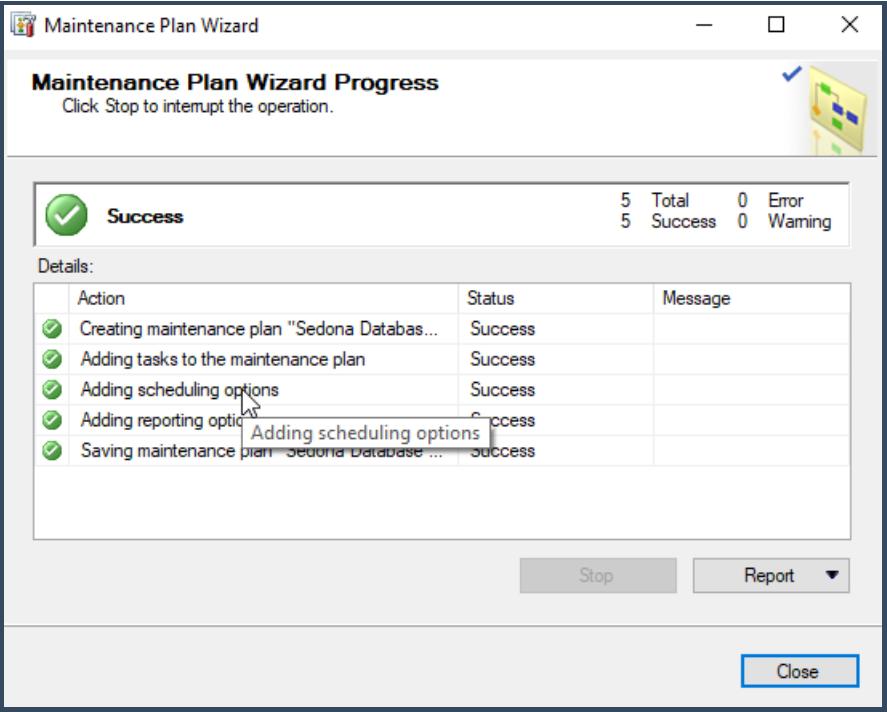
Click Next and then review the plan summary.

And if OK click Finish.



The screenshot shows the 'Complete the Wizard' window of the Maintenance Plan Wizard. The title bar reads 'Maintenance Plan Wizard'. The main heading is 'Complete the Wizard' with the instruction 'Verify the choices made in the wizard, and then click Finish.' Below this, it says 'Click Finish to perform the following actions:'. A list box shows the following tasks: 'Maintenance Plan Wizard', 'Create Maintenance Plan 'Sedona Database Maintenance Plan'', 'Single schedule selected', 'SQL Server Agent job is scheduled to run : Occurs every week on Wednesday, Sunday at 2:00 AM', 'Define Database Check Integrity Task', 'Check Database integrity on', 'Databases: MasterSetupStandard,QuoteWerks,Sandbox,SedonaDocuments', 'Include indexes', 'Physical only', 'Define Reorganize Index Task', 'Reorganize index on', 'Databases: MasterSetupStandard,QuoteWerks', and 'Object: Tables and views'. At the bottom, there are buttons for 'Help', '< Back' (highlighted with a blue border), 'Next >', 'Finish', and 'Cancel'.

You will see a processing screen should the plan be setup.



Click Close.