



PASS Summit 2010 Preview

Automate Your Database Maintenance Using Ola Hallengren's Free Script

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Many Ways to Create a Database Maintenance Plan

- Use the SQL Server Maintenance Wizard/Designer
- Write Your Own Transact-SQL Scripts
- Write Your Own PowerShell Scripts
- Use an Established, Freeware Script

Use the SQL Server Maintenance Plan Wizard/Designer

- If used properly, the Maintenance Plan Wizard/Designer can be used to create **basic**, although **incomplete**, database maintenance plans.
- While it is designed with the “novice” in mind, unfortunately:
 - It is harder to use than it appears to be
 - It is not very flexible
 - It can’t perform all necessary maintenance tasks
 - It allows DBAs to create maintenance plans that can:
 - Significantly hurt the performance of SQL Server
 - Give a false sense of security in regard to availability
- Attend my PASS Summit session: *How to Get the Most Out of the Maintenance Plan Wizard*, to learn how to properly use the Maintenance Plan Wizard/Designer.

Script Your Own Database Maintenance Plans Using T-SQL or PowerShell

- Writing your own scripts is a common option for experienced DBAs with the time to write them.
- Allows DBAs to customize their database maintenance to meet their unique environment's needs.
- On the other hand, this option may not be available if the DBA is inexperienced, or just doesn't have the available time to create their own custom scripts.

Use an Established Freeware Script

- If you prefer the flexibility of a custom script, but don't have the experience or time to create your own, then consider one of the many freeware scripts available to you on the Internet.
- Not all freeware database maintenance scripts are of equal quality, so you must carefully check them out.
- Personally, I have been using the free database maintenance script written by SQL Server DBA Ola Hallengren, which has a long and established reputation for being a flexible, powerful, and robust script.

Ola Hallengren's Free Database Maintenance Script

- Freeware without any restrictions on use.
- Powerful, flexible, robust, customizable.
- Easy enough to be used by novice DBAs.
- Used by some of the largest companies in the world.
- Supports Microsoft SQL Server 2005, Microsoft SQL Server 2008 and Microsoft SQL Server 2008 R2.
- Support all SQL Server editions; Datacenter, Enterprise, Standard, Web, Workgroup, Developer and Express.
- Ola is a DBA based in Sweden, and has been refining his script since January 2008.

What Does Ola's Script Do?

- While Ola's script won't perform all database maintenance, it will perform all the key tasks, including:
 - Perform full, differential, and transaction log backups as specified by the DBA. It can also automatically delete backup files no longer needed.
 - Perform dynamic index optimization; including rebuilding indexes online or offline (depending on the edition of SQL Server you have), reorganizing indexes, updating statistics, or doing nothing at all, based on an index's size and fragmentation level.
 - Perform DBCC CHECKDB.
 - Delete old MSDN history.
 - Automatically create jobs that implement each of the above tasks.

The MaintenanceSolution.sql Script

- When the script is executed, the following happens:
 - Four stored procedures and one function are created in the Master database.
 - Optionally, jobs are created to execute all of the relevant database maintenance tasks.
 - If you choose to have jobs automatically created, all you need to do is to schedule them (and customize them if you desire).
 - If you choose to create your own jobs, then you will use the available stored procedures, along with their available parameters, to create your own custom maintenance tasks.

Script Demo

- Configuring the script
- Running the script
- Examining the stored procedures
- Examining the database maintenance options
- Examining the created (optional) jobs

Give Ola's Script a Try

- If you are looking for a better database maintenance solution than the one you have now, download Ola's script and give it a try on a test SQL Server box.
- Take the time to learn how to customize the script by altering the parameters used for the stored procedures so that it better meets your specific needs.
- Test your customized maintenance jobs.
- Once you are happy with the script, implement in your production environment, and monitor, just as you would monitor any maintenance job.

For More Information

- Download Ola Hallengren's script here:
 - ola.hallengren.com
- Read my article for more in-depth information on Ola Hallengren's database maintenance script here:
 - <http://www.simple-talk.com/sql/database-administration/automate-and-improve-your-database-maintenance-using-ola-hallengrens-free-script/>
- To read more about database maintenance and Ola's scripts, visit:
 - www.bradmcgehee.com



Celebrating SQL Server 2008 R2

Questions?