

Run a prescriptive analysis on your SQL Server

When configuring your analysis, you can select any combination of [performance categories](#) to focus the analysis. Each category contains a set of performance metrics and their related recommendations. By picking a category, you are identifying which SQL Server areas concern you most.

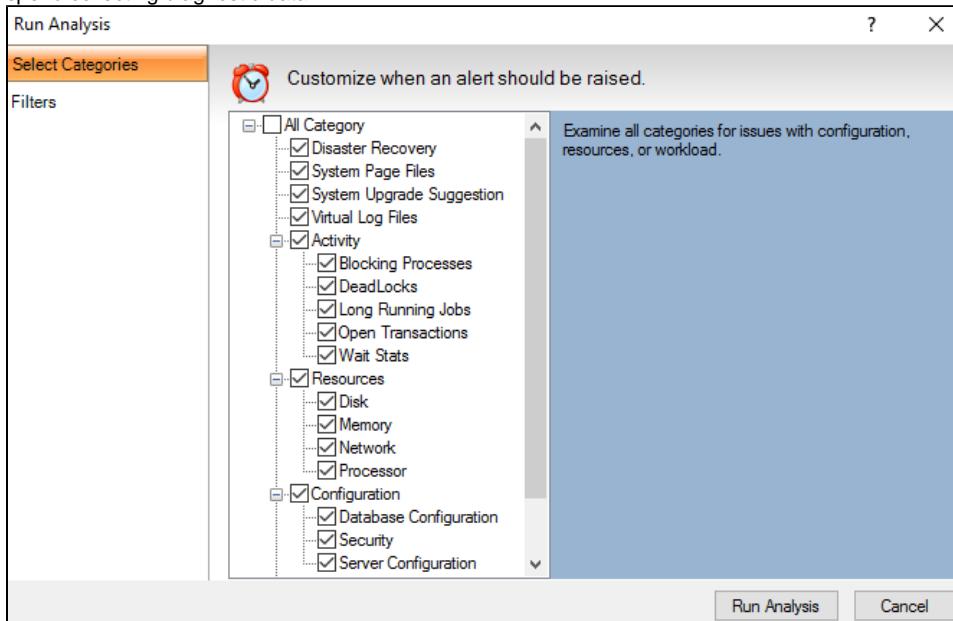
Based on the chosen categories, SQL Diagnostic Manager polls your target SQL Server instance to gather the appropriate metrics and determine which recommendations match the current performance issues.

The screenshot shows the SQL Diagnostic Manager application window. The top navigation bar includes 'Servers', 'Reports', 'Alerts', and 'Administration'. Below this is a toolbar with 'Overview', 'Sessions', 'Queries', 'Resources', 'Databases', 'Services', 'Logs', and 'Analyze' tabs. The 'Analyze' tab is selected. On the left, there's a sidebar with 'MY VIEWS' (All Servers 4, Critical 2, Warning 0, OK 2, Maintenance Mode 0) and 'TAGS'. The main content area displays 'Analysis results for WINDEV2305EVAL'. It shows two rows of data in a table:

Started	Duration	Type	Recommendations	Priority
Monday, July 31, 2023 11:06	00:05:00	Analysis	27	<div style="width: 100%;">[Color-coded priority bar]</div>
Monday, July 31, 2023 9:02	00:05:00	Analysis	26	<div style="width: 100%;">[Color-coded priority bar]</div>

To run an analysis:

1. Click **Run Analysis** in the Analyze tab.
2. When the Run Analysis window opens, you can select all the categories depending on what you want to include in your analysis. In the Filters tab, you can include specific applications (% wildcard), limit your analysis to a single database, and set how long SQLDM should spend collecting diagnostic data.



3. Once you are finished with the Analysis configuration, click **Run Analysis** to start with the Analysis, or click **Cancel** if you want to cancel the Analysis.
4. When the analysis is complete, SQL Diagnostic Manager lists all the performed analysis results by date.
5. Double-click any of the Analyses to review the priority-ranked list of recommendations.



SQLDM lists recommendations by priority. The priority of a recommendation is determined by the performance gain you receive from making the suggested change, and how relevant are the parameters you specified when configuring the analysis.

6. Select a recommendation to have detailed information.

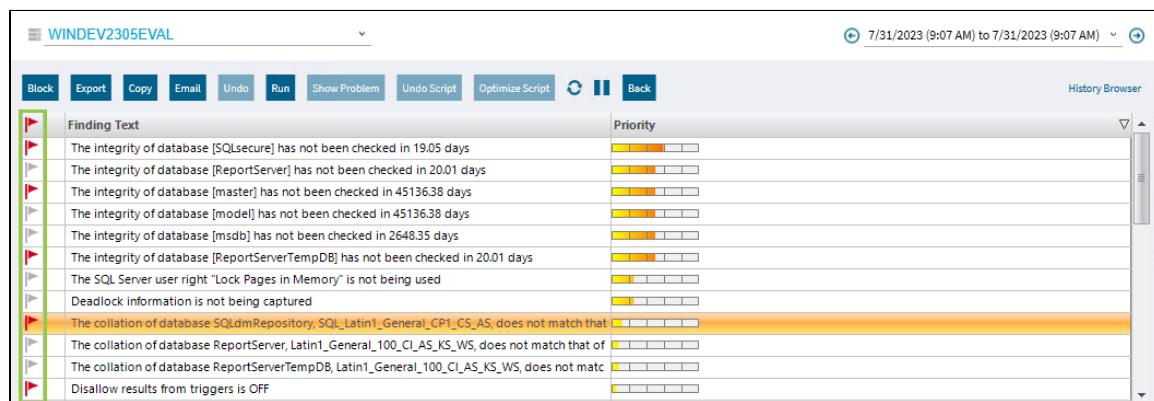
 You can set up the Analysis categories, Analysis options, Scheduling, and other Advanced Settings in the Monitored SQL Server Properties window:

1. Right-click the appropriate SQL Server instance from the **Servers** tree and select **Properties**.
2. Select **Analysis Configuration** when SQL Diagnostic Manager displays the Monitored SQL Server Properties window. For more information, review [Configure your prescriptive analysis options](#).
3. Click **OK**.

Flag a Recommendation

Flagging a recommendation allows you to mark it for follow-up action. Use flags to identify recommendations that require further investigation or that you want to optimize at a later time. When you flag a recommendation, this flagged state is saved to the analysis file, allowing you to easily find the recommendation later.

To flag recommendations, click the **Flag** icon next to the recommendation you want to flag.



The screenshot shows the SQL Diagnostic Manager interface with a list of recommendations. Each recommendation has a priority bar indicating its severity. The recommendations listed are:

- The integrity of database [SQLSecure] has not been checked in 19.05 days
- The integrity of database [ReportServer] has not been checked in 20.01 days
- The integrity of database [master] has not been checked in 45136.38 days
- The integrity of database [model] has not been checked in 45136.38 days
- The integrity of database [msdb] has not been checked in 2648.35 days
- The integrity of database [ReportServerTempDB] has not been checked in 20.01 days
- The SQL Server user right 'Lock Pages in Memory' is not being used
- Deadlock information is not being captured
- The collation of database SQLdmRepository, SQL_Latin1_General_CI_AS_AS, does not match that of ReportServer, Latin1_General_100_CI_AS_KS_WS, does not match that of ReportServerTempDB, Latin1_General_100_CI_AS_KS_WS, does not match that of
- Disallow results from triggers is OFF

Scripts

Optimize Script

Some recommendation has the Optimize Script option enabled. The Optimize Now window displays the script that was used to enact the recommended change. Review the script, to either Run it or Cancel to return to the recommendation you were viewing.

When you run the Optimize Script, displays next to the optimized recommendation.

 You can also copy the script to a Notepad or any other text editor to examine the code and research other options further before making the change.

Undo Script

The **Undo Optimization** window displays the script that is used to enact the recommended change. Review the script and either click the **Run** button to initiate the undo or click **Cancel** to return to the recommendation you were viewing. The undo script can be copied to the clipboard and used at a later time.

 Executing the undo script on a recommendation that is not already optimized can harm your SQL Server environment. Before executing the undo script, be sure that the corresponding optimization is performed.

Show Problem

The **Show Problem** button launches the SQL Viewer window with the SQL text associated with the recommendation highlighted.

Additional actions

Block

Block a particular recommendation or recommendations to fine-tune your analysis.

Export

Export your recommendations in .xls file format.

Copy

Copy your recommendations to the clipboard so that you can view the text in a text editor.

Email

Email your analysis results with recommendations.