

# SQL Sentry SQL Server Settings

Last Modified on 22 February 2022

## Blocking SQL

Setting	Description	Related Condition
<b>Maximum Duration Threshold</b>	Sets the maximum allowed duration for the object.	<a href="#">Blocking SQL: DurationThreshold Max</a>

## Blocking SQL Source

Setting	Description	Related Condition
<b>Maximum Rows To Synchronize</b>	Sets the maximum rows of historical event data to collect from this source.	N/A
<b>Minimum Block Duration</b>	Sets the time that must elapse before a Block Condition is triggered.	<a href="#">All Blocking SQL Conditions</a>

## Databases Source

For more information, see the [Fragmentation Manager](#) topic.

## Deadlocks Source

Setting	Description	Related Condition
<b>Maximum Rows To Synchronize</b>	Sets the maximum rows of historical event data to collect from this source.	N/A
<b>History Filter</b>	<p>The filter used for history synchronization. Only events that meet the filter criteria are written to the database. For more information, see <a href="#">History Filter</a>.</p> <p><b>Note:</b> The <b>Deadlocks History Filter</b> only impacts what displays on the Event Calendar and doesn't impact deadlock collection. For more information, see <a href="#">Synchronization of Performance Analysis sources</a> section of the History filter topic.</p>	N/A
<b>Collect Deadlock Events</b>	Specifies whether a deadlock statement collection is enabled.	<a href="#">All Deadlock SQL Conditions</a>

Setting	Description	Related Condition
<b>Index Defragmentation</b>		

For more information, see the [Fragmentation Manager](#) topic.

## Maintenance Plan Source

Setting	Description	Related Condition
<b>Auto-watch New Objects</b>	Specifies whether new objects are set to <u>watched</u> when they are discovered.	<a href="#">All Maintenance Plan Conditions</a> - An object must be watched in order for Conditions to be evaluated for it.
<b>Maximum Rows To Synchronize</b>	The maximum rows of historical data to collect for this source.	N/A

## Reporting Services Report

Setting	Description	Related Condition
<b>Maximum Runtime Threshold</b>	Defines the maximum allowed runtime for the object.	<a href="#">Reporting Services Report: Runtime Threshold Max</a>
<b>Maximum Runtime Threshold Percent</b>	Defines the maximum allowed runtime percent for the object.	<a href="#">Reporting Services Report: Runtime Threshold Max</a>
<b>Minimum Runtime Threshold</b>	Defines the minimum allowed runtime for the object.	<a href="#">Reporting Services Report: Runtime Threshold Min</a>
<b>Minimum Runtime Threshold Percent</b>	Defines the minimum allowed runtime percent for the object.	<a href="#">Reporting Services Report: Runtime Threshold Min</a>

## Reporting Services Report Source

Setting	Description	Related Condition
		<a href="#">All Reporting Services</a>

Setting	Description	Report Conditions - Related Condition
<b>Auto Watch New Objects</b>	Specifies whether new objects are set to watched when they are discovered.	An object must be watched for <b>Conditions</b> to be evaluated for it.
<b>Maximum Rows To Synchronize</b>	The maximum rows of historical data to collect for this source.	N/A
<b>History Filter</b>	The filter used for history synchronization. Only events that meet the filter criteria are written to the database. For more information, see <a href="#">History Filter</a> .	N/A

## SQL Server Agent Alerts Source

Setting	Description	Related Condition
<b>Auto-watch New Objects</b>	Specifies whether new objects are set to watched when they are discovered.	<a href="#">All SQL Server Agent Alert Conditions</a> - An object must be watched in order for Conditions to be evaluated for it.
<b>Maximum Rows To Synchronize</b>	The maximum rows of historical data to collect for this source.	N/A
<b>History Filter</b>	The filter used for history synchronization. Only events that meet the filter criteria are written to the database. For more information, see <a href="#">History Filter</a> .	N/A

## SQL Server Agent Job

Setting	Description	Related Condition
<b>Maximum Runtime Threshold</b>	The maximum allowed runtime for the object.	<a href="#">SQL Server Agent Job: Runtime Threshold Max</a>
<b>Maximum Runtime Threshold Percent</b>	The maximum allowed runtime percentage for the object.	<a href="#">SQL Server Agent Job: Runtime Threshold Max</a>
<b>Minimum Runtime Threshold</b>	The minimum allowed runtime for the object.	<a href="#">SQL Server Agent Job: Runtime Threshold Min</a>

Setting	Description	Related Condition
<b>Minimum Runtime Threshold Percent</b>	The minimum allowed runtime percent for the object.	<a href="#">SQL Server Agent Job: Runtime Threshold Min</a>
<b>Queue Others for up to</b>	The maximum length of time this job will queue other jobs. For more information, see Job Queuing.	N/A
<b>Auto-Start Threshold</b>	Any job whose next scheduled run time is beyond the specified threshold starts automatically upon leaving the queue. If a job's next scheduled run time is before the threshold it won't auto-start.	N/A
<b>Queue Type</b>	The behavior when this job is queued. For more information, see Job Queuing.	<a href="#">SQL Server Agent Job: Queued</a>
<b>Queue For Up To</b>	The maximum length of time this job can be queued. For more information, see Job Queuing.	N/A
<b>Auto-Start Type</b>	Controls the auto-start behavior for the job when it leaves the queue. <b>Use default</b> setting causes the queuing job's <b>Auto-Start Threshold</b> setting to be used.	N/A

## SQL Server Agent Jobs Source

Setting	Description	Related Condition
<b>Auto-watch New Objects</b>	Specifies whether new objects are set to be watched when they are discovered.	<a href="#">All SQL Server Agent Job Conditions</a> - An object must be watched for <b>Conditions</b> to be evaluated for it.
<b>Missed Run Threshold</b>	The length of time that must pass before an object run is considered to be missed.	<a href="#">SQL Server Agent Job: Run Missed</a>
<b>Maximum Rows To Synchronize</b>	The maximum rows of historical data to collect for this source.	N/A

## SQL Server Agent Log Source

Setting	Description	Related Condition
<b>Auto-watch New Objects</b>	Specifies whether new objects are set to be <u>watched</u> when they are discovered.	<a href="#">All SQL Server Agent Log Source Conditions</a> - An object must be watched in order for <b>Conditions</b> to be evaluated for it.

Setting	Description	Related Condition
<b>Maximum Rows To Synchronize</b>	The maximum rows of historical data to collect for this source.	N/A
<b>History Filter</b>	The filter used for history synchronization. Only events that meet the filter criteria are written to the database. For more information, see <a href="#">History Filter</a> .	N/A

## SQL Server Instance

Setting	Description	Related Condition
<b>Auto-enable SQL Server Agent Tokens</b>	On SQL Server 2005 and above, SQL Agent Tokens are disabled as a security measure. They must be enabled to allow SQL Sentry to <u>watch Alerts</u> .	<a href="#">All SQL Server Agent Alert Conditions</a>
<b>Auto-recycle large SQL Server Agent Logs</b>	Specifies whether to automatically recycle large <b>Agent Log</b> files. SQL Sentry polls the <b>Agent Log</b> for history synchronization. If an <b>Agent Log</b> file becomes too large, this polling causes timeout problems. To prevent this, SQL Sentry stops polling and issues a <b>Client Alert</b> if the <b>Agent Log</b> file exceeds one MB.  <b>Note:</b> This problem often manifests when informational level logging is enabled.	N/A
<b>Maximum Queue Length</b>	The maximum number of objects that can be queued at one time.  <b>Note:</b> This setting always applies to the <u>instance</u> level.	<a href="#">SQL Server Agent Job: Queued</a>
<b>Synchronize Type</b>	This setting refers to how the <u>SQL Sentry client</u> responds if it discovers the data in the <u>SQL Sentry Database</u> isn't up to date. The default is to show a message box warning of the condition and ask if the SQL Sentry client should synchronize the information itself.	N/A
<b>Synchronization Threshold</b>	The amount of time that passes since the last successful synchronization by the SQL Sentry <u>monitoring service</u> before the client attempts to synchronize directly with the <u>target</u> .	N/A
<b>Max User Databases to Synchronize (largest first)</b>	The maximum number of user databases to synchronize, ordered by total size. This includes system databases.	N/A

Setting	Description	Related Condition
<b>Max User Database Files to Synchronize (most active &amp; largest first)</b>	The maximum number of user database files to synchronize, ordered by most active and total size.	N/A
<b>Maintenance Window</b>	<p>Used to set a schedule for the <b>Maintenance Window</b>. Only <b>Log Actions</b> are triggered for <b>Failsafe</b> conditions inside the <b>Maintenance Window</b>. <b>Maintenance Window</b> settings allow a time frame to be specified while daily maintenance activities take place on that instance.</p> <p>For more information, see the <a href="#">Schedules and Windows</a> topic.</p>	<a href="#">Failsafe Conditions</a>

## Top SQL

Setting	Description	Related Condition
<b>Maximum Runtime Threshold</b>	The maximum allowed runtime for the object. This default value is one hour.	<a href="#">Top SQL: Runtime Threshold Max</a>

## Top SQL Source

Setting	Description	Related Condition
<b>Maximum Rows to Synchronize</b>	The maximum rows of historical data to collect for this source.	N/A
<b>Minimum Duration</b>	Determines the required duration for a <b>Top SQL</b> event to be collected. The default setting is five seconds. For safety reasons, it can't be reduced below 100ms unless one of the <b>CPU</b> , <b>Reads</b> , or <b>Writes</b> filters is > zero.	<a href="#">All Top SQL Conditions</a>
<b>Minimum CPU</b>	The minimum required CPU for a statement to be logged.	<a href="#">All Top SQL Conditions</a>
<b>Minimum Reads</b>	The minimum required reads for a statement to be logged.	<a href="#">All Top SQL Conditions</a>
<b>Minimum Writes</b>	The minimum required writes for a statement to be logged.	<a href="#">All Top SQL Conditions</a>
<b>Collect Trace Events</b>	Specifies whether to collect <b>Trace Events</b> . If <b>Collect Trace Events</b> is disabled, SQL Sentry won't start a trace or collect any <b>Top SQL</b> events from a monitored	N/A

Setting	target. Description	Related Condition
<b>Collect Statement Events</b>	<p>Specifies whether to collect <b>Statement Events</b>. If <b>Collect Statement Events</b> is disabled, statement-level information won't be available in the <b>Plan Explorer Statements Tree</b> when viewing a query plan.</p> <div data-bbox="451 443 1086 824" style="background-color: #f8d7da; padding: 10px; border: 1px solid #f5c6cb;"> <p><b>⚠ Warning:</b> On systems with very high transaction volumes that make extensive use of scalar functions, enabling <b>Collect Statement Events</b> can cause a negative impact on performance of the monitored target, regardless of the effective <b>Top SQL</b> filter settings or the number of events actually collected.</p> </div> <div data-bbox="451 857 1086 1088" style="background-color: #d1ecf1; padding: 10px; border: 1px solid #bee5eb;"> <p><b>🔗 Additional Information:</b> For more information, see the MSDN article <a href="#">Unintended Consequences of Scalar-Valued User Defined Functions</a>.</p> </div>	<p>N/A</p>
<b>Collect Execution Plans</b>	<p>Specifies whether to collect <b>Execution Plans</b>. If <b>Collect Execution Plans</b> is disabled, <b>Top SQL</b> event collection occurs as normal; however, query plan information won't be automatically collected for those events.</p> <p><b>📌 Note:</b> Plan information can still be collected on demand from within a <b>Plan Explorer</b> session.</p>	<p>N/A</p>
<b>Max Plan Size to Collect (MB)</b>	<p>Specifies the max plan size to collect in MB. Default value is three.</p>	<p>N/A</p>
<b>Running Events Polling Interval</b>	<p>Specifies how often the service checks for running events.</p>	<p>N/A</p>
<b>Collect Query Stats</b>	<p>Specifies whether <b>Query Stats</b> collection is enabled. This setting must be set to <b>True</b> for <b>Procedure Stats</b> and <b>Query Stats</b> to function.</p>	<p>N/A</p>
<b>Query Stats Sample Interval</b>	<p>Specifies how often to sample query stats.</p>	<p>N/A</p>
<b>Filter Time Span</b>	<p>Specifies the base length of time over which the</p>	<p>N/A</p>

	collection filters are applied to <b>Query Stats</b> .	
<b>Setting</b>	<b>Description</b> Calculated by dividing the <b>Query Stats Sample Interval</b> by the <b>Filter Time Span</b> . The collection filters such as <b>Minimum Duration</b> are multiplied by this value when applied to <b>Query Stats</b> collection.	<b>Related Condition</b>
<b>Filter Factor</b>		N/A

**Note: Top SQL Source:**

There is an **And** relationship that exists between the **Minimum Duration**, **Minimum CPU**, **Minimum Reads**, and the **Minimum Writes** collection settings. This means, that to be collected as **Top SQL**, the event needs to satisfy each individual collection setting. For example, if you set the **Minimum Duration** at 10 seconds and the **Minimum Reads** at 25, an event needs to meet both a **Minimum Duration** of 10 seconds **And** a **Minimum Read** of 25 to be captured in **Top SQL**.

**Minimum Duration** can't be set below 100ms unless **Minimum CPU**, **Minimum Reads**, or **Minimum Writes** is greater than zero. This lower limit is enforced because setting this thresholds below 100ms for an extended period of time could dramatically increase the volume of data collected and stored by SQL Sentry, and have a negative impact on the monitored server. SQL Sentry's [QuickTrace](#) functionality is better suited to analyze extremely short duration events.