



The Sentry-go Monitoring System Monitoring Database & SQL Queries

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Be Proactive, Not Reactive!

Table of Contents

Symbols	2
Background.....	2
Recommended Monitoring Settings	2
Quick Facts.....	3
Monitoring Database Connectivity & SQL Queries.....	3
Configuring Database Availability & SQL Query Monitoring	5
Scheduling the Check.....	8
Testing Database Connectivity & SQL	9
Temporarily Ignoring a Configured Check.....	9
Configuring an Automatic Response	10
More Information, Help & Support.....	11



Symbols

Thank you for choosing Sentry-go® as your monitoring solution for Windows. In this guide, the following symbols are used to denote specific items ...



Important information which should be noted – it may affect what you are trying to do.



Additional information relating to the operation being described is shown.

Background

One of the best ways of ensuring a database is performing correctly, especially for key production systems is to periodically connect to it and optionally run one or more queries and compare the results with a known good value. With many solutions this would involve the creation of numerous scripting files and programming it yourself.

With Sentry-go, such checks are easy to configure & automate, allowing you to monitor ODBC System DSNs defined on the server as well as configure queries that the Quick Monitor should periodically run & check.

Recommended Monitoring Settings

It is recommended that your primary databases are periodically checked for availability and connectivity. You may also wish to run one or more queries against these databases to ensure table access is available or data integrity is being maintained – for example ...

- To check a given value or number of rows doesn't exceed a threshold figure
- To verify that an action such as an UPDATE or INSERT as performed by other systems can be run correctly.

Quick Facts

Here is a summary of the options available with this component. They are discussed in more detail in the pages that follow ...

Component :	SQL Connection & Query Monitor
Aim/Description :	To provide periodic monitoring of database connectivity & optionally run & check the results from SQL queries.
Main Monitoring Features :	<ul style="list-style-type: none">• Verify connectivity to one or more ODBC database connections (DSN)• Optionally check that SQL queries can be run against the DSN• Optionally check results returned from SQL queries run against the DSN• Optionally verify the time taken to run an SQL query
Periodic Monitoring :	✓
Scheduled Monitoring :	✓
Local Monitoring :	✓
Dial-up Support :	
Alerting :	All alerting & auto-response options available
Web Reports :	Status report
External software req's :	None

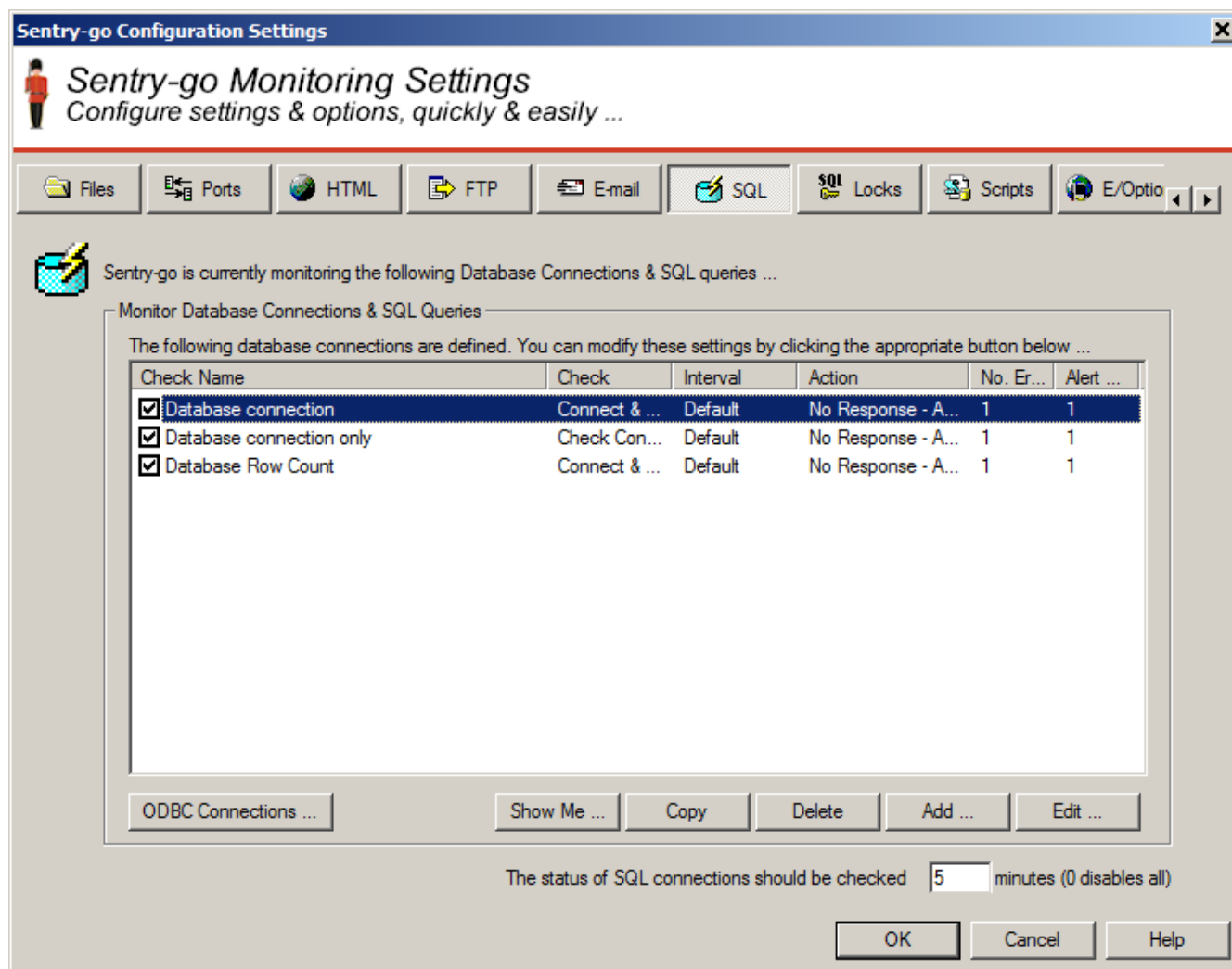
Monitoring Database Connectivity & SQL Queries

To monitor database availability simply select the Sentry-go monitor from the Client Console with the right mouse button and click "Configure".

A window containing a number of tabs will be displayed. To monitor available disk space, select the "SQL" tab. From here, you can configure the following ...

- The monitoring of one or more database connections (ODBC DSNs)
- Optionally the running of one or more SQL queries
- What should happen in a check fails.
- How often each check should be run.
- Temporarily disable the monitoring of one, more or all connections.

The resulting list will show all the currently defined ports which are currently being monitored (or temporarily ignored). From here you can add new monitored items, edit existing ones or delete them from the monitor's scan.



The status of Database Connectivity and SQL queries should be checked every (minutes)

This value specifies how often, in minutes, the Quick Monitor should check that the defined database connections and run any associated queries. You can override this for a given connection by editing the connection details.



Configuring Database Availability & SQL Query Monitoring

To monitor a new connection or edit an existing one, select the Add or Edit option from the main window.

Add Query/Connection Test

Scan Criteria | Schedule | Response | Alert

Please define your ODBC connection & optionally SQL query below ...

Which ODBC connection do you wish to verify ?

Refer to this check as :

Connect using DSN :

User : Password :

SQL Sentry-go will check the above connection. If this fails, the defined response will be run. If successful, you can optionally run the SQL query defined below ...

After connecting, also run this SQL Query ...

Returns a data type of : of length :

Cancel changes after running query (Rollback) ?

Trigger an alert if ...

The query cannot be executed successfully

The query takes more than ... sec(s) to complete

No. rows affected/returned is ...

Returned data (col 1, row 1) is ...

From here you can define which ODBC data source (connection) the monitor should attempt to use in order to establish connectivity with the database as well as any associated SQL query to be performed.

Refer to this check as

This is the name that you will refer to the check as on both web reports and in any alerts generated. It is recommended that a short and accurate description be placed here - e.g. Live Database Connection.

Connect using DSN

Select the ODBC data source that represents a connection to the database you wish to access or check. To add a new entry, click the "New ..." button.

User

This value is used to specify the SQL Server User ID that is to be used with the ODBC connection in order to logon to the database.



To use a Trusted SQL Server Connection, leave this and the password entry blank. For more information on using trusted connections with Sentry-go, see ["Sentry-go - Using Trusted SQL Server Connections"](#).

Password

This is the password associated with the above SQL Server User ID.

Testing SQL Connectivity

Once defined, click the "Test ..." button to verify that the connection can be made. See below for more details.

After connecting, run this SQL Query

Select this option if you wish to run a SQL Query against the connected database. Sentry-go will then run the SQL query entered below once connectivity has been established. To check database connectivity only, leave this option unchecked.

This field below allows you to enter the SQL query that you want to run. This can either be a data retrieval (SELECT) or action (INSERT, UPDATE etc.) statement.

- If a SELECT statement is run, you can check ...
 - That the statement executed successfully
 - The value returned in the first column, first row
 - The number of rows returned

- If an action statement is run, you can check ...
 - That the statement executed successfully
 - The number of rows affected by the statement

Cancel Changes after Query (Rollback)

Select this option if you wish to perform an SQL rollback after the statement completes successfully. If this option is not selected, the statement (including any changes made) will be committed upon completion.

Testing the SQL Query

Once defined, click the "Test ..." button to verify that the connection can be made & the SQL query entered is valid and can be run against the chosen data source. See below for more details.

Data Type

For a SELECT statement, this value indicates the type of value being returned (i.e. the data type of column 1). It can be set to an integer, long or character.



If character is selected, enter the maximum length of the character data in the length field. For other data types, this field is ignored.

Trigger an Alert if ...

The option selected here determines which check should be performed after the SQL has been run. In particular, these options define under which condition an alert should be triggered ...

- **The query cannot be executed successfully.**

If this option is selected, an alert is triggered if an error was encountered while running the query.

- **The query takes more than X seconds to run.**

If this option is selected, an alert is triggered if the query takes longer than the time entered to complete.

- **The no. rows returned/affected is ...**

If this option is selected, an alert is triggered if the number of rows affected or returned by the statement is less than, equal to, not equal to or greater than the value entered. The value entered must be numeric.

- **Returned Data is ...**

If this option is selected, an alert is triggered if the result from a SELECT query is less than, equal to, not equal to or greater than the value entered.



To use this option, the SQL query must be a SELECT statement. The comparison can be either character or numeric - no quotes are required for character data.

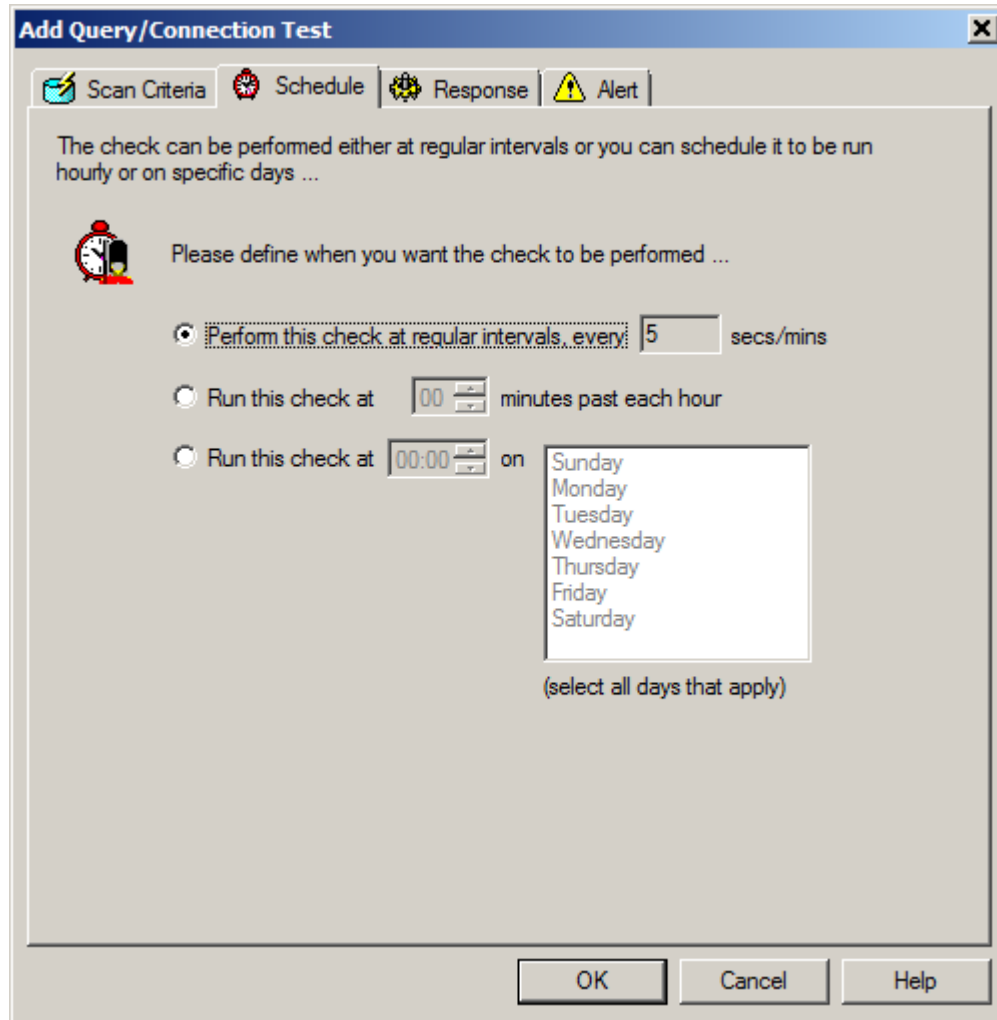
If multiple values (columns or rows) are returned, the value from the first row & first column is verified.

If a "less than" or "greater than" comparison is used, the return type must be numeric.

Scheduling the Check

By default, each check is performed periodically at regular intervals throughout the day. The frequency of these checks is determined by the value specified at the bottom of the main list.

However, there may be times when you wish to perform the check at a different time, maybe at a set time each day, or on certain days etc. To do this, select the “Schedule” tab.



From here you can define exactly when the check is to be performed.

Perform this check at regular intervals, every (mins)

Select this option to use the default interval specified at the bottom of the on the main list window. In this case the check will be performed every X minutes.

Run this check at HH:MM and every hour thereafter

Select this option to run the check at the specified time past each hour. In this case, only the minutes (MM) are used to determine when the check is to be performed.

Run this check at HH:MM On [Days]

Select this option to run the check at the specified time on the given days. In this case, the check will be performed at the given time if the associated day has been selected. Select all days that apply.

Testing Database Connectivity & SQL

Before saving your settings, you can optionally check database connectivity and/or the entered SQL query using the defined DSN and user/password by clicking the appropriate “Test ...” button. When selected, the Client Console connects to the target monitoring server (the server being configured) in order to run the test, the results of which are then displayed in the resulting web page.



In order to check the configuration, the target Sentry-go monitor must be running with web reports enabled.

The monitoring check itself is not run, only connectivity to the database using the DSN and authentication specified is verified at this stage.

The parameters, along with the test results are shown on the web page. In some cases, errors may be obvious and easily corrected; in others, additional diagnostic information may be found in the Sentry-go log file, accessible on the server or via the web reports menu.

For more information on the Sentry-go log file, see [Sentry-go - Configuring Logging Options](#).

Temporarily Ignoring a Configured Check

In some cases, you may wish to exclude a check from monitoring without removing it permanently. To do this, simply remove the “tick” or check against the entry you wish to ignore in the main list.

Configuring an Automatic Response

In the event an error is detected, an alert will be triggered. In this case, Sentry-go can be configured to either respond automatically (i.e. take action itself), alert one or more Administrators, or both.

To configure what the monitor should do in the event an error is detected, select the entry from the list and click Edit. On the resulting window, select the Response tab.



For more information on the options available as well as details on how to configure alerts & responses, see [Sentry-go - Configuring Alert & Automatic Response Options](#).

More Information, Help & Support

More information can be found in the guides that accompany the Sentry-go software. You can also access the following resources ...

- For the very latest information & product updates, please visit <http://www.Sentry-go.com>
- For sales advice, please e-mail Sales@Sentry-go.com
- For technical support, please e-mail Support@Sentry-go.com



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