

Configuring Heartbeat Monitoring

With Sentry-go Quick & Plus! monitors

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Be Proactive, Not Reactive!

Ensuring your monitors are running is an obvious, yet sometimes overlooked task. Sentry-go server monitors come with heartbeat monitoring built-in, allowing you to "monitor your monitors" quickly, easily and with a method that fits your environment.

This guide gives full details of how you can configure heartbeat monitoring using Sentry-go.

In this guide

System requirements	2
Recommended monitoring settings	2
Monitoring Sentry-go heartbeats	3
Configuring a verified monitor	5
Configuring an automatic response	6
Configuring an alert	6
Setting up the heartbeat database (if required)	6
Defining the heartbeat connection method	7
Testing the connection method	. 10
More Information	. 11

System requirements

This component is fully compatible with both Sentry-go Quick Monitors v6 and above, and Sentry-go Plus! v6 monitors and above.

Recommended monitoring settings

It is recommended that the heartbeat from all Sentry-go server-based monitors are periodically verified to ensure they are running & responding as expected.

To ensure all monitors are covered, we recommend that ...

- All monitors are configured to generate heartbeat monitoring information.
- At least one monitor (monitor A) verifies the heartbeat of monitors within your environment.
- Another monitor verifies heartbeat information from monitor A.
- All monitors should be configured to use the same heartbeat connection method.



One of the others is used to check the first, to provide total alerting coverage.

Monitoring Sentry-go heartbeats

To ensure your Sentry-go monitors are responding as expected each one emits heartbeat information. One or more monitors can verify this information to determine if any failures currently exist. To set up monitoring, configure the appropriate monitor and select the "H/beat" tab.

Sentry-go	o Configuration Settings		×					
Sentry-go Monitoring Settings Configuring settings made easy!								
U H/be	eat 🕅 Network 🖽 Perf. 🖳 Logs	🖵 Disks 🔗 Services 🔄 Process 🎒 Printers 🔄 File	F					
Heartbeats allow one monitor to ensure others are running & continually available Heartbeat Monitoring Send heartbeat information from this monitor ? Send & monitor heartbeat information from this monitor How is the information sent/accessed ? Settings								
	Monitor the heartbeat of these monitors	Action No Error Alex Crown	1					
	Dev-SQL-Server	No Response - Alert Only 2 Oritical Errors						
	Live-App-Server	No Response - Alert Only 2 Critical Errors						
	Live-SQL-Server	No Response - Alert Only 2 Critical Errors						
	Windows-AD	No Response - Alert Only 2 Critical Errors						
	Import Known Servers	Test Delete Add Edit						
		OK Cancel Help						

Send heartbeat information from this monitor ?

This option determines the heartbeat processing performed by the monitor being configured. You can select ...

- Do not send or monitor heartbeats. Select this option to disable all heartbeat monitoring.
- Send & monitor heartbeat information from this monitor. Select this option to both generate heartbeat information from this monitor as well as verify details from the monitors listed below.
- Send heartbeat information (only) from this monitor. Select this option to generate heartbeat information, but not verify it from other monitors.
- Monitor, but do not send heartbeat information from this monitor. Select this option to monitor the heartbeat of other monitors, but not generate information itself.

Unless web-based heartbeat monitoring is being used, this option is not recommended as a failure of the local monitor will prevent others from being verified & alerted etc.

How is the information sent/accessed ?

Click "Settings" to determine how heartbeat information should be generated & monitored. See below.

Listed monitors

The lower list allows you to define which monitors are to be periodically checked to ensure they are responding. This is only used if the above selection is set to "Send & monitor heartbeat information from this monitor" or "Monitor, but do not send heartbeat information from this monitor".

Testing Access to Heartbeat Information

To test access to heartbeat information for the given monitor, highlight it's entry in the list and click "Test".

If the server has yet to generate heartbeat information, an error may be displayed indicating that no information is available. This is correct behaviour.

If you are connecting to a database to retrieve heartbeat information and the database cannot be found, you will be given the option to create the database direct from the web report. You can do this now, or wait for the monitor to access information for the first time at which point it will attempt to create the database itself. See below for more information on creating the required SQL table.

Configuring a verified monitor

You can use the buttons at the bottom of the window to define new entries, edit existing ones or remove entries from the list. An un-ticked item in the list is defined, but will be ignored by the monitor.

To easily import all remote entries already defined within your local Client Console, click "Import Servers from Console".

To edit a server, highlight it in the list & click "Edit". The following window will be displayed ...

Edit Sentry-go Server
🕛 Edit Monitor 🛞 Response 🦳 Alert
Please define the server running Sentry-go that you wish to monitor below
Which Sentry-go monitor would you like to monitor ?
You can enter a host or PC name, or enter the IP-address of the device you wish to check
Live-SQL-Server
Test
Sentry-go must be installed on this machine & configured to send heartbeat information
OK Cancel Help

From here you can enter or update the name of the monitor you wish to verify. You can also verify access to the resource using the "Test" button.

() The value entered should be the Windows name of the server on which the monitor is running.

Configuring an automatic response

In the event an error is detected, Sentry-go can be configured to optionally respond automatically - i.e. to take action itself.

To configure this, select 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 automatic responses, please see the "Configuring Automatic Responses" guide.

Configuring an alert

In the event an error is detected and either no automatic response is defined or the response doesn't resolve the fault, an alert will be triggered. Depending on the monitor's general settings, you can either notify one or more contacts individually, or specify the alert group you wish to inform.

To configure these options, select the entry from the list and click Edit. On the resulting window, select the "Alert" tab.



Setting up the heartbeat database (if required)

If you are using an ODBC database, a single table, named "SentrygoHeartbeat" is required. This will be created automatically by the monitor the first time it is required if not already present.

However, to do this the configured user must additionally have CREATE TABLE permission within the target database.

To create the table manually, use this information ...

```
CREATE TABLE SentrygoHeartbeat
(
ServerName varchar(255) NOT NULL,
Status varchar (100) NOT NULL
)
```

Defining the heartbeat connection method

In order to function, you must define how the monitor will emit and/or retrieve heartbeat information. To do this, click "Settings" button from the heartbeat configuration tab. The following window will be displayed ...

Heartbe	at Connection Settings						
ᠿ	The following settings are used by the monitor to send & verify heartbeat information (as applicable)						
	• Use the integrated web server Web server's port :	1000					
	C Use this directory/share UNC Path :				,		
				User			
	C Use this database Connect using DSN :	Sentry-goAudit		v			
				New			
	User :		Password :				
	C Use FTP FTP server :		Remote directory :				
	Connect to port :	21					
	User :		Password :				
	Generate & check heartbeat information every (secs). :	60 () To () inte	ensure correct operation, rval is the same on all pa	, please ensure this rticipating monitors.	_		
	Alert notifications when connection error occurs :	Alerting					
		Help	Test	Cancel OK			

From here you can choose & configure the connection method you wish to use.

The chosen method will depend on the environment in which Sentry-go is running. It is recommended that all monitors use the same heartbeat connection settings.

You can choose to use a direct connection, via the integrated server, or a remote "data store", using a remote network share, ODBC database or FTP server.

Use the integrated web server

Select this option to verify a monitor by connecting to its integrated web server. This is the quickest and easiest method to use and requires no specific heartbeat information to be generated, or a separate data store. However using it ...

- Requires the web server be configured, with the same port no. & running on all participating monitors
- Requires access to the web servers from the verifying monitor, which may not be available due to firewall
 restrictions

To configure, simply enter the port number on which your web servers listen for inbound requests.

Use this directory/share

This method allows you to use a central network share which will store heartbeat information and be accessed by the verifying monitors as appropriate. This option works well when you cannot use the integrated web server but ...

- Requires a network share that is accessible to all participating monitors
- Is normally restricted to monitors running within the same domain
- May be restricted from some servers where a firewall is implemented

To configure, simply enter the full UNC path (<u>\\Server\ShareName\Path</u>) that will be used to store and access heartbeat information.

Always use the UNC path and not a mapped drive.

Individual heartbeat info. files will be written to and read from the above folder.

Use this database

This method allows you to use a central ODBC database to store heartbeat information.

To configure...

• Select the ODBC DSN from the list that will allow the monitor to connect to your chosen database. To create a new entry, click "New ...". (available when configuring locally).

See "Setting up the Database" below for more information.

- Enter the user ID, where required, that can be used with the above ODBC connection in order to logon to the database ...
 - For databases such as Microsoft Access that do not require a logon, leave this field blank.
 - To use a Trusted SQL Server Connection, leave this field blank. Please see the "Using SQL Server Trusted Connections" guide for more information.
 - The first time the Sentry-go monitor accesses the database, it will attempt to create it if not found. To do this, the logged on user must have "CREATE TABLE" privilege where appropriate. Otherwise, it must have SELECT, INSERT and UPDATE privileges.
- Enter the password for the above user, where required. If no password is required, simply leave this entry blank.

Use FTP

This method allows you to use a central FTP server & directory store heartbeat information. This is particularly useful when using Sentry-go in a more distributed environment, or where firewalls protect access between machines.

To configure...

- Enter the name or IP Address of your FTP Server.
- Enter the remote FTP directory that will be used to store heartbeat information.

The entered path must exist & should be relative to the default directory used by the FTP user defined below.

- Enter the port number on which the FTP directory accepts inbound connections. By default, FTP servers use port 25, but your network Administrator may override this.
- Enter the user ID that should be used to connect to your FTP server.

The entered user must have permission to create, update & delete files from the remote directory.

• Enter the password for the above user.

Generate & check heartbeat information every (secs)

This value indicates how often heartbeat information will be accessed (and therefore generated and/or verified). The lower the interval, the more up to date monitoring information will be, but the more work the monitor - and possibly the external data store, must do.

The default value is 60 seconds.

After connection error, do not check again for (mins)

This value is used to indicate how the monitor should behave if heartbeat information cannot be generated/logged because a connection to the data store (remote share, database or FTP server) could not be made.

If set to a non-zero value, the monitor will not re-check heartbeat information for the given no. minutes, allowing time for the problem to be investigated and resolved.

This setting does not affect issues relating to individual servers being monitored. To control them, edit the properties of the individual monitor/server in the main heartbeat monitoring list.

Alerting ...

Click this button to define who will be contacted in the event connection to the data store fails. Depending on your monitor's settings, you can either select individual contacts or the required alert group from the list.

For more information, please see the "Configuring Sentry-go Alerts" guide.

This setting does not relate to alerts triggered because of issues relating to individual servers being monitored. To configure alerting for this, edit the properties of the individual monitor/server in the main heartbeat monitoring list.

Testing the connection method

Once defined, you can optionally check the configuration by clicking the "Test" button. When selected, the configuration utility 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.



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, please see the "Configuring Logging Options" guide.

More Information

If you need more help or information on this topic ...

- Read all papers/documents on-line.
- Watch demonstrations & walkthrough videos on-line.
- Visit <u>http://www.Sentry-go.com</u>.
- Contact our <u>Support Team</u>.



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