

The Sentry-go Monitoring System Configuring Alert & Automatic Response Options

Last Updated Tuesday, 01 February 2011

© 3Ds (UK) Limited
<http://www.Sentry-go.com>

Be Proactive, Not Reactive!

Table of Contents

Symbols	2
Background.....	2
Alerts vs Responses	2
Configuring Sentry-go Automatic Responses.....	3
Using Dial-Up Networking.....	10
Running Automatic Responses as a Named User	11
Sentry-go Alerting	13
Alert Groups.....	15
System Notifications	17
Types of Notification	19
The Sentry-go Alert Engine	21
Defining your Alert Groups	22
Adding a New Alert Notification Option.....	23
Sending an E-mail to an Administrator	24
Automatically Resending Failed E-mails	28
Sending a Network Message to an Administrator	29
Specifying your own E-mail/Network Message Text & Title	32
Running a Windows Command, Batch file, VBScript or Preformatted Notification	33
Example Alert Engine Batch File or Script.....	39
Example Alert Engine Custom E-mail	40
Example Alert Engine SysLog File	42
Example Alert Engine HTTP (Web Server) File	44
Testing Notifications	46
Specifying when to Notify with Notification Schedules.....	48
What is an SMS Gateway ?	50
More Information, Help & Support	51

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

When a fault or error is detected by Sentry-go, you can either ...

- Let the monitor take the appropriate action itself
- Alert one or more Administrators using one or more different methods as appropriate to the person and/or time of day etc.
- Both of the above

This guide gives full details on how you can configure both of these options.

Alerts vs Responses

In general, a monitoring solution is designed primarily to continually or periodically monitor one or more aspects of your server and alert you when an error condition is detected. These alerts may take the form of a network message, e-mail, SMS text message or messaging via a 3rd party solution.

However, there may be times when the more immediate requirement is to take corrective action based on a known resolution – whereby the monitor itself makes an automatic response and then checks to see if the resolution has been successful, based on re-running the original check.

The response itself will depend on the check being performed – e.g. restart a failed service, removing temporary files to conserve disk space, deleting large prints from print queues, terminating blocked or blocking SQL processes.

- Responses allow the monitor to take action itself, thus only informing the Administrator if the fault cannot be automatically corrected. This is a powerful feature for issues that have a standard resolution.



Following a response, Sentry-go will perform the check that previously failed again. If it now succeeds, the response is considered successful. If not, an alert will be triggered.

You can also configure the monitor to alert you even when the response has resolved the problem.

- Alerts are typically triggered when a failure has been detected, in order to inform one or more Administrators promptly and efficiently using one or more alerting methods.

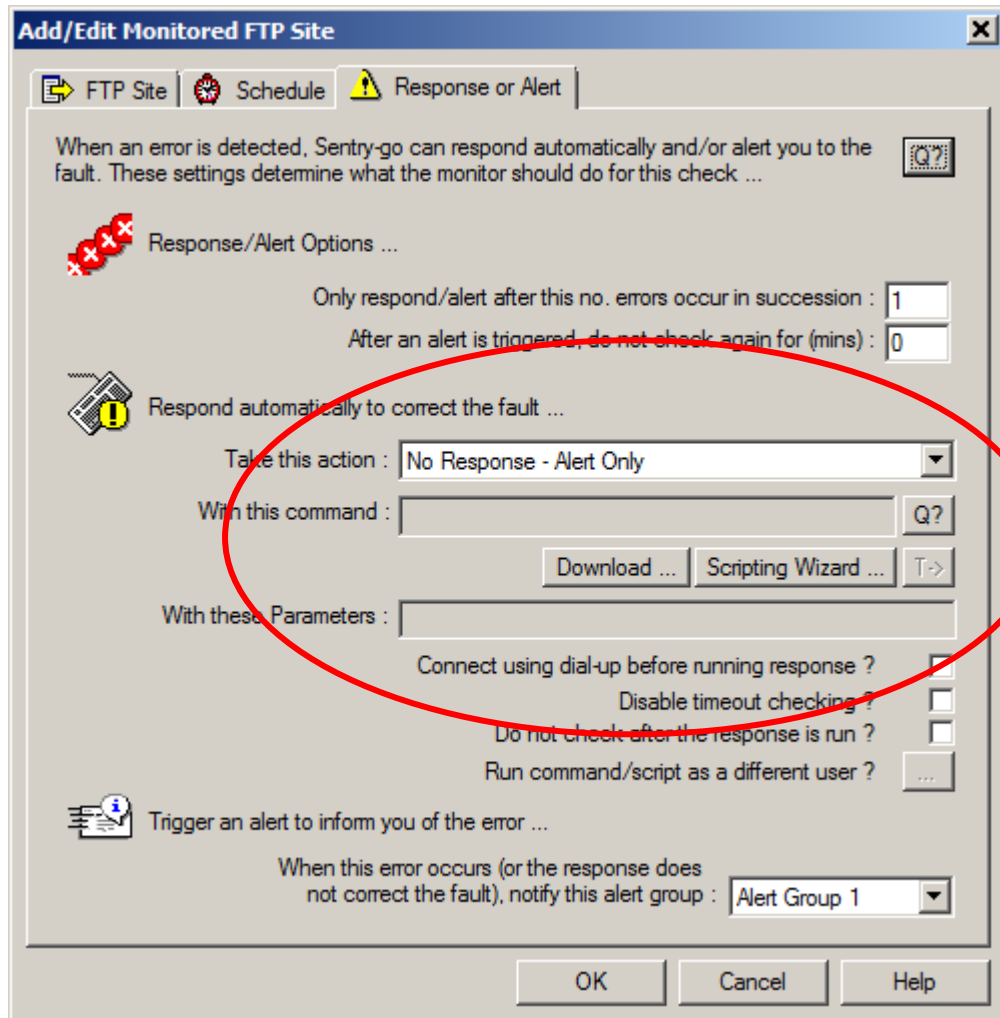
Both alerting and automatic response options are available to you with Sentry-go and are described in detail below.

Configuring Sentry-go Automatic Responses

Responses are optionally run when an error is detected and before an alert is triggered. To configure them, simply select the Sentry-go monitor from the Console with the right mouse button and click "Configure".

From the resulting window, select the tab that reflects the check you wish to configure and then click Add or Edit as required to add a new item or configure an existing one from the list.

In most cases, simply select the "Response" tab from the properties window.



Respond/Alert Options

These options relate to both auto-responses & alerts.

Only respond/alert only after this no. errors are triggered in succession

This value is used to specify the number of errors that must occur in succession before the response or alert is triggered.

 The count is automatically reset once the test has run successfully.

After an alert is triggered, do not check again for (mins)

When an alert is triggered, it may take time for corrective action to be taken. During this time, you may not wish to be notified again (as the corrective action is on-going). To allow for this, set a time (in minutes) here. During this time, the monitor will not perform the check and hence continual notifications for the check avoided.

Respond automatically to correct the fault



This section allows you to optionally define an automatic response in order to attempt to resolve the error.




Take this action







This option allows you to determine what Sentry-go should do if an error is detected ...








The options available are dependent on the check being performed. Some may not be available for all check types.

Action	Description
No Response - Notify Only	Select this option if you simply wish to alert one or more System Administrators about the error. In this case, no corrective action will be attempted by the monitor.
No Response - Log Only	If logging is enabled via the "Logging" tab, either to file, database or both, then details of all alerts will be written to the appropriate location. If this option is set, no notification or action will be triggered. Instead, the alert will simply be written to the log.
Reboot the Server	Select this option if the monitor should reboot the server in response to this failure. In this case, no other corrective action will be attempted. Before a reboot occurs, notifications, indicating that a reboot is about to occur will be automatically sent to the appropriate System Administrators based on the Alert group of the error. A short delay will precede any reboot, to ensure the above Administrators receive their notification.  If, after the server is rebooted, the same alert is triggered again, the same Administrators will be notified but the reboot cancelled. This prevents continual reboots from being performed.
Run an Application	This option allows the monitor to take automatic corrective action to the appropriate test by running the application entered in the "With this Command" field. For example, to clear down temporary files to reclaim free disk space etc. you might run an application or batch file.  The application entered should be specified along with the full path & must be available to the monitor being configured. The application is run directly from the location entered. No changes or modifications are made by the monitor to this file.

Action	Description
Run a Command	<p>This option allows the monitor to take automatic corrective action to the appropriate test. If selected, the "With this Command" option is enabled, allowing you to specify the command you wish to run in response to the failure.</p> <p> The command entered should be specified - along with the full path if required & must be available to the monitor being configured.</p> <p>The monitor will run the command using the Windows "CMD" interface directly from the location entered. No changes or modifications are made by the monitor to this file.</p>
Run a VBScript	<p>This option also allows the monitor to take automatic corrective action to the appropriate test. If selected, the "With this Command" option is enabled, allowing you to specify a Windows Scripting Host (WSH) or VBScript (VBS) file which should be run in response to the failure.</p> <p> The script entered should be specified along with the full path & must be available to the monitor being configured.</p> <p>In addition, place-markers can be used within the script to include context specific information relating to the fault that triggered the response. These will be translated at runtime, prior to running the response. See "Sentry-go - Place-markers" for more details.</p> <p>Example scripts can be found on-line in the Sentry-go Scripting Library.</p>
Restart the Service	<p>Select this option to attempt to restart the associated service which has been detected as stopped.</p>
Restart or Continue the Service	<p>Select this option to attempt to restart the associated service which has been detected as stopped. In addition, the monitor will respond to a "Paused" state by attempting to continue the service.</p>
Start the Process with this Command	<p>Select this option to attempt to run the required number of copies of the process with the command specified below in order to meet the specified check criteria.</p>
Attempt to Terminate the Process	<p>Select this option to terminate the running copies of the given application if they are found to be running.</p> <p> It is assumed that the process running has no user session and will be terminated without warning. Any user or associated data will be lost.</p>

Action	Description
<p>Pause the Printer</p>	<p>If this option is selected, the associated printer will automatically be paused, stopping any further documents from being printed. Documents will continue to be queued.</p> <p> The printer may fail to pause if an error is being reported.</p>
<p>Resume the Printer</p>	<p>If this option is selected, Sentry-go will attempt to resume (continue) the printing of documents from a previously paused state.</p> <p> The printer may fail to resume if an error is being reported.</p>
<p>Delete all Queued Documents</p>	<p>If this option is selected, Sentry-go will purge (delete) all documents from the associated printer/print queue.</p>
<p>Take the Printer Off-line</p>	<p>If this option is selected, Sentry-go will attempt to take the printer off-line (i.e. jobs will be spooled and held - not printed).</p> <p> This option has no effect under Windows NT as off-line printing is not supported under this Operating System.</p> <p>This may have no noticeable effect if an error is being reported by the printer.</p>
<p>Bring the Printer On-line</p>	<p>If this option is selected, Sentry-go will attempt to bring the printer on-line (i.e. documents will be printed, not simply spooled and held).</p> <p> This option has no effect under Windows NT as off-line printing is not supported under this Operating System.</p> <p>This may have no noticeable effect if an error is being reported by the printer.</p>
<p>Redirect Print Queue</p>	<p>If this option is selected, Sentry-go will attempt to redirect the print queue to the local port entered below & bring the printer on-line (i.e. documents will be printed, not simply spooled and held).</p> <p> The target port must point to the same type of printer, as the spooled data will have already been converted for that printer type.</p> <p>The document currently printing (i.e. the document effectively reporting the error) cannot be transferred to another printer.</p> <p>If the associated printer is offline or is showing an error, the document showing that error cannot be moved to a new port.</p>
<p>Pause Queued Document</p>	<p>If this option is selected, the associated document will be paused (not printed).</p> <p> In most cases, if the document has started printing, it will complete, even if it is paused.</p> <p>The response has no effect for printer-wide checks - i.e. checks not linked to print jobs.</p>

Action	Description
Delete all Queued Documents	If this option is selected, Sentry-go will attempt to delete all queued documents from the associated print queue.
Resume Queued Document	<p>If this option is selected, the associated document will be un-paused (i.e. resumed).</p> <p> The response has no effect for printer-wide checks – i.e. checks not linked to print jobs.</p>
Restart Document Printing	<p>If this option is selected, the printing of the associated document will be restarted from the beginning.</p> <p> The response has no effect for printer-wide checks – i.e. checks not linked to print jobs.</p>
Delete the Queued Document	<p>If this option is selected, Sentry-go will attempt to delete the associated document.</p> <p> The response has no effect for printer-wide checks – i.e. checks not linked to print jobs.</p>
Terminate the blocking process	<p>If this option is selected, Sentry-go will attempt to cancel the SQL connection associated with the connection that is stopping another SQL process(es) from continuing – i.e. the blocking SQL process.</p> <p> No warning will be given & any unsaved (uncommitted) data associated with the connection will be lost. However, blocked processes will then be allowed to continue.</p>
Terminate the blocked process	<p>If this option is selected, Sentry-go will attempt to cancel the SQL connection associated with the connection that is currently being blocked by one or more other SQL process(es) – i.e. the blocked SQL process.</p> <p> No warning will be given & any unsaved (uncommitted) data associated with the connection will be lost.</p>

With this Command

This option allows you to enter the name of the file, script, or command that you wish to run in response to the triggered error.



The files entered must be available to the local server.

Always specify the full path, including drive or UNC path as appropriate.

If the file is located on another server (not recommended in case it becomes unavailable), specify the full UNC path with the file.



Commands, paths & filenames can contain environment variables (in the format %<variable>%) or Sentry-go place markers (e.g. <\$\$ERROR>) if required. These will be translated at runtime, prior to running the response. See "[Sentry-go - Place-markers](#)" for more details.

Example scripts can also be found on-line in the [Sentry-go Scripting Library](#).

Scripting Wizard

Click this button to launch the [Sentry-go Scripting Wizard](#). This can be used to generate a new script based on an existing template file (without the need for programming or scripting knowledge) or access information, where available, for an existing script.

Example files & scripts can be found on-line in the [Sentry-go Scripting Library](#).

See "Generate the file or script using the Scripting Wizard" later in this document for more information on the Scripting Wizard.

Download

Select this option to launch your web browser & connect to the on-line [Sentry-go Scripting Library](#). Example scripts & templates can be accessed & downloaded from here.

With these Parameters

If the above command or file requires parameters or command-line switches, you can enter them here.



Parameters can contain environment variables (in the format %<variable>%) or Sentry-go place markers (e.g. <\$\$ERROR>) if required. These will be translated at runtime, prior to running the response. See "[Sentry-go - Place-markers](#)" for more details.

Connect using dial-up before running response

Tick this option if you want Sentry-go to connect to the network using Windows dialup before running the auto-response.



Disable timeout checking

By default, Sentry-go will monitor the action taken. If it takes an excessive amount of time to complete, the system automatically terminates the job and fails the check.

Tick this option to disable this check and run the auto-response to completion, however long it takes.

Do not check after a response is run (where applicable)

Tick this option if you don't want Sentry-go to re-run the check in the event a response has been run.

Often, you will want to verify the check to see if the response has corrected the fault that triggered the alert originally. To do this, leave this option unchecked.

However, there may be some cases when you do not wish to do this – for example, when a check is used to trigger a related job that will not affect the monitored item. To do this, tick this option.



This option is useful for options such as file conversions. The file monitor can trigger an alert when a new item is added to a directory, and the resulting response used to perform a file conversion – e.g. Word to PDF. In this case you don't wish to run the check again and so you would tick this option.

Run command/script as a different user

By default, any response will be run as the user running the Sentry-go monitoring service. Typically this will be the local system account which has administrative privileges to the local machine only. If you wish to run the response under a specific account – e.g. a domain account with specific permissions or an account which has access to network resources etc, click the “...” button to specify a named user – see below.

Using Dial-Up Networking

If your server uses dial-up networking to connect to the network and the response itself requires network resources, tick the option to ensure dial-up networking is connected before the response is run ...

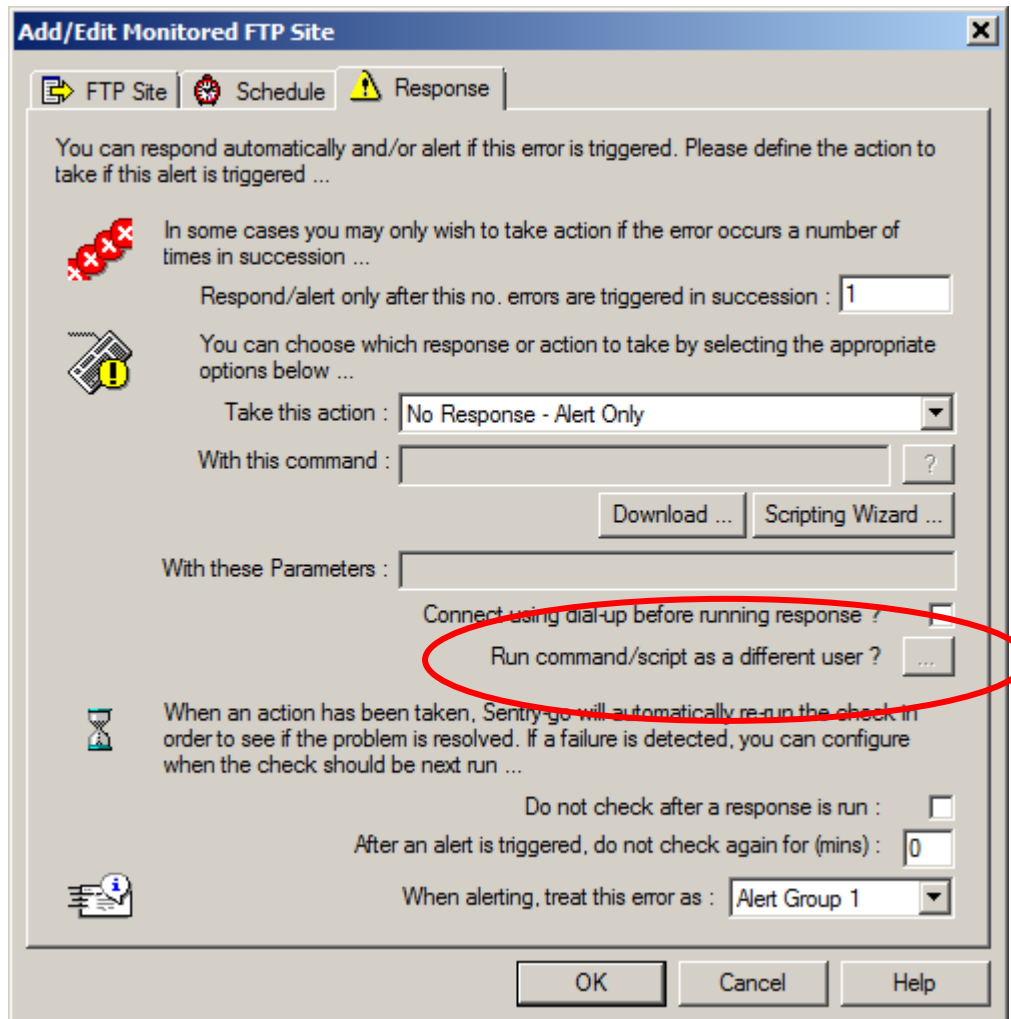
The screenshot shows the 'Add/Edit Monitored FTP Site' dialog box with the 'Response or Alert' tab selected. The dialog is divided into several sections:

- Response/Alert Options ...**: Includes a red 'X' icon. Fields for 'Only respond/alert after this no. errors occur in succession' (set to 1) and 'After an alert is triggered, do not check again for (mins)' (set to 0).
- Respond automatically to correct the fault ...**: Includes a yellow warning icon. A dropdown menu is set to 'No Response - Alert Only'. Below it are fields for 'With this command' and 'With these Parameters'. Buttons for 'Download ...', 'Scripting Wizard ...', and 'T->' are present.
- Connect using dial-up before running response ?**: This checkbox is highlighted with a red circle and is currently unchecked. Other unchecked checkboxes include 'Disable timeout checking ?' and 'Do not check after the response is run ?'. A button for 'Run command/script as a different user ?' is also present.
- Trigger an alert to inform you of the error ...**: Includes an information icon. A dropdown menu is set to 'Alert Group 1'.

At the bottom of the dialog are 'OK', 'Cancel', and 'Help' buttons.

Running Automatic Responses as a Named User

By default, any response will be run as the user running the Sentry-go monitoring service. Typically this will be the local system account which has administrative privileges to the local machine only. If you wish to run the response under a specific account – e.g. a domain account with specific permissions or an account which has access to network resources etc, you can specify a named user ...



The following window will be displayed ...

Run Response or File As a Named User

By default, the user ID running the Sentry-go monitoring service will be used to run the file/script or access network resources. To use a different user, please specify their logon details below ...

Domain : YourDomain

User : WindowsUser

Password : *****

Confirm Password : *****

T-> Use default user (clear)

The user specified may need permissions to access resources.
It is recommended that the user specified should have a non-expiry password.

Help Cancel OK



In order to ensure the response is run correctly, the entered user must ...

- Have “logon as a service” permission.
- Permissions to access any required resources.
- Have a non-expiry password (recommended).



Click “T ->” to verify the details entered and ensure the server has access to the user.

Sentry-go Alerting

Whereas responses are optionally run in order to take corrective action to a detected fault, alerts are triggered when ...

- A failure is detected, the required number of successive errors has been reached and no response has been defined.
- A failure is detected, the required number of successive errors has been reached and the defined response could not be executed.
- A failure is detected, the required number of successive errors has been reached and the defined response ran but did not resolve the problem.
- An internal or configuration error occurs such that a check cannot be performed.

Alerts are defined in two parts ...

- Firstly you define the users that should be notified and/or the files/scripts that should be run when an alert is triggered. This is done by ...
 - Defining one or more “alert groups” along with their associated notification methods.
 - Optionally defining one or more “system users” or “system scripts”.
- Then you assign an alert group to the check(s) Sentry-go is performing.

To configure alerting, alert groups, system users & notification options, simply select the Sentry-go monitor from the Client Console with the right mouse button and click "Configure". Then click the "Alerts" tab to display the following window. All alert groups & notifications can be accessed & configured from here.

Sentry-go Configuration - Local Machine

Sentry-go - View & Edit Configuration Settings

Navigation: HTML | FTP | E-mail | SQL | Locks | Scripts | **Alerts** | Logging | Settings

Alerts

When Sentry-go raises an alert, it can alert Administrators in one or more different ways. These notifications are defined below ...

Sentry-go Alerting

The following Alerts are currently defined. You can add, edit and amend these using the options below ...

File/Address	Alert Group	Type	Notify
<input checked="" type="checkbox"/> YourUser	1,2,3,4,5	Send a network message	All Times
<input checked="" type="checkbox"/> E-mail@YourCompany	20	Send an e-mail	All Times
<input checked="" type="checkbox"/> E-mail@YourCompany	20	Send an e-mail	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times

Buttons: Test ... | Copy | Delete | Edit ... | Add ...

Message Text Override

For e-mail & network message Alerts, you can also override the title & message text by clicking here ... [Advanced ...](#)

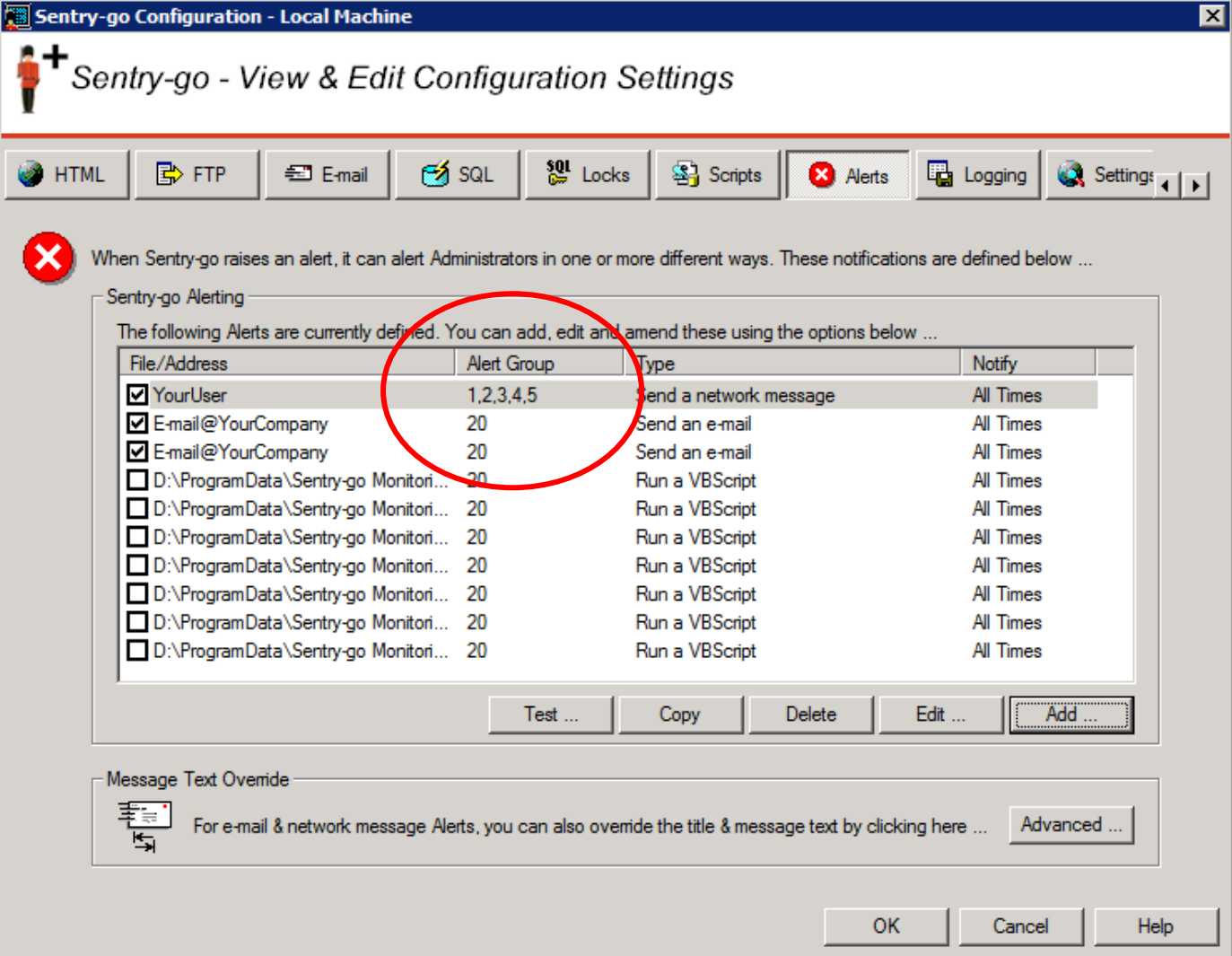
Buttons: OK | Cancel | Help

Alert Groups

Before we configure the options, it is important to understand “alert groups” & “system notifications”. Both are fundamental part of the Sentry-go alerting mechanism & allow you to control who should be notified and how they should be contacted when errors and system errors are detected.

Alert groups are numbered from 1 to 20 and are used to categorise or group alerts together. For example, you could create alert groups for ...

- Your System Administrators
- Helpdesk personnel on call
- DBAs (for database-related faults)
- An out of hours support group



Sentry-go Configuration - Local Machine

Sentry-go - View & Edit Configuration Settings

HTML FTP E-mail SQL Locks Scripts Alerts Logging Settings

When Sentry-go raises an alert, it can alert Administrators in one or more different ways. These notifications are defined below ...

Sentry-go Alerting

The following Alerts are currently defined. You can add, edit and amend these using the options below ...

File/Address	Alert Group	Type	Notify
<input checked="" type="checkbox"/> YourUser	1,2,3,4,5	Send a network message	All Times
<input checked="" type="checkbox"/> E-mail@YourCompany	20	Send an e-mail	All Times
<input checked="" type="checkbox"/> E-mail@YourCompany	20	Send an e-mail	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitori...	20	Run a VBScript	All Times

Test ... Copy Delete Edit ... Add ...

Message Text Override

For e-mail & network message Alerts, you can also override the title & message text by clicking here ... Advanced ...

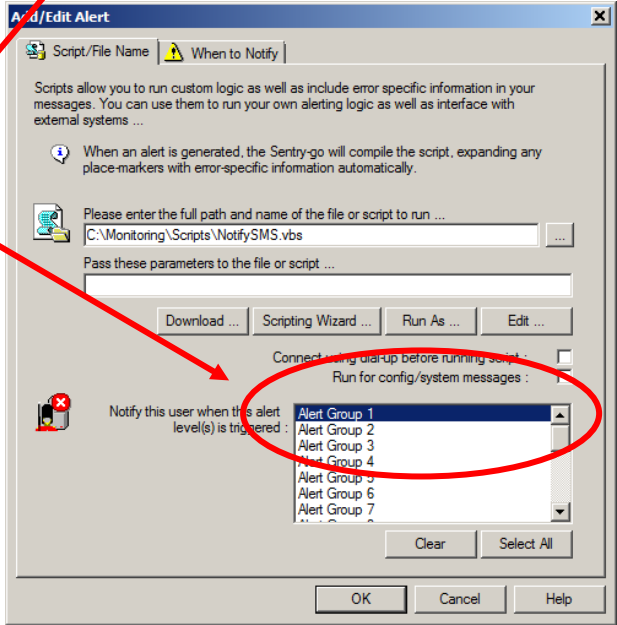
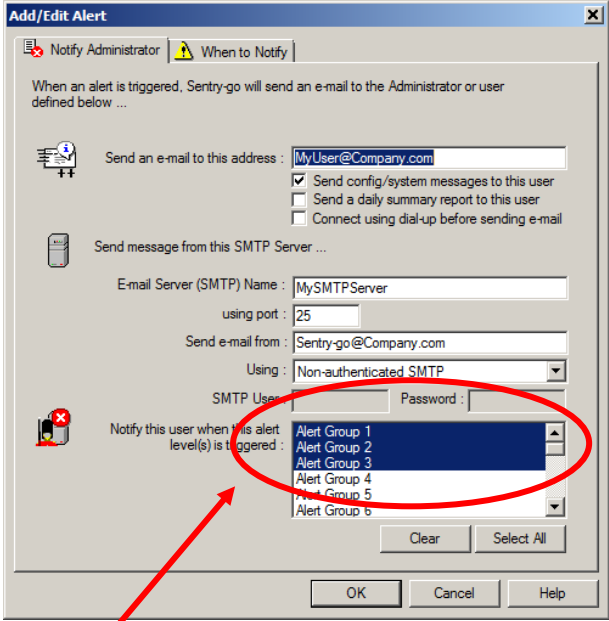
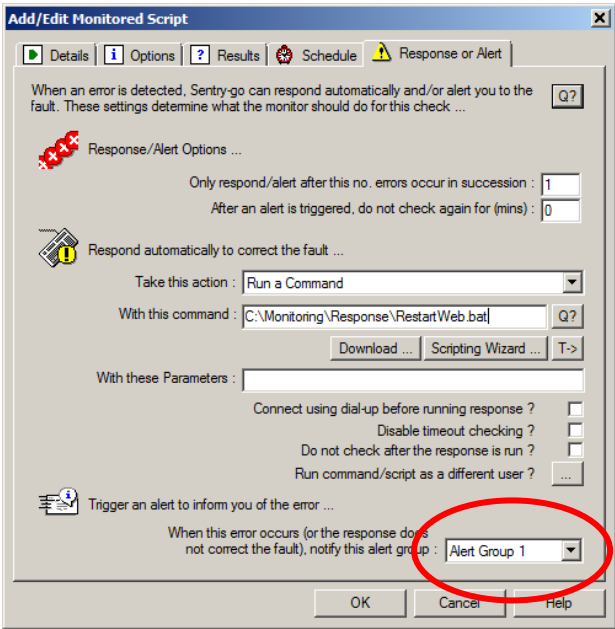
OK Cancel Help

Within these, you define which Administrators, notification actions and/or files are to be called when that particular alert group needs to be notified of a fault.




An Administrator, notification action and/or file is always associated with at least one alert group. It can, however, be associated with multiple groups as required.

Each monitored check is then associated with an alert group – by default this will always be alert group 1, but this can be changed when configuring the check. This is then called in the event the associated alert is triggered.



In this case, the check is defined as triggering “Alert Group 1”. As both the e-mail and script are both defined as being triggered with this alert group, the mail will be sent and the script run if the check fails.

 If you don't need different alert groups, simply apply all alerting options and checks to alert group 1.

You define alert groups on a per server basis. However, settings can be copied from one Sentry-go monitor to others using the Client Console.



System Notifications

System notifications are generated when the monitor cannot perform a configured task. For example, if ...

- A configuration option is not valid on the server
- An error occurs such that the requested action cannot be performed
- An associated task cannot be performed – e.g. web publishing cannot be performed because a connection could not be established with the defined destination.

When a system notification is generated ...

- Details are sent to all Client Consoles registered with the monitor
- Details are highlighted on web reports – e.g. the Recent Alerts report & Current Status reports
- Users defined as System Users are notified
- Files/scripts defined as System Scripts are run.

You determine whether a user is notified and/or a script run in response to a system notification when you define the alert user or script. They are defined in the same way other users/scripts but instead of (or in addition to) selecting alert groups, you indicate that it will accept system notifications For e-mails & network messaging alerts this selection is made as follows ...

Add/Edit Alert

Notify Administrator | When to Notify

When an alert is triggered, Sentry-go will send an e-mail to the Administrator or user defined below ...

Send an e-mail to this address : Administrator

- Send config/system messages to this user
- Send a daily summary report to this user
- Connect using dial-up before sending e-mail

Send message from this SMTP Server ...

E-mail Server (SMTP) Name : []

using port : 25

Send e-mail from : []

Using : Non-authenticated SMTP

SMTP User : [] Password : []

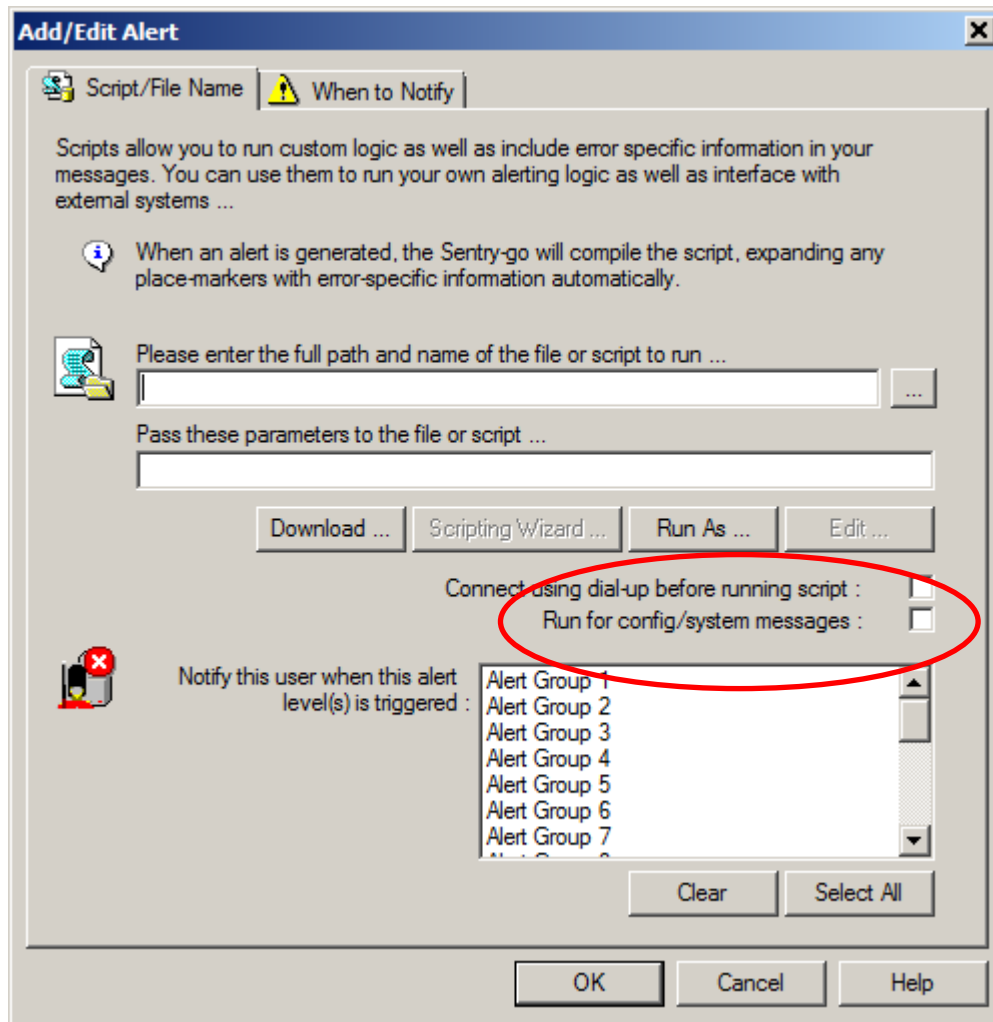
Notify this user when this alert level(s) is triggered :

- Alert Group 1
- Alert Group 2
- Alert Group 3
- Alert Group 4
- Alert Group 5
- Alert Group 6

Clear Select All

OK Cancel Help

And for alert files & scripts, tick the following option ...



In most installations, at least one user/script will be configured to respond to system notifications. Users and scripts can be a set up to be notified or run based on System errors, one or more alert groups, or both.

Types of Notification

Sentry-go allows you to specify different types of notifications as described below and in the pages that follow.

Direct Notifications

Direct notifications allow you to notify a user directly, without the need to call a script, batch file or executable. These include e-mail notifications & network messages.

Script-based (Alert Engine) Notifications

The remaining notifications are script-based and provide the ultimate in flexibility. With Sentry-go, script-based options are further enhanced by the "Alert Engine", an integrated part of the Sentry-go monitor. When a script-based notification is called as a result of an alert being triggered, the file is first compiled and then executed. This allows error-specific information to be included that would otherwise be unavailable when the monitor is being configured.

Example scripts can be found on-line in the [Sentry-go Scripting Library](#).

The files themselves are standard text files run through the appropriate interpreter. However, they can optionally include one or more special place-markers – formatted strings such as "<\$\$ERROR>" and "<\$\$SERVER>" which are then expanded at runtime by the Alert Engine to include the actual error message and server name prior to running the script.

See "[Sentry-go - Place-markers](#)" for more details.

Here is an example ...

```
'
' Sentry-go Alert Engine Script to log alert information via a an
' external LogInfo.exe routine.
'
' See associated documentation for more details on how to specify
' the information to send via this file.
'
' ----- Local declarations -----
Dim strTextToSend

' ----- Set up parameters -----
strTextToSend = "Error - < $$ERROR> on <$$SERVER>"
Set Shell = CreateObject("WScript.Shell")

' ----- Create & execute the target command -----
Shell.Run """"c:\program files\Inhouse\LogInfo.exe"""" """" & strTextToSend &
"""" ,, True


' ----- Cleanup -----
Set Shell = Nothing

' ----- End of Script -----
```

In addition to scripts, other specially formatted files can also be processed by Sentry-go in order to make the required notification. The following options are available ...


- **Standard Windows Batch file.**

Defines a standard batch file containing one or more Windows commands, external command-line utilities or other batch files as well as error-specific information. Batch files are simpler than scripts & are best used when you wish to run a series of commands that need little or no programmatic control. Batch files are run through the Windows command interpreter (CMD).

 Example files & scripts can be found on-line in the [Sentry-go Scripting Library](#).

- **VBScript or Windows Scripting Host file.**

Defines a VBScript or Windows Scripting Host file. Scripts provide greater programmatic control over batch files, but are more complex to develop, requiring programming knowledge. Script files are run through the CScript interpreter (e.g. a .vbs file).

 The [Scripting Wizard](#) can be used to generate scripts without the need for programming or scripting knowledge.

Example files & scripts can be found on-line in the [Sentry-go Scripting Library](#).

- **SysLog file.**

Allows you to log an alert to a SysLog server.

- **SMTP e-mail file.**

Sends a custom/preformatted e-mail to one or more users or external systems. This can be a formatted e-mail containing your own text as well as error-specific information that can be sent to one or more users, or an external system such as an SMS gateway. Such a system can then be used to forward the alert on to a mobile phone or pager etc.

- **HTTP web file.**

Sends error/alert information to an external system using an HTTP (web) interface. As with the SMTP option above, the HTTP protocol can often be used to forward information on to an external system such as an SMS gateway.

These options are described in detail in the pages that follow.

The Sentry-go Alert Engine

As stated above, an Alert Engine script is simply a text file - either a batch, script or preformatted file that can contain one or more special "place-markers". See "[Sentry-go - Place-markers](#)" for more details.

When the Engine is invoked, it performs the following actions ...

- A monitored error occurs & Sentry-go triggers an alert.
- If the error's alert group matches one of the groups assigned to the file, the Alert Engine will be invoked for the given file.
- When run, the Alert Engine copies the file to a temporary location & compiles it, replacing any place-markers found with error-specific values.
- If the file is defined as a batch file it is then run through the Windows command interpreter & then (the temporary file is) deleted.
- If the file is defined as a script, it is then run through the Script interpreter & then (the temporary file is) deleted.
- If the file is a preformatted file, the information is used to invoke the appropriate interface.
- Once complete, the temporary file is deleted.

Defining your Alert Groups

To define your alert groups, run the Client Console, select the appropriate Sentry-go monitor and click Configure. Then select the “Alerts” tab ...

When Sentry-go raises an alert, it can alert Administrators in one or more different ways. These notifications are defined below ...

Sentry-go Alerting

The following Alerts are currently defined. You can add, edit and amend these using the options below ...

File/Address	Alert Group	Type	Notify
<input checked="" type="checkbox"/> YourUser	1,2,3,4,5	Send a network message	All Times
<input checked="" type="checkbox"/> E-mail@YourCompany	20	Send an e-mail	All Times
<input checked="" type="checkbox"/> E-mail@YourCompany	20	Send an e-mail	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitor...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitor...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitor...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitor...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitor...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitor...	20	Run a VBScript	All Times
<input type="checkbox"/> D:\ProgramData\Sentry-go Monitor...	20	Run a VBScript	All Times

Test ... Copy Delete Edit ... Add ...

Message Text Override

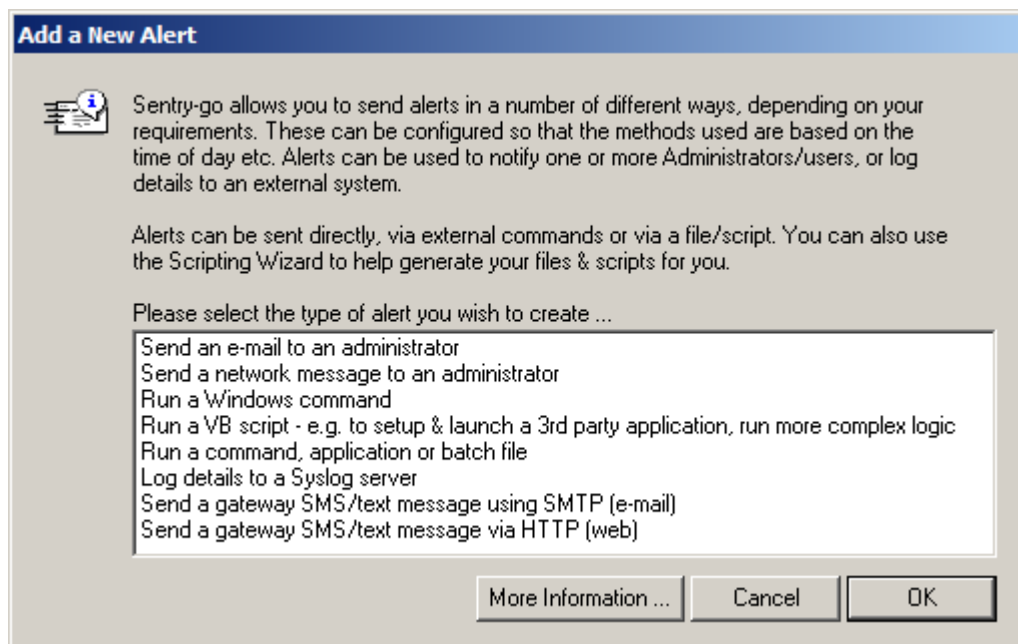
For e-mail & network message Alerts, you can also override the title & message text by clicking here ... Advanced ...

OK Cancel Help

The list will show all currently defined alerts and whether they are enabled (ticked) or not. To configure or add new items, select the entry and/or click the appropriate button. To override default message settings, click “Advanced”.

Adding a New Alert Notification Option

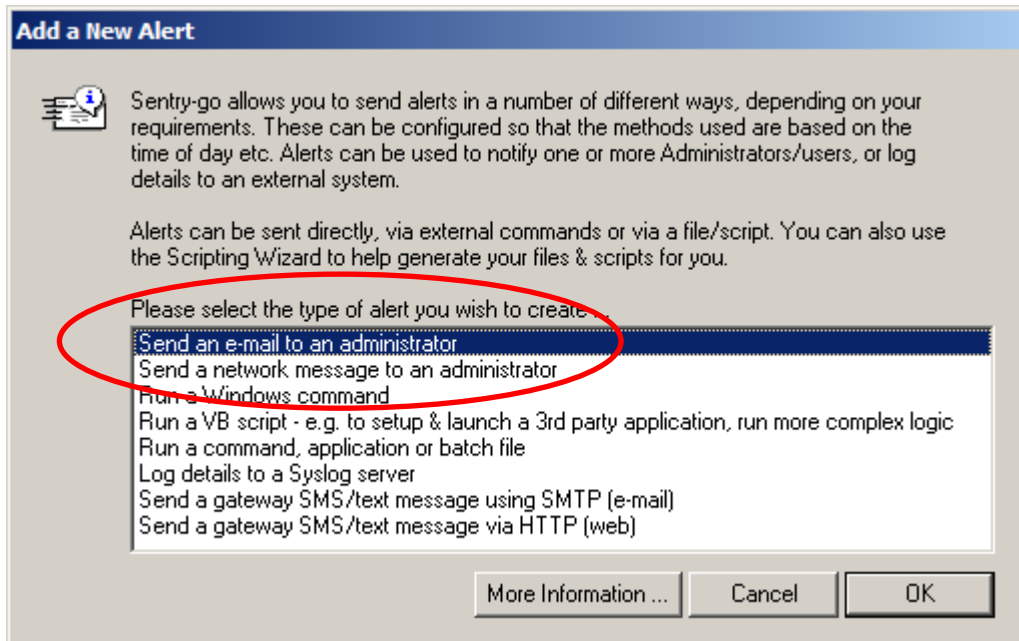
To add a new alert option, click the Add button. The following window will be displayed, allowing you to select the type of notification you wish to define ...



Select the appropriate entry and click OK.

Sending an E-mail to an Administrator

This option allows you to notify a user by e-mail when an alert is triggered or optionally when automatic action is taken to resolve a problem.



The following window will be displayed ...

Add/Edit Alert

Notify Administrator | When to Notify

When an alert is triggered, Sentry-go can inform one or more Administrators by sending them an e-mail ...

Send an e-mail to this address : E-mail@YourCompany.com

Send config/system messages to this user

Send a daily summary report to this user

Connect using dial-up before sending e-mail

Send message from this SMTP Server ...

E-mail Server (SMTP) Name : YourSMTPServer

using port : 25

Send e-mail from : Sentry-go@YourCompany.com

Using : Non-authenticated SMTP

SMTP User : Password :

Notify this user when this alert level(s) is triggered :

- Alert Group 1
- Alert Group 2
- Alert Group 3
- Alert Group 4
- Alert Group 5
- Alert Group 6

Clear Select All

OK Cancel Help

Send an e-mail to this address

This field is used to specify the e-mail address to which the notification will be sent.



The address given should be fully qualified with the full domain name and must be accessible (or reachable) from the SMTP server specified below.

Send config/system messages to this user

Select this option if the defined user should receive system notifications - errors relating to the configuration or setup of Sentry-go itself. For example, if web publishing errors occur, details of the fault will be sent to the user if this option is enabled.

Send daily summary report to this user

Tick this option to allow the given user to receive a daily summary report – a daily e-mail that shows the total checks performed and alerts raised by Sentry-go.



Alert Summaries are always sent by e-mail shortly after midnight.

Connect using dial-up networking

Select this option if Sentry-go needs to connect to the network by invoking dial-up networking before the message can be sent.

For more information, please see [“Sentry-go - Configuring Dialup Networking”](#).

E-mail Server Name

Enter the name or IP address of the SMTP server used to send e-mails from your organisation.



The value entered will typically be the same as the server used by your e-mail client.

Using Port

Enter the port number on which the above SMTP listens for requests.



By default this will normally be 25.

Send e-mail From

This is the e-mail address of the user sending the mail.




In general, this should be in the format <Someone>@<YourDomain> as the server may check the originating domain before proceeding.


Using (SMTP type)

This option determines how the monitor will send the e-mail alert ...

- **Non-authenticated SMTP.** Select this option if you do not need to logon to your SMTP server in order to send e-mails.
- **Auth, Secure SMTP (Microsoft CDO).** Select this option if you wish to send an e-mail using authenticated & secure (SSL) SMTP through the Microsoft CDO library.


 To use this option, Microsoft Collaborative Data Objects (CDO) must be installed on the monitoring server.

- **Auth, Secure SMTP (Microsoft .NET).** Select this option if you wish to send an e-mail using authenticated & secure (SSL) SMTP with Microsoft .NET and the goNetMail utility.

 To use this option, the Microsoft .NET framework version 2.0 must be installed on the monitoring server.

goNetMail.exe is an external utility provided with Sentry-go and installed as part of v5.2 and above.

- **Auth, Non-Secure SMTP (Microsoft .NET).** Select this option if you wish to send an e-mail using authenticated but non secure SMTP with Microsoft .NET and the goNetMail utility.

 Use this option to use when your e-mail (SMTP) server doesn't support secure connections but still requires authentication (user/password logon).

To use this option, the Microsoft .NET framework version 2.0 must be installed on the monitoring server.

goNetMail.exe is an external utility provided with Sentry-go and installed as part of v5.2 and above.

SMTP User

Enter the user ID that can logon to your SMTP server.

Password

Enter the password for the above user ID.

Notify this user when ...

Select the alert group(s) for which this user should be notified. If an alert is triggered belonging to one of these groups, the user here will be notified.

When to Notify

By default, when enabled, the notification will be active regardless of the time of day the alert is triggered. However, you can specify when the notification is to be run and when it isn't by selecting the "When to Notify" tab.



See [Notification Schedules](#) for more information.

Automatically Resending Failed E-mails

By default, e-mails are sent to the configured e-mail (SMTP) server as soon as the alert is triggered. However, if this server is unavailable or cannot be contacted, the e-mail alert will be lost (although other methods will continue to run and the associated recent errors web report will still highlight the fault).

To allow for this, Sentry-go will automatically attempt to resend failed e-mails for a period of 2 days. After this time, queued e-mails will be deleted.




Up to a maximum of 500 files are stored. If 500 files are stored, no new entries will be recorded until some existing entries are sent, or cleared down after 2 days.

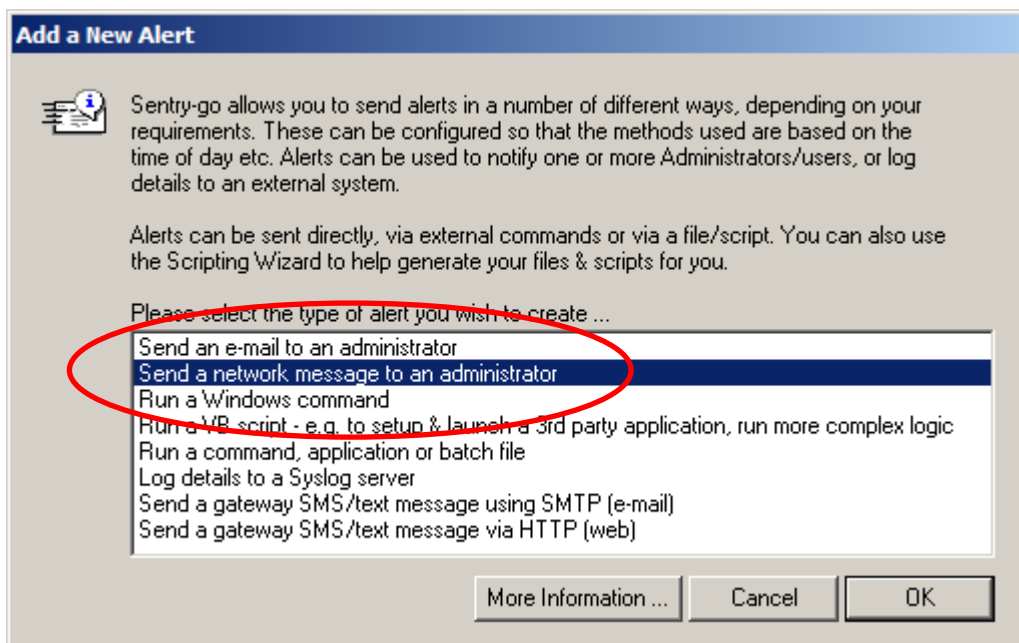
Any currently queued e-mails are listed on the System Summary web report.

Sending a Network Message to an Administrator

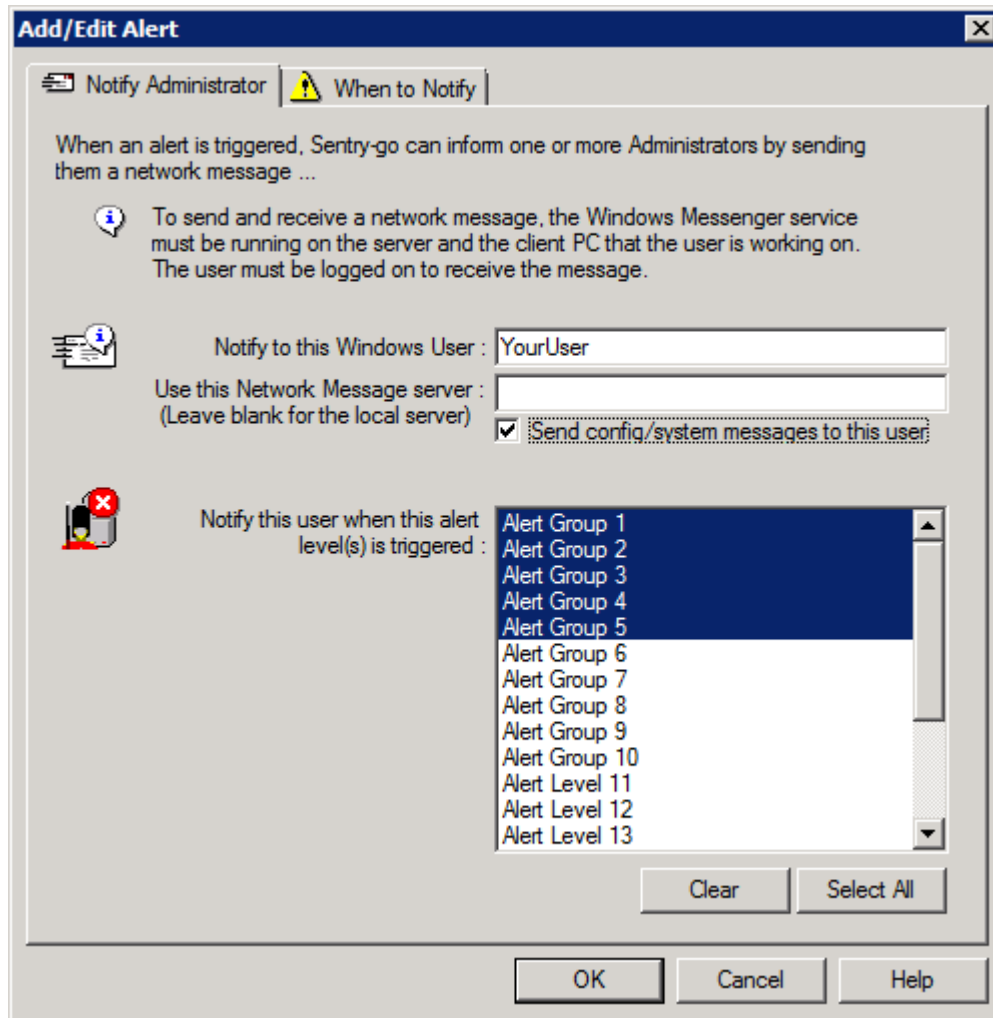
If the user is logged on to the domain, the network message is often the fastest way of notifying them of a detected failure. This option allows you to notify a user by network message when an alert is triggered or optionally when automatic action is taken to resolve a problem.

 In order for the message to be received ...

- The user must be logged on
- The Messenger service must be running on the local server
- The Messenger service must be running on the PC the user is logged on to
- Network messaging must be enabled.



The following window will be displayed ...



Send a Network Message to this User

This field is used to specify the Windows user ID to which the notification will be sent.

Use this Network Messaging Server

Enter the name or IP address of the SMTP server used to send e-mails from your organisation.

 To use the local Messenger service, leave this field blank.

Send config/system messages to this user

Select this option if the defined user should also be sent system notifications - errors relating to the configuration or setup of Sentry-go itself. For example, if web publishing errors occur, details of the fault will be sent to the user if this option is enabled.

Notify this user when ...

Select the alert group(s) for which this user should be notified. If an alert is triggered belonging to one of these groups, the user here will be notified.

When to Notify

By default, when enabled, the notification will be active regardless of the time of day the alert is triggered. However, you can specify when the notification is to be run and when it isn't by selecting the "When to Notify" tab.



See [Notification Schedules](#) for more information.

Specifying your own E-mail/Network Message Text & Title

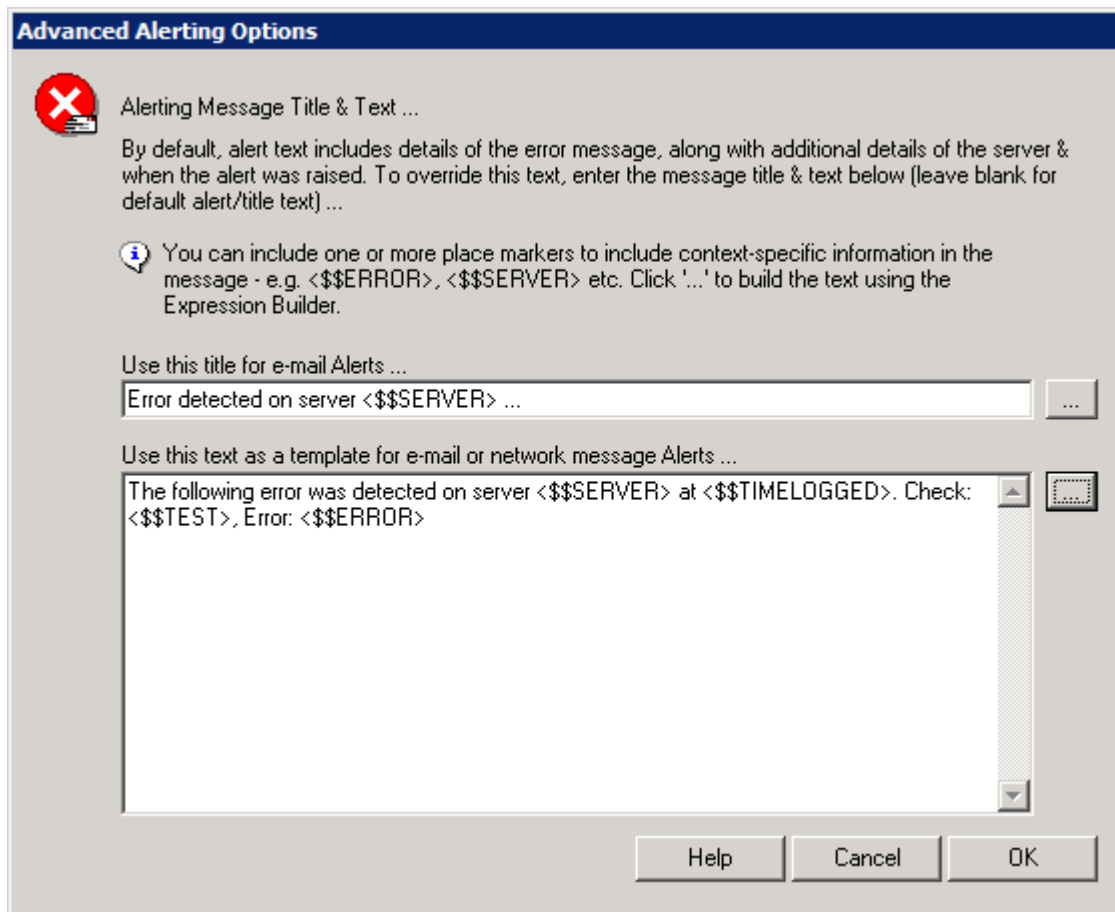
By default, e-mail & network message alerts will provide details of the error, the server & the time the problem occurred when an alert is triggered and a notification is sent. However, you can override these defaults if required

Scripts

For script-based logic, simply create your own text, incorporating the appropriate place-markers (such as <\$\$ERROR> and <\$\$SERVER> as required. See "[Sentry-go - Place-markers](#)" for more details.

E-mails & Network Messaging

For e-mails & network messages, click the "Advanced" button from the Alerting tab to display the following ...

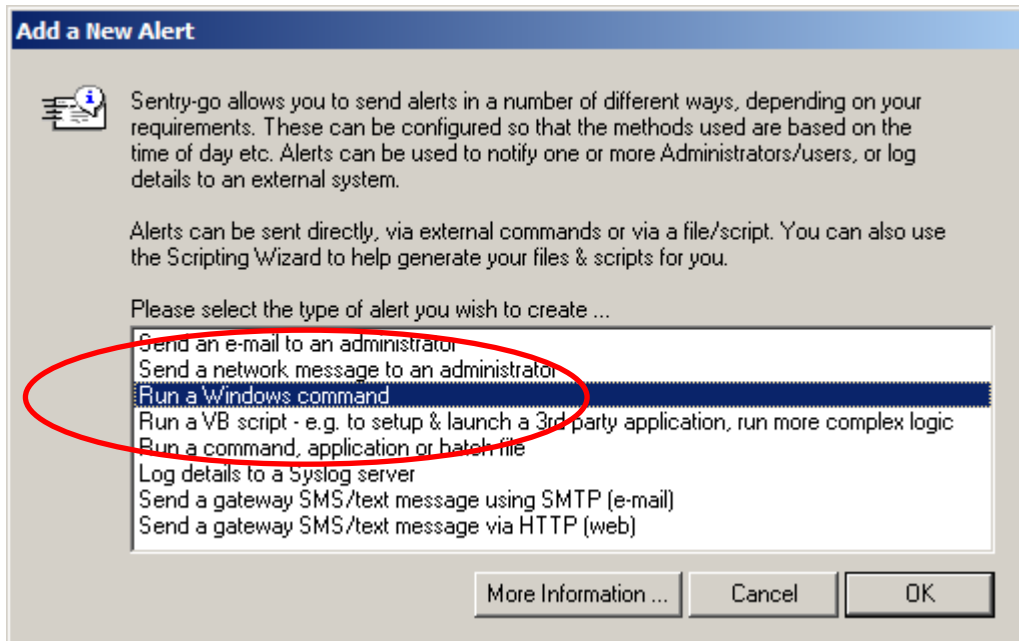


From here, simply enter the appropriate text you wish to send, adding formatting & any place-markers as required.

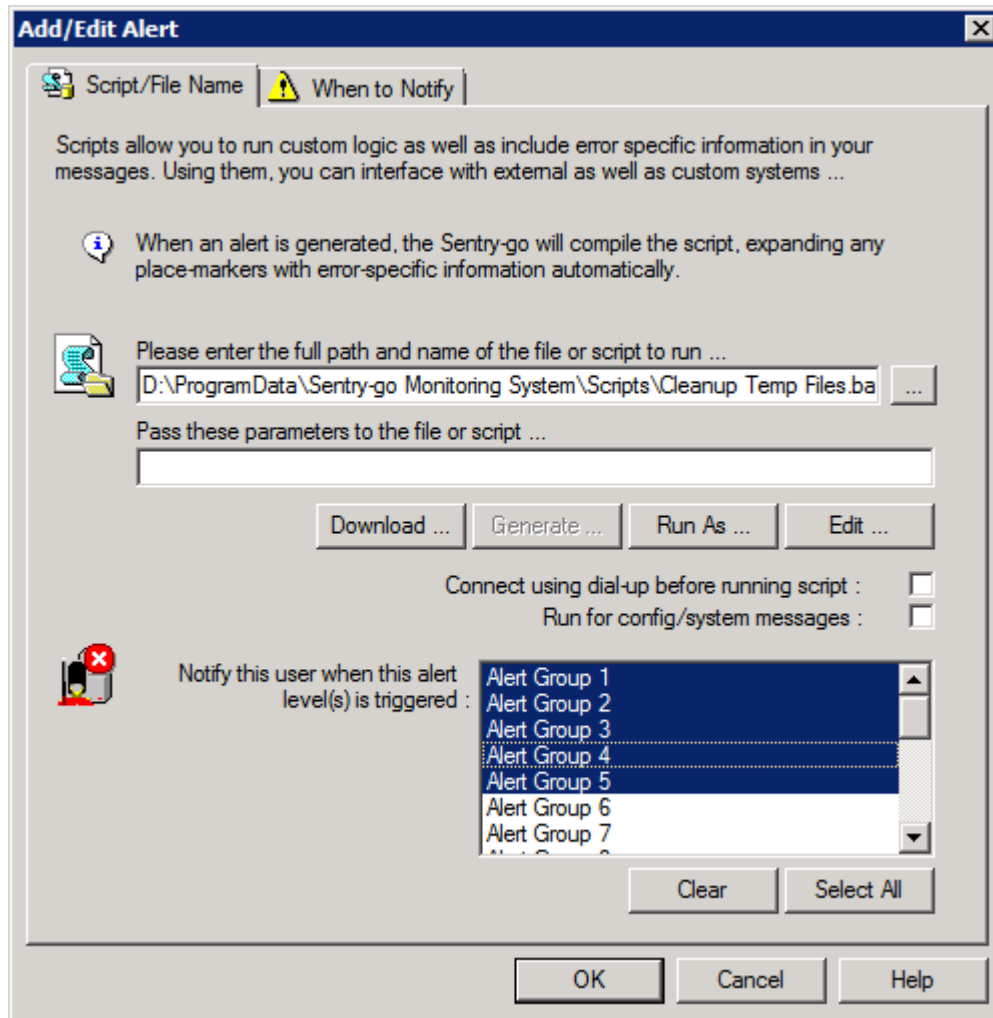
For help in defining this message text, click the appropriate "..." button to launch the message builder. See "[Sentry-go - Place-markers](#)" for more details.

Running a Windows Command, Batch file, VBScript or Preformatted Notification

These options allow you to define a notification as an Alert Engine file – either by executing a Windows command, batch file, VB Script or preformatted -for accessing an SMS gateway or other 3rd party application.



When you select one of these options, the following window will be displayed ...



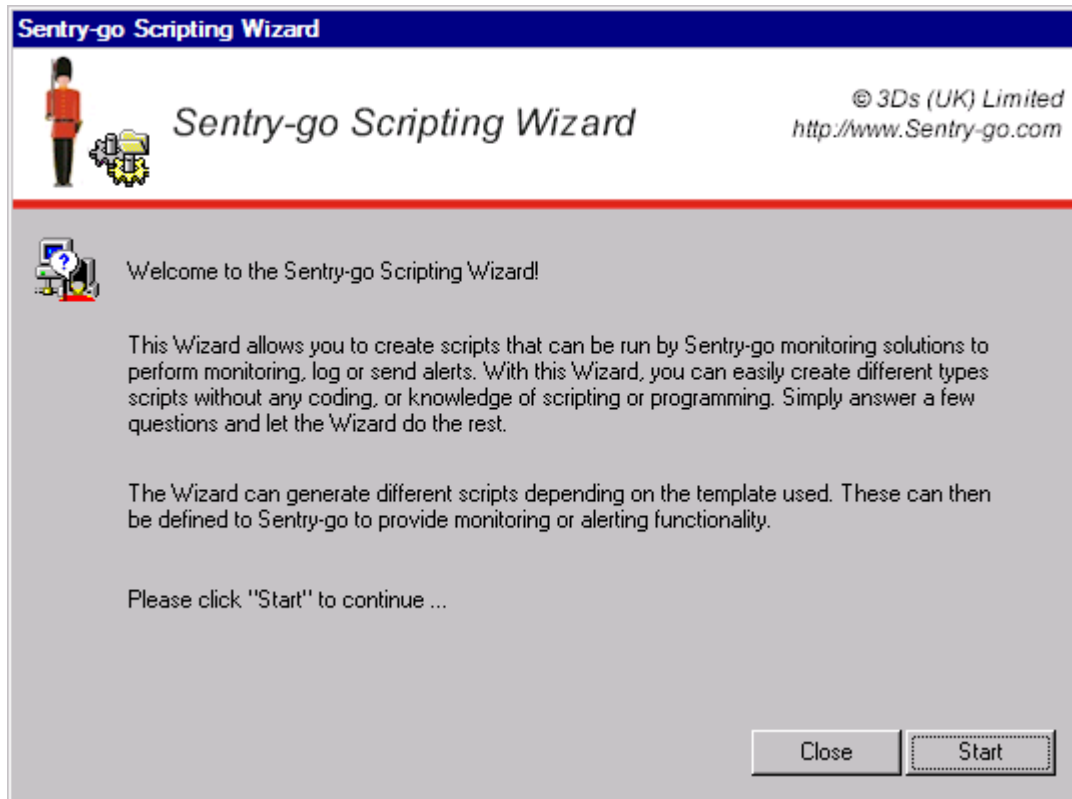
Please enter the full path and name of the file or script to run

This field is used to specify the full path and name of the file being defined or the Windows command you wish to execute. Depending on option selected or the type of notification being edited, this may be a command, a batch file, script or pre-formatted gateway file.

- **When editing an existing file**, this will be the full path & name to that file on the server being monitored. If you're configuring the local server, you can click the "Edit ..." button to edit the file.
- **When defining a new file**, simply enter the full path and name of the file, relative to the local server. If you're configuring the local server, you can click the "Edit ..." button to create & then edit the file. For preformatted files, a template will be provided, allowing you to quickly & easily supply your own information.

Generate the file or script using the Scripting Wizard

For new files or scripts, click this button to launch the Sentry-go Scripting Wizard. The Wizard allows you to quickly & easily generate scripts that perform specific tasks without the need for any programming or scripting knowledge.



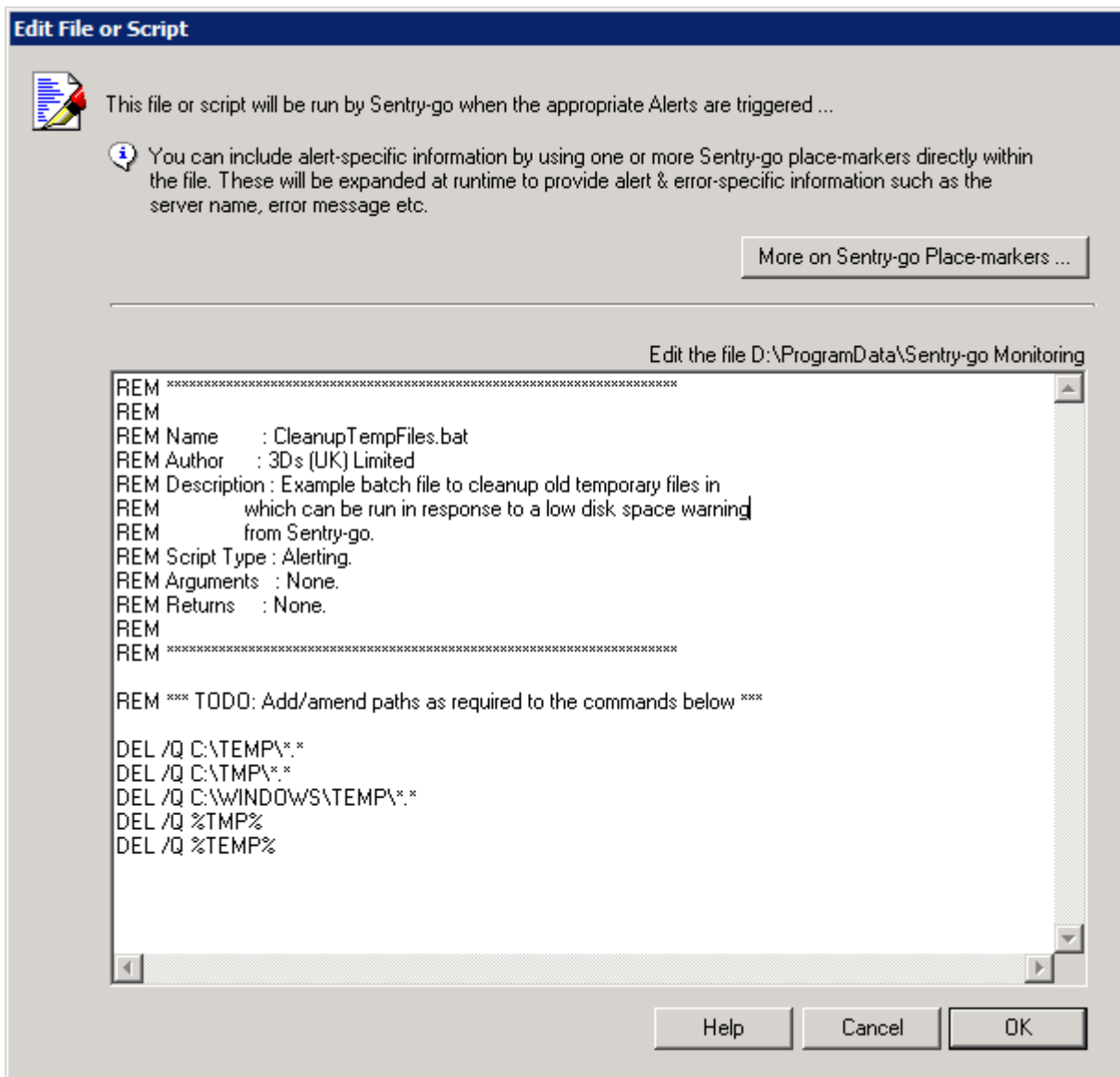
The options & scripts available and the availability of the Wizard itself are dependent on the type of notification being defined & the templates installed. However, typically they include ...

- Sending a custom e-mail alert using SMTP
- Sending an e-mail alert using an authenticated SMTP server
- Sending an SMS/text message using a gateway provider via SMTP (e-mail)
- Sending an SMS/text message using a gateway provider via HTTP (web)
- Logging an error to a SysLog server
- Logging an error to a text file
- Logging an error to an Event Log

For more information, please see "[Sentry-go – Running the Scripting Wizard](#)".

Edit the File or Script

Click this button to edit the underlying file in the editor ...



If no file is found, you will be offered to copy a default template, depending on the type of notification being defined. You can use this as the basis of your own script.



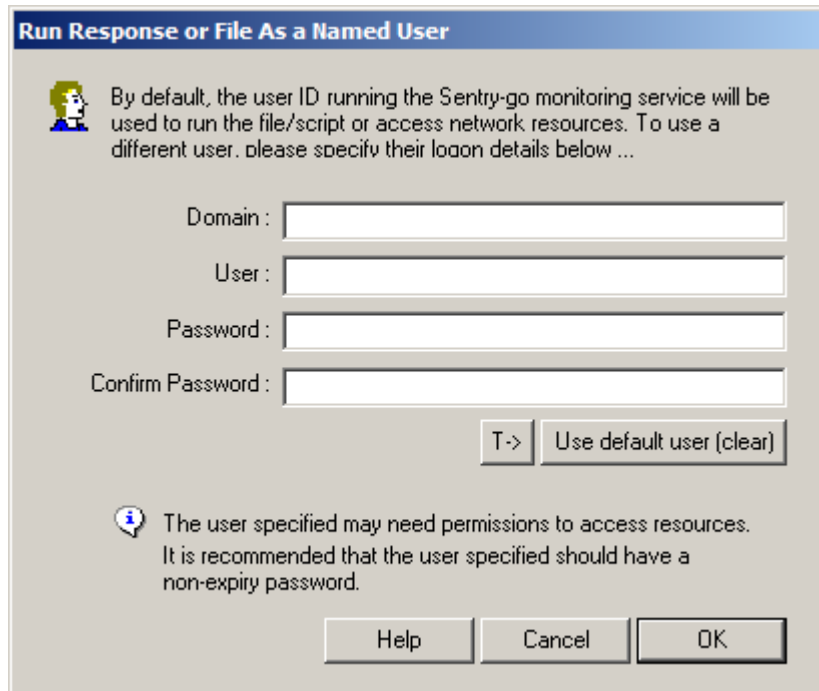
See "[Sentry-go - Place-markers](#)" for more information on the variables that can be included.


Example files & scripts can be found on-line in the [Sentry-go Scripting Library](#).


Alternatively, use the [Scripting Wizard](#) to generate the script for you.

Run this file or script as a different user

By default, the file or script will be run as the user running the Sentry-go monitoring service. Typically this will be the local system account which has administrative privileges to the local machine only. If you wish to run the file under a specific account – e.g. a domain account with specific permissions or an account which has access to network resources etc, you can specify a named user ...




 To run the response under the same account as the user running the Sentry-go monitoring service (the default behaviour), simply ensure no entries are made – click the “Use default user (clear)” button.

 In order to ensure the notification is run correctly, the entered user must ...

- Have “logon as a service” permission.
- Permissions to access any required resources.
- Have a non-expiry password (recommended).

To check that the user/password combination is valid from the monitoring server click the “T ->” button. When selected, the Client Console connects to the target monitoring server (the server being configured) in order to verify the logon details & attempts to load their profile. The results are also 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 response itself is not run, only logon details are verified at this stage.

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

Connect using Dial-up before running script

If the server needs to connect to an external network using dial-up networking in order for the notification to be sent, tick this option.

Run for config/system messages

Select this option if the defined file or script should also be run if errors relating to the configuration or setup of Sentry-go itself are encountered. For example, if web publishing errors occur, details of the fault will be sent to the user if this option is enabled.

Run this script when ...

Select the alert group(s) for which this file or script should be run. If an alert is triggered belonging to one of these groups, the Alert Engine will be invoked.

When to Notify

By default, when enabled, the Alert Engine will be invoked regardless of the time of day the alert is triggered. However, you can specify specific times it should be run by selecting the "When to Notify" tab.



See [Notification Schedules](#) for more information.

Example Alert Engine Batch File or Script

Batch file or scripts are standard text files run through the appropriate interpreter. In this example, a short VBScript is used to export alert information to an in-house system, through an external utility called LogInfo.exe. In particular, it shows how to include the strings "<\$\$ERROR>" and "<\$\$SERVER>" which are then expanded at runtime by the Alert Engine to include the actual error message and server name prior to running the script. Batch files are similar, except that standard Windows commands & external command-line utilities are used in place of script-based commands.

```
'
' Sentry-go Alert Engine Script to log alert information
' via an external LogInfo.exe routine.
'
' See associated documentation for more details on how to
' specify the information to send via this file.
'
' ----- Local declarations -----
Dim strTextToSend

' ----- Set up parameters -----
strTextToSend = "Error - < $$ERROR> on <$$SERVER>"
Set Shell = CreateObject("WScript.Shell")

' ----- Create & execute the target command -----
Shell.Run """"c:\program files\Inhouse\LogInfo.exe"""" """" & strTextToSend &
"""",,True

' ----- Cleanup -----
Set Shell = Nothing

' ----- End of Script -----
```

Example Alert Engine Custom E-mail

When the alert file is defined as an SMTP file, the preformatted commands are used to interface with an external SMTP server. For example, you can use these to send a custom e-mail or to interface with an external system such as an SMS gateway. The following commands, which are generally used in the format <Command>:<Value> should be included in this type of file ...

Command	Meaning
#	Any commands or lines prefixed with a # are counted as comments by the Alert Engine and ignored. Blank lines are also ignored.
AE-SERVER: <TargetServer>	Required. This command is used to identify the target SMTP (e-mail) server - either by name or IP address.
AE-PORT: <Port No>	Optional. This is the port number on which the SMTP server is listening for inbound requests. Unless otherwise stated by your provider or Administrator, this is normally 25.
AE-SENDFROM: <User>@<YourDomain>	Required. This is the e-mail address of the user sending the mail. In general, this should be in the format <Someone>@<YourDomain> as the server may check the originating domain before proceeding..
AE-SENDTO: <User>@<Domain>, <User>@<Domain>, <User>@<Domain> etc.	Required. This is the e-mail address of one or more users that should receive the mail. Separate multiple entries with a comma.
AE-SUBJECT: <Title>	Required. This is the string that will form the subject for the e-mail. It can contain any valid text or place markers.
<Alert Text>	The last parameter (with no command prefix) is the alert you wish to log. It can span multiple lines and contain one or more place markers.

Example

```
#
# SMTP Alert File
#
# This file allows you to send alert details to an SMTP server.
# Simply edit the appropriate details below and configure the Alert
# Engine to call this file for the appropriate alert levels. Any
# place markers found (e.g. <$$ERROR>) will automatically be expanded
# by the Alert Engine at runtime.
#
AE-SERVER: MySMTPServer
AE-SENDFROM: Sentry-go@Company.com
AE-SENDTO: Support@Company.com, SMS@Provider.com
AE-SUBJECT: Critical Error Detected!

# The following (last) entry is the message we want to log. This
# will be expanded to contain the actual error/alert information
# at runtime.

The error <$$ERROR> occurred on server <$$SERVER> at <$$TIMELOGGED>
```

Example Alert Engine SysLog File

When the alert file is defined as a SysLog file, the preformatted commands are used to interface with an external SysLog server. The following commands, which are generally used in the format <Command>:<Value> should be included in this type of file ...

Command	Meaning
#	Any commands or lines prefixed with a # are counted as comments by the Alert Engine and ignored. Blank lines are also ignored.
AE-SERVER: <TargetServer>	Required. This command is used to identify the target SysLog server - either by name or IP address.
AE-PORT: <Port No>	Required. This is the port number on which the server is listening for inbound HTTP requests. Unless otherwise stated by your provider, this is normally 514.
AE-SYSLOGSEVERITY: <Lvl>	Optional. Indicates which SysLog severity you wish to log the alert under. If not specified, the default severity level is 1 (alert).
AE-SYSLOGFACILITY: <Lvl>	Optional. Indicates which SysLog facility you wish to log the alert under. If not specified, the default facility is 14 (alert message).
<Alert Text>	The last parameter (with no command prefix) is the alert you wish to log. It can span multiple lines, but will be truncated if the length exceeds the maximum size allowed by the SysLog standard.

Example

```
#
# SysLog Alert File
#
# This file allows you to send alert details to a SysLog server.
# Simply edit the appropriate details below and configure the Alert
# Engine to call this file for the appropriate alert levels. Any
# place markers found (e.g. <$$ERROR>) will automatically be expanded
# by the Alert Engine at runtime.
#
AE-SERVER: MySysLogServer
AE-PORT: 514
AE-SYSLOGSEVERITY: 1
AE-SYSLOGFACILITY: 1

# The following (last) entry is the message we want to log. This
# will be expanded to contain the actual error/alert information
# at runtime.

The error <$$ERROR> occurred on server <$$SERVER> at <$$TIMELOGGED>
```

Example Alert Engine HTTP (Web Server) File

When the alert file is defined as an HTTP file, the preformatted commands are used to interface with an external web (HTTP) server (and optionally on to an external system such as an SMS gateway). The following commands, which are generally used in the format <Command>:<Value> should be included in this type of file ...

Command	Meaning
#	Any commands or lines prefixed with a # are counted as comments by the Alert Engine and ignored. Blank lines are also ignored.
AE-HTTPSERVER: <TargetServer>	Required. Indicates the name or IP address of the target web/HTTP server. This name is dependent on your provider .
AE-PORT: <Port No.>	This is the port number on which the server is listening for inbound HTTP requests. Unless otherwise stated by your provider, this is normally 80.
AE-METHOD: GET	Required. Indicates which HTTP call type the Alert Engine should use. Currently, this must be set to GET - indicating that an HTTP Get request is to be performed. This may be extended in a future version of the Alert Engine.
AE-URL: <URL>?<Params>	Required. This is the URL that is to be called in order to make the GET request. It may contain one or more parameters as required. Parameters must be URL encoded - e.g. %20 in place of spaces, no double quotes etc.
AE-SUCCESSTEXT: <Text>	Optional. If included, it indicates some text that the server will return to indicate that the call was successful - e.g. OK. If the text is not returned (or no text is returned), the command will be considered to have failed. <i>If both AE-ERRORTTEXT and AE-SUCCESSTEXT are included and neither string is found, it is assumed that the command failed.</i>
AE-ERRORTTEXT: <Text>	Optional. If included, it indicates some text that the server will return to indicate that the call failed - e.g. Error. If the text is not returned (or no text is returned), the command will be considered to have worked successfully. <i>If both AE-ERRORTTEXT and AE-SUCCESSTEXT are included and neither string is found, it is assumed that the command failed.</i>

Example

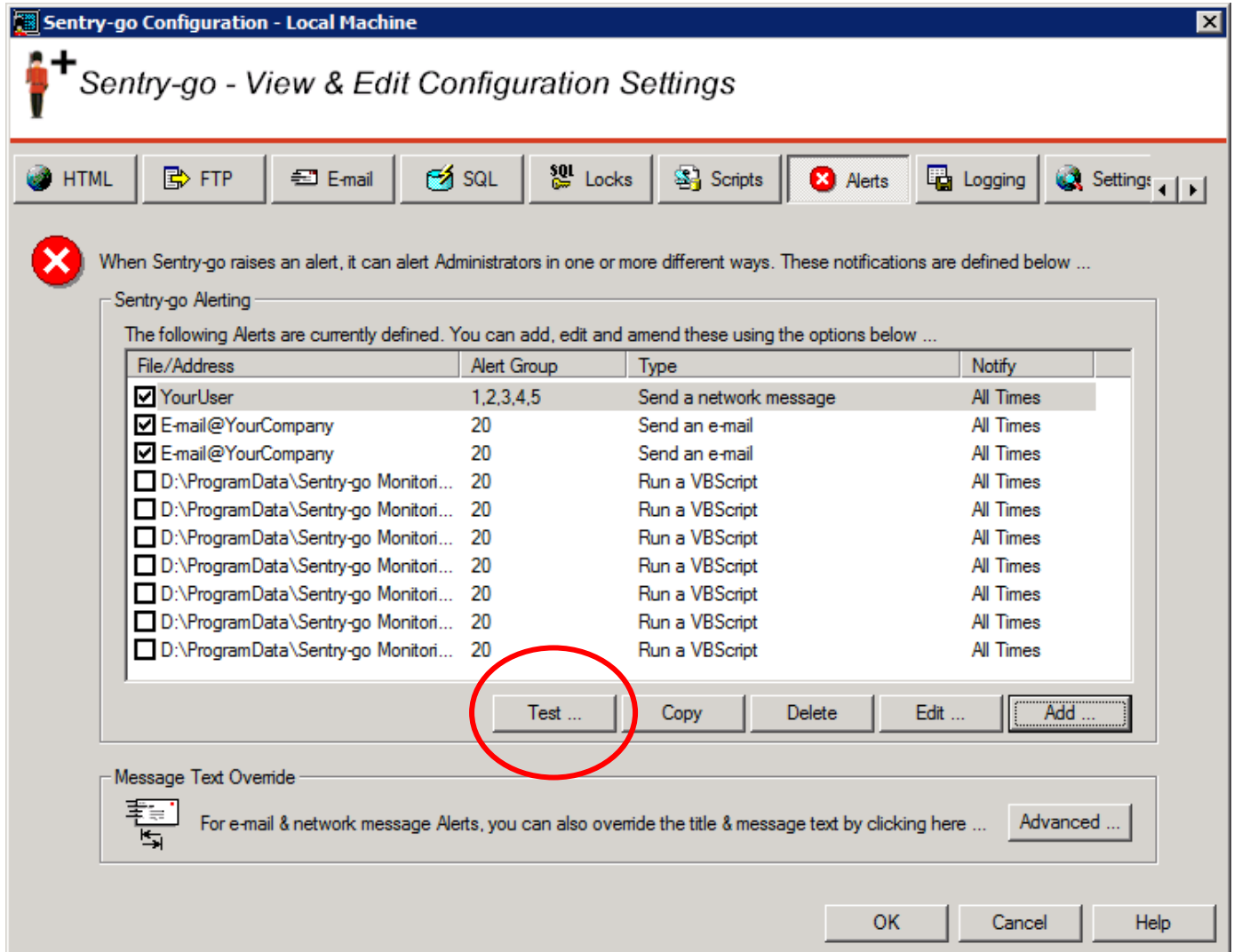
```
#
# HTTP Alert File
#
# This file allows you to send alert details to an HTTP (Web) server.
# Simply edit the appropriate details below and configure the Alert
# Engine to call this file for the appropriate alert levels. Any
# place markers found (e.g. <$$ERROR>) will automatically be expanded
# by the Alert Engine at runtime.
#
AE-HTTPServer: www.YourProvidersSite.com
AE-Port: 80
AE-METHOD: GET

# The following should appear on a single line
AE-URL: http://www.YourProvider.com/TheirPage.htm?
      Param1=Value&Text=<$$ERROR>%20on%20server%20<$$SERVER>

AE-SuccessText: OK
AE-ErrorText: ERR
```

Testing Notifications

It is obviously important that notifications can be sent and alert files correctly defined in the event a failure occurs. To test the notification, highlight it in the list and click the “Test ...” button ...




To provide accurate testing, the test option connects to Sentry-go's integrated web server. The monitor must be running & the web reports enabled and available to the user in order to test the notification.

When invoked, the monitor's web page will be displayed along with the associated progress messages and results ...

The screenshot shows a web browser window titled "WALTON-64 - Sentry-go Monitoring Service - Verify Alert - Windows Internet Explorer". The address bar contains the URL: `http://localhost:1000/SgoMntrVerifyAlert.sgp?%20Type=7&TargetAddress=YourUser&SourceServer=&Tai`. The page content includes the Sentry-go logo (a red figure with a black cross) and the text "Sentry-go Monitoring System v5 Web Reporting". In the top right corner, it says "© 3Ds (UK) Limited http://www.Sentry-go.com". Below this, the page is titled "Sentry-go® Verify Alert".

System information displayed:

- Server : WALTON-64
- Licence : Demonstration (Shareware)
- Generated on : 4th Nov. 2009 at 13:22:58
- System Health :  87% check success ▾ [?]

A message states: "Sentry-go Monitoring Service will now check the alert action by generating a sample error. Request information & results are shown below. Please verify that the action ran and/or the appropriate message was received ..."

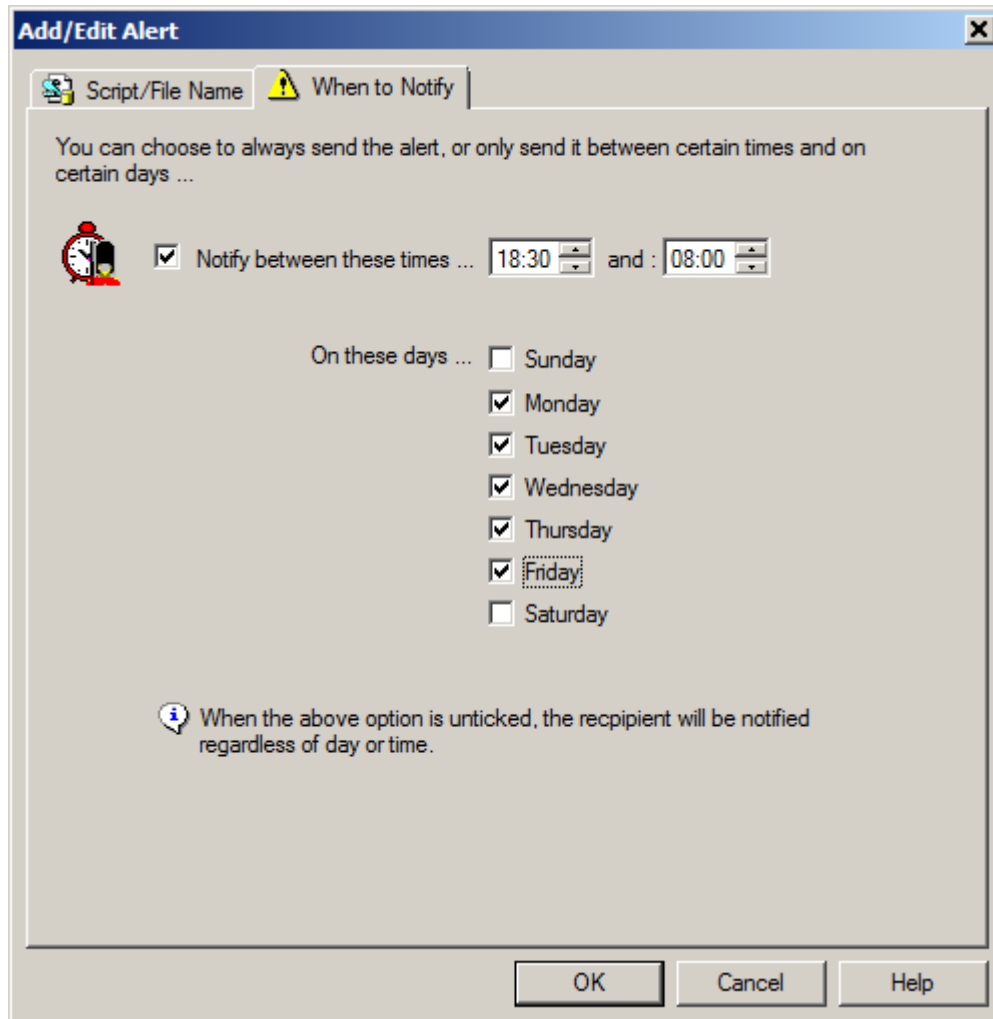
Request Summary ...

- Request from client : 127.0.0.1
- Alert type : Send a network message
- Target user : YourUser
- Server : WALTON-64
- Results :
 - Translating inbound parameters ...
 - Building test message ...
 - Sending network message ...
- The network message was successfully sent. Please check it was received by the user

If the monitor detects an error in the script or the script cannot be found or run, it will be displayed here. Otherwise, once complete, please check that the notification results are as expected – e.g. the e-mail arrives in the correct mailbox etc.

Specifying when to Notify with Notification Schedules

By default, notifications are run whenever the appropriate alert & alert level is triggered. However, you can override this behaviour by defining a notification schedule for the associated user or file ...



When enabled, enter the start and end times. The alert will only be sent if the error occurs within these times. In addition, select (tick) the days you want the alert to be sent. If the current day is not selected, the alert will not be sent to the associated e-mail address or network user when an error occurs.



If you want to specify different times on different days, simply duplicate the alert and specify the appropriate settings.

For example, to enable an alert within normal office hours, select ...

- Start time: 09:00
- End time: 17:30
- Tick Mon, Tues, Weds, Thurs, Fri.

To enable an alert outside normal office hours, select ...

- Start time: 17:30
- End time: 09:00
- Tick Mon, Tues, Weds, Thurs, Fri.

Then, duplicate the alert and set ...

- Start time: 00:00
- End time: 23:59
- Tick Sat, Sun

What is an SMS Gateway ?

An SMS gateway is an external service provided by a third party organisation that allows you to forward information in a predefined format and have them send the details to one or more mobile phones via the Short Message Service (SMS). Typically, details can be sent via a standard SMTP e-mail or HTTP.

Unless you want to alert an Administrator via SMS, there is no need to use this service. However, an SMS message is an ideal way of alerting you to a significant or important fault. By using an external service, rather than sending the message direct, you have the following advantages ...

- Access & configuration is easy
- No need to set up or maintain external modem connections
- You can use your own provider or shop around for a low cost provider that can interface with your mobile network

The Alert Script templates provided with Sentry-go contain logic for a number of SMS Gateway providers including ...

- BigFoot
- ClickATell
- IntelliSoftware



Although the above templates are provided, 3Ds (UK) Limited does not specifically recommend any one solution. However, at the time of writing provide a low cost, affordable solution.

If you are looking for an alternate provider, we recommend that you use a company based on the mobile network you and they connect to - some charge higher costs for foreign networks.

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 more information on Sentry-go place-markers, please see “[Sentry-go - Place-markers](#)”
- 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



3Ds (UK) Limited
Design, Develop, Deliver Solutions!

69, Esher Road,
East Molesey,
Surrey.
KT8 0AQ
<http://www.3Ds.co.uk>