HealthMonitor 2.1

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1. Introduction

What's HealthMonitor ?

HealthMonitor is a free powerful and featureful monitoring tool for Windows.

It works as a Windows Service and check system status (event viewer, disk free space, services status, performance....) and notify the administration by E-Mail, SMS, with NET SEND or with a Script and it's also able to log to a Database.

It's developed with Visual Basic .NET 2003 and use WMI (Windows Management Instrumentation).

It's started automatically as soon as the system boot, you can use Aministrative Tools -> Services in order to start/stop the service; moreover you can use its interface that allow you also to configure the parameters.

It is under constant development, and releases are usually frequent. The latest news regarding HealthMonitor can be found on Sourceforge.

Licensing

HealthMonitor is a free software distributed under the GNU General Public License.

You can have a look at the GNU Site to know what you can/can't do.

2. Installation

Hardware Requirements

There are no special requirements for HealthMonitor, the service needs about 1 Mb of disk space and 10Mb of RAM; processor usage depends from the consideration of checks time intervals.

However it has been tested with a Celeron 600 MHz with 128Mb of RAM

Software Requirements

It needs Windows 2000 or greater with .NET Frameworks 1.1, you can download redistributable files from

http://www.microsoft.com/downloads/details.aspx?familyid=262D25E3-F589-4842-8157-034D1E7CF3A3 .

It may also work on Windows 9x / NT 4.0 after installing core WMI components, for further details visit:

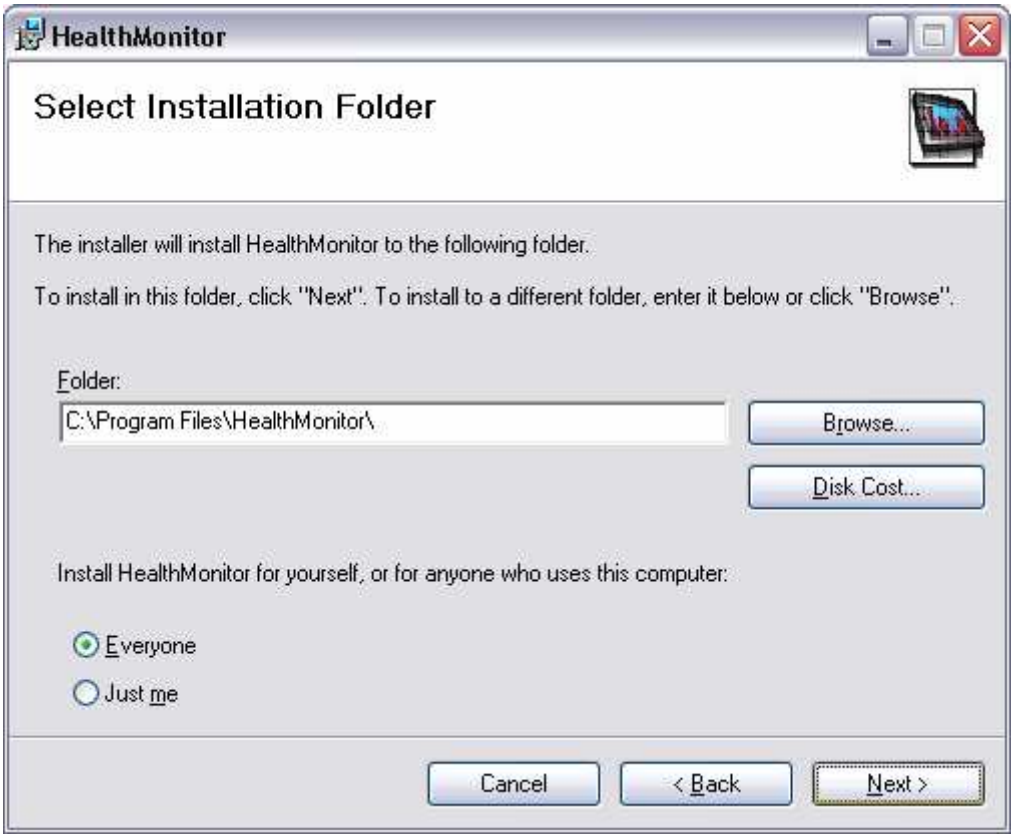
http://msdn.microsoft.com/developer/sdk/wmisdk/

Obviously an smtp server is needed in order to send the notification by e-mail and a SQL Server/MSDE is needed if you would like to enable SQL Logging.

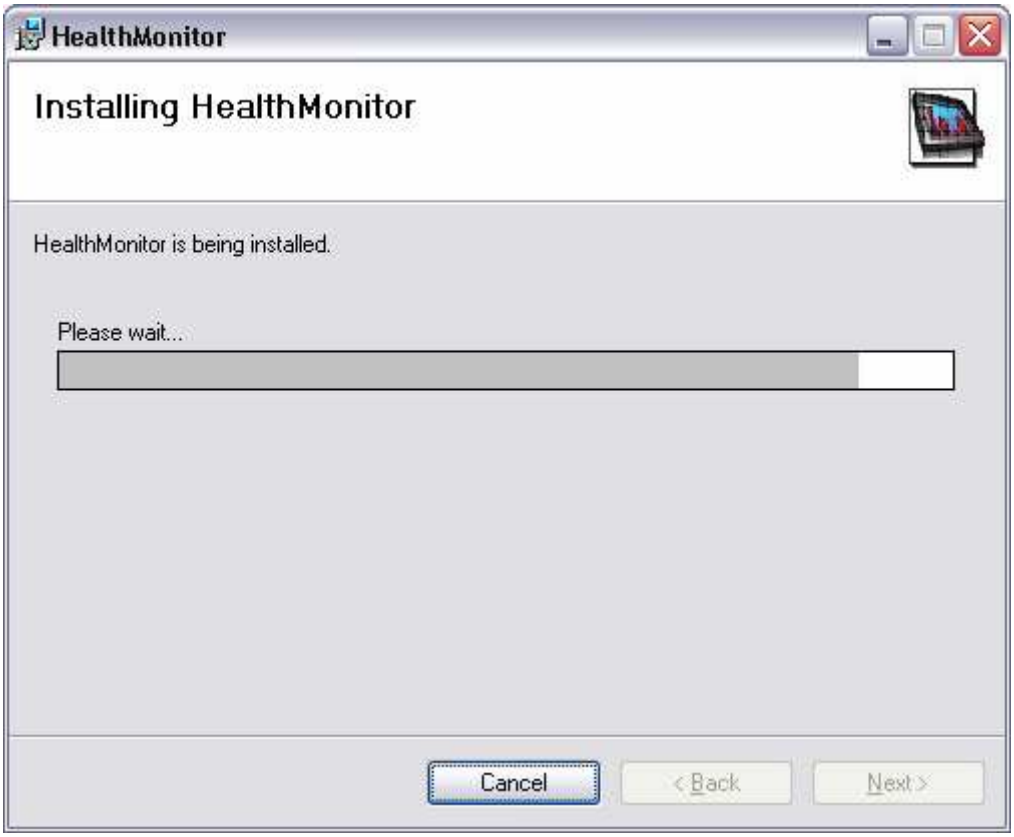
Step by Step Installation

After verify requirements and downloaded the setup package from Sourceforge site, unzip the package and run healthmonitor.msi

Press Next to continue

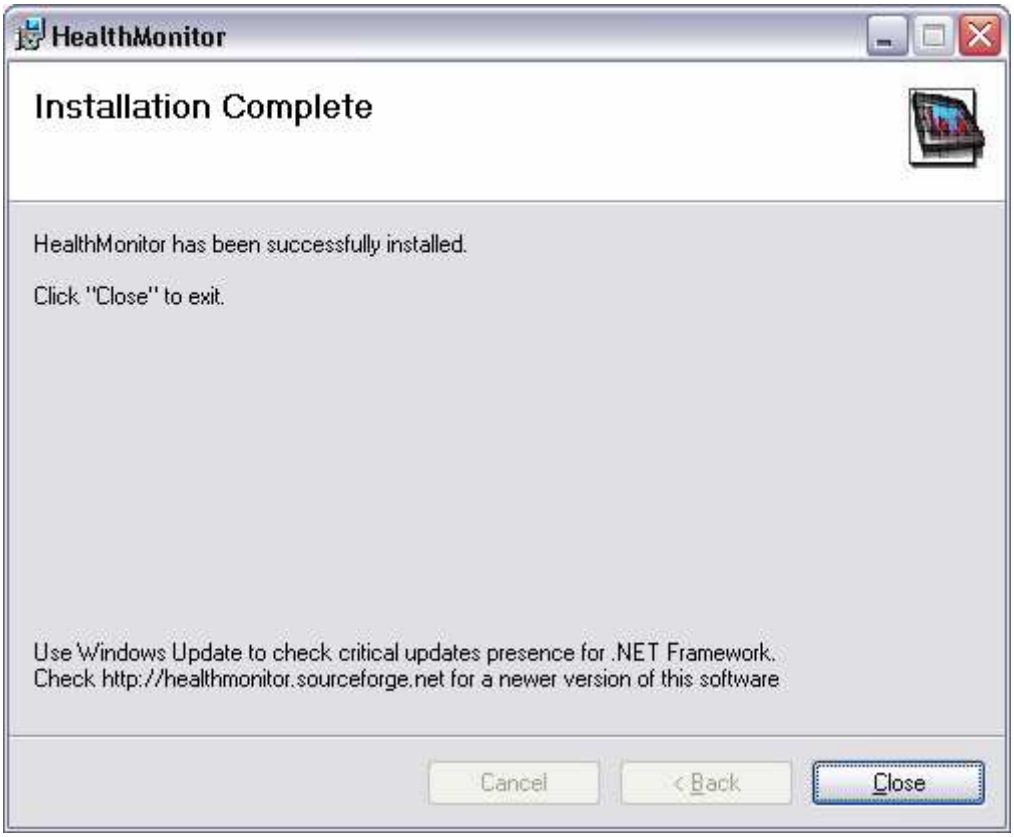


Select the installation folder.



Wait until the installation process end

Press Next to continue

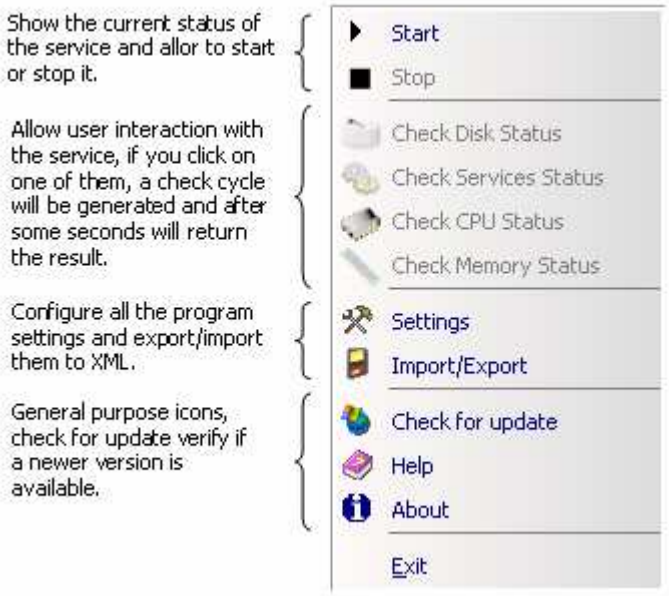


Press Close to exit the installation

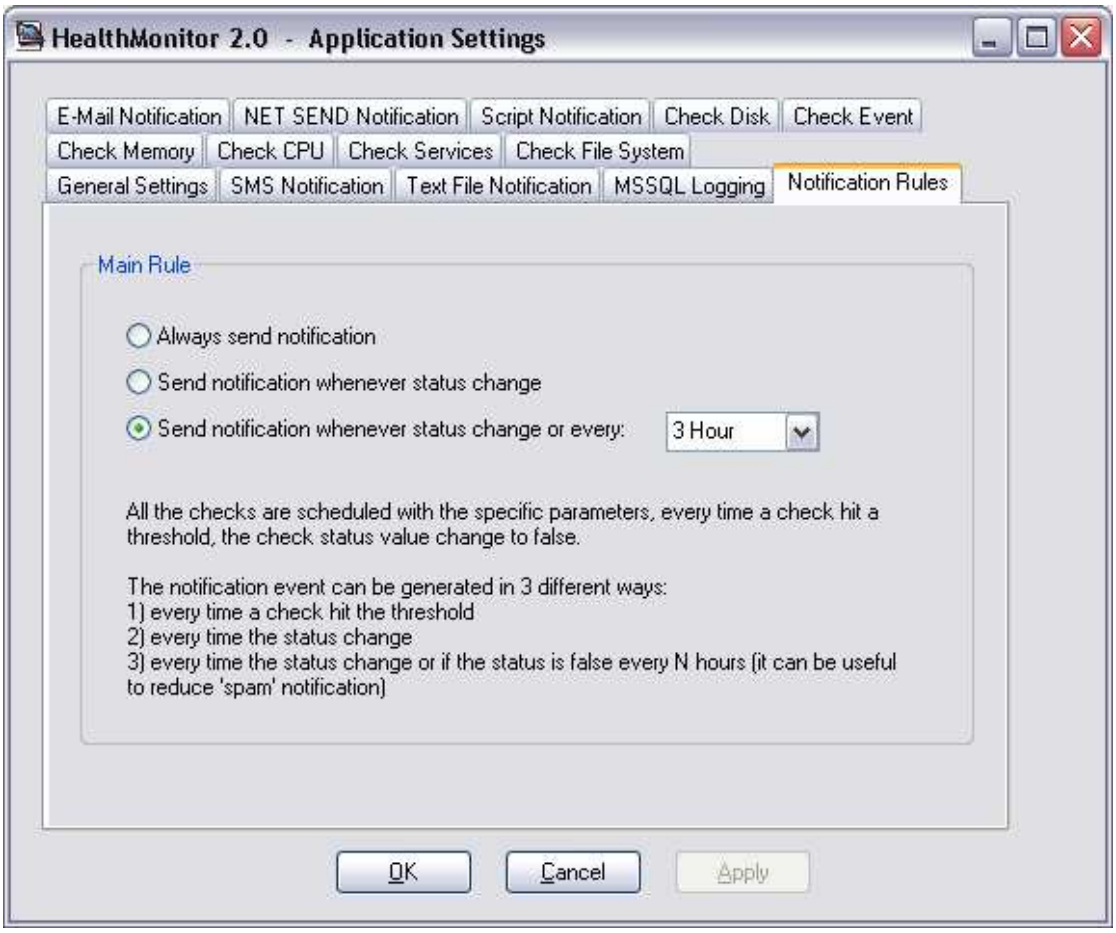
After the installation is completed, the HealthMonitor Configuration Interface will be displayed; for further details please go to the Configuration Section.

3. Configuration

Healthmonitor has a small tray icon that allow user to interact with the service and to get general purpose informations, below a small description.



Selecting Settings icon, you will see the main configuration:



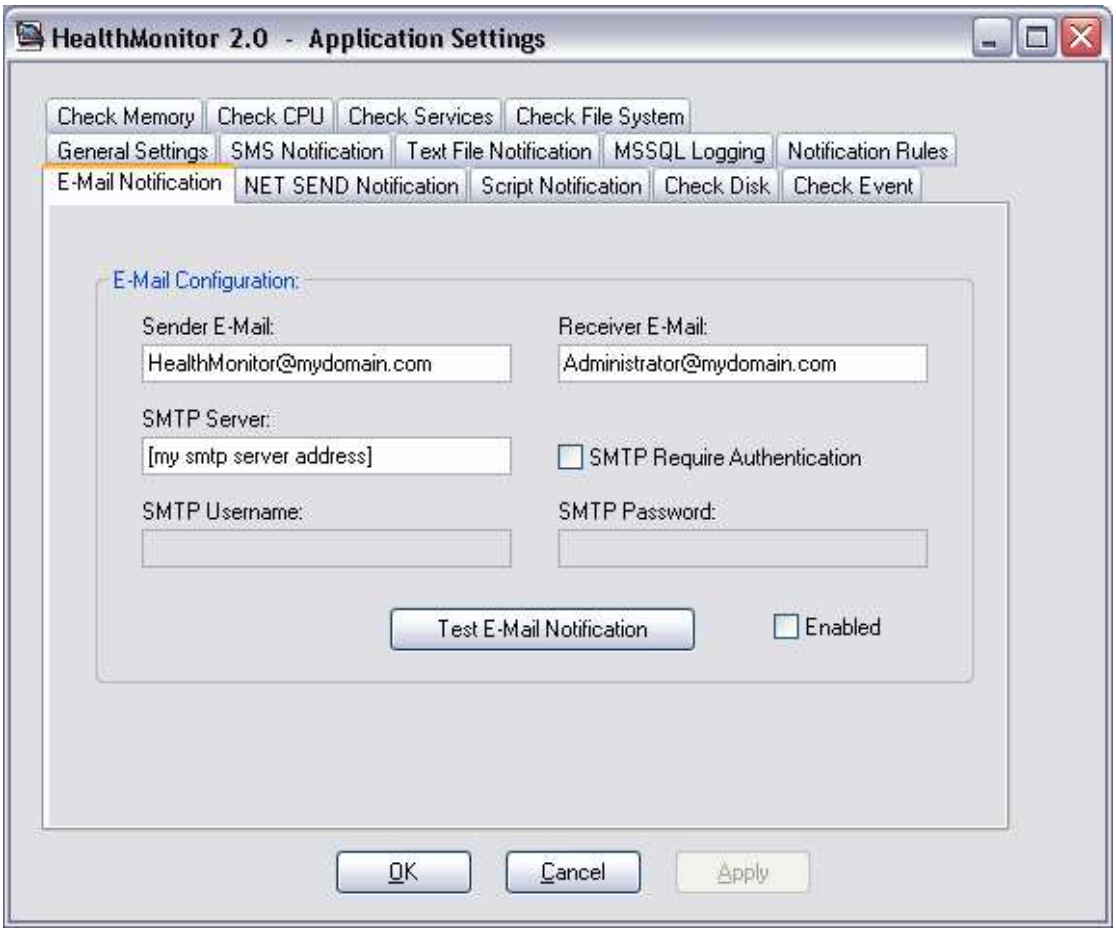
This form set the e-mail notification rules that will be applied to the notification methods (e-mail, log file…) and to every check.

Always send notification: every time a check hit a threshold (e.g. Free Disk Space equal to 0 with Check Disk enabled) a notification method is generated; this can generate a lot of notification.

Send notification whenever the status change: the notification is generated the first time a check hit a threshold and when the same check status return to OK (e.g. Disk was full and then become empty).

Send notification whenever the status change or every N Hours: the notification is generated like the previous rule and if the status is error then every N Hours.

Every time the service is restarted, the status is resetted.

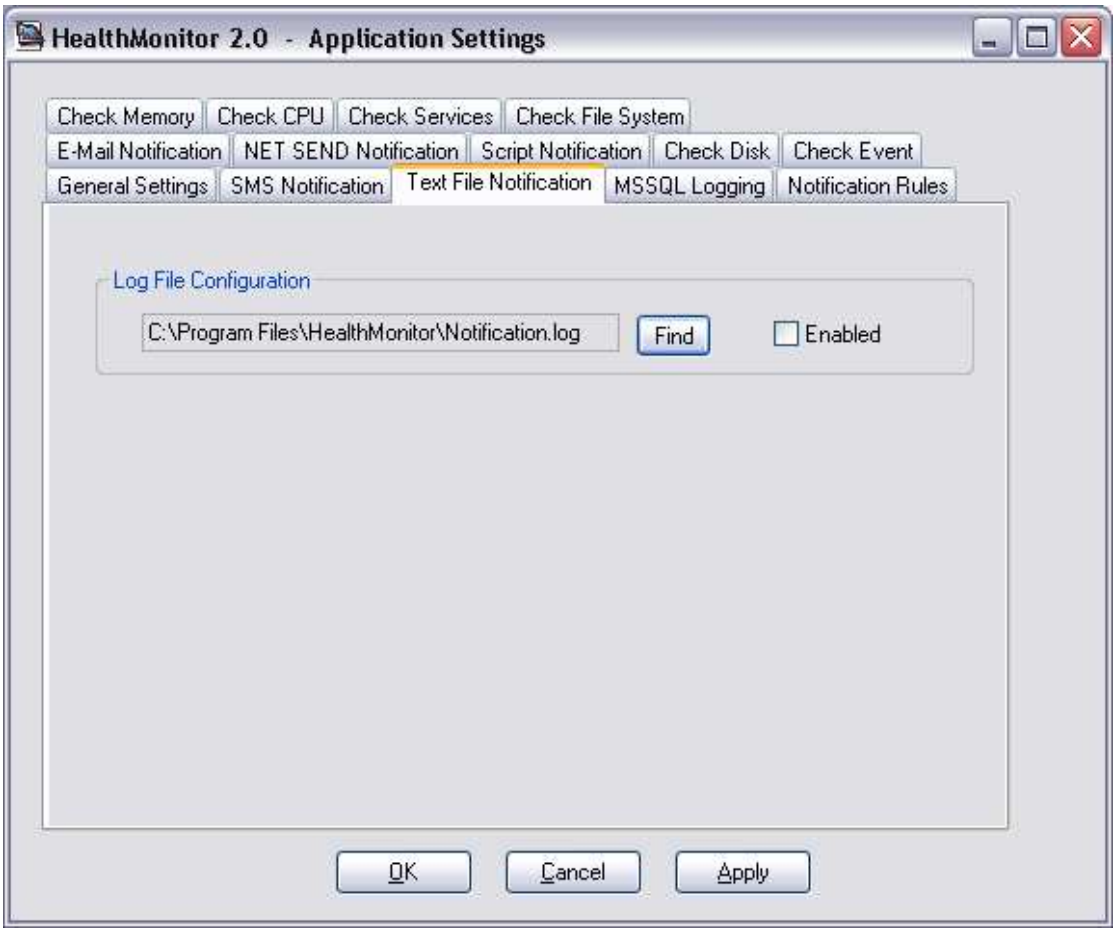


This form set the e-mail notification parameters, you should enter an e-mail address for the sender, a valid mailbox for the receiver (the program will send the notification to this address), a valid smtp server that will be used to send notification by e-mail.

If the smtp server requires authentication, you should select the check box and insert the username and the password.

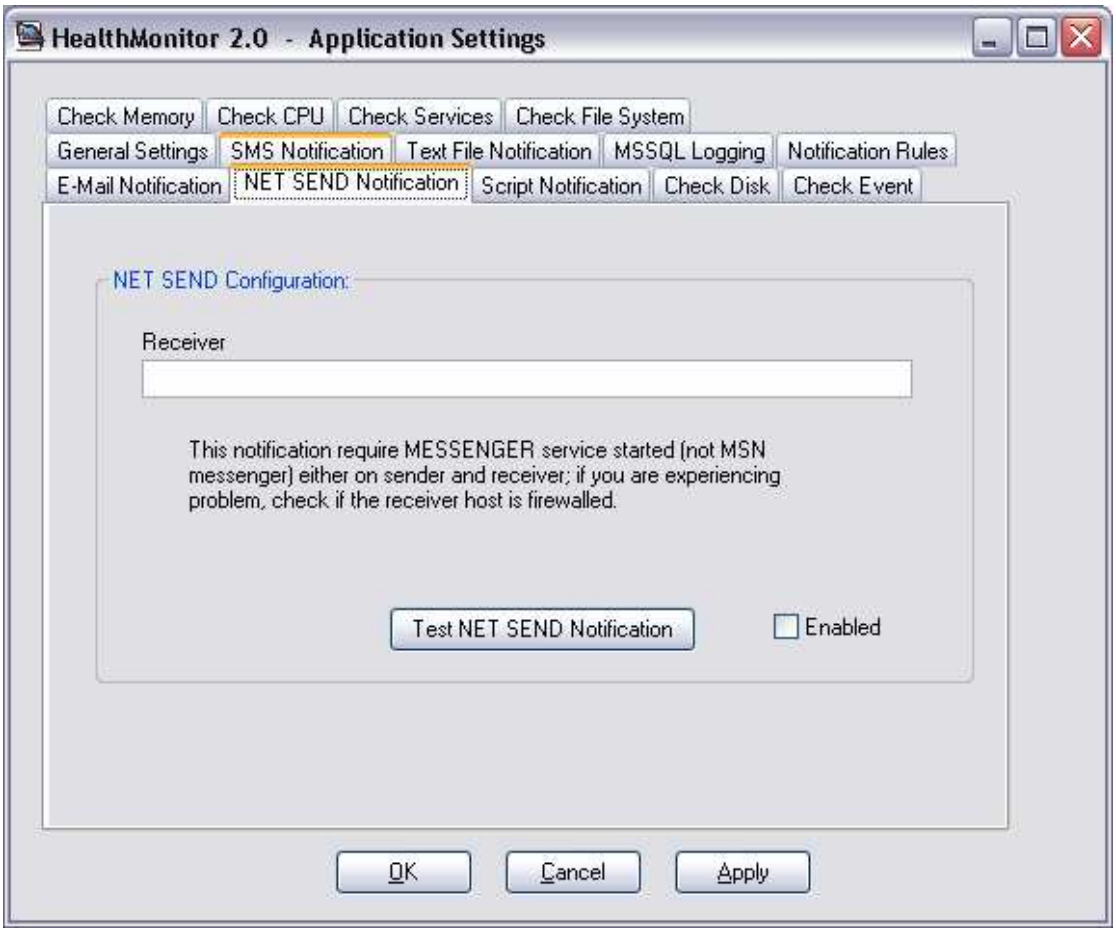
After setting all the E-Mail parameters, you can test the E-Mail configuration just clicking on "Test E-Mail Notification" button.

You can enable/disable this notification using the specific checkbox.



This form set the text log notification parameters, you should browse for a specific file and all the notification information will be saved on it.

You can enable/disable this notification using the specific checkbox.



This form set the NET SEND notification parameters, you should enter a valid receiver.

In order to use this notification, the Messenger Service (not confuse with MSN) should be started.

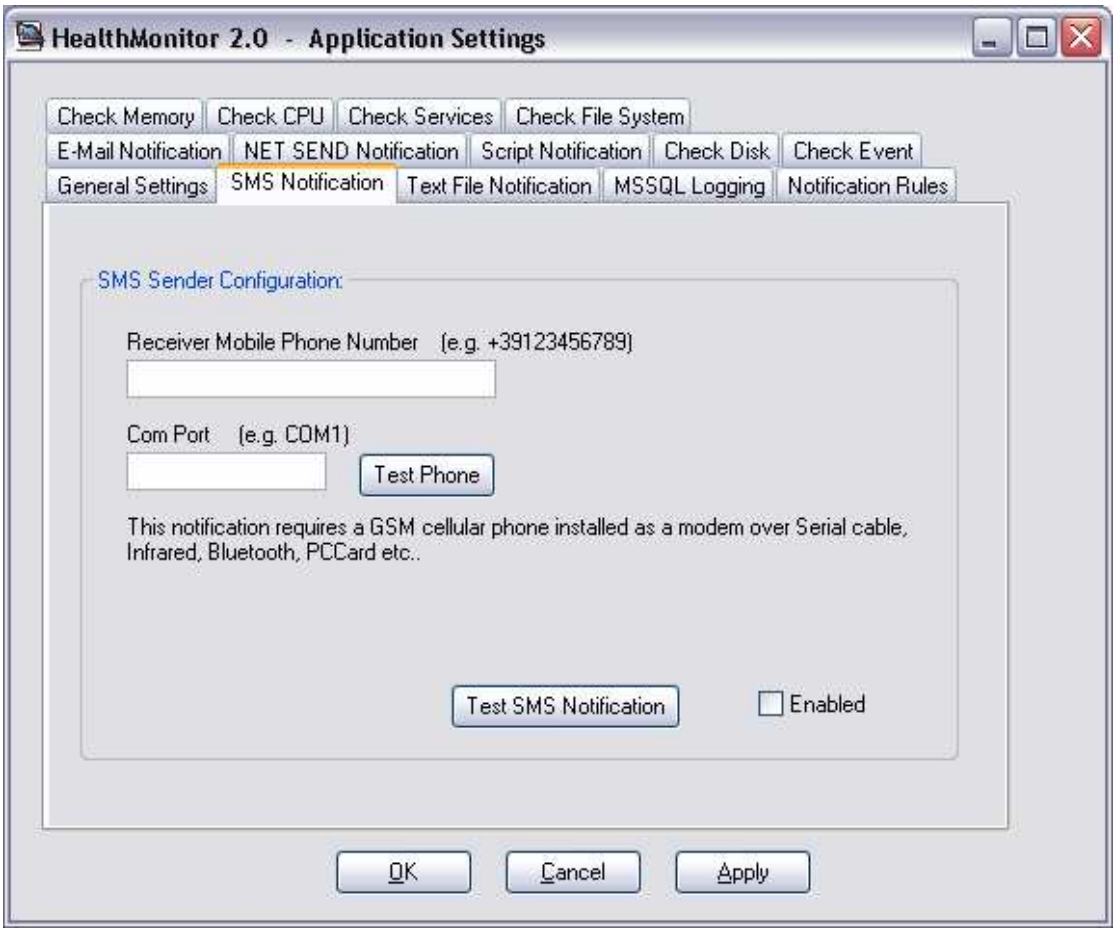
After setting all the parameters, you can test the NET SEND configuration just clicking on "Test NET SEND Notification" button.

You can enable/disable this notification using the specific checkbox.

This form set the Script notification parameters, you should enter a valid script file, moreover you can add arguments, for further details see the forum.

After setting all the parameters, you can test the NET SEND configuration just clicking on "Test Script Notification" button.

You can enable/disable this notification using the specific checkbox.



This form set the SMS notification parameters, you should enter a valid COM Port and a valid receiver; the mobile phone must be connected over Serial Cable, Infrared, Bluetooth, PCCard… and the operating system must install it as a modem.

After setting all the parameters, you can test the NET SEND configuration just clicking on "Test NET SEND Notification" button.

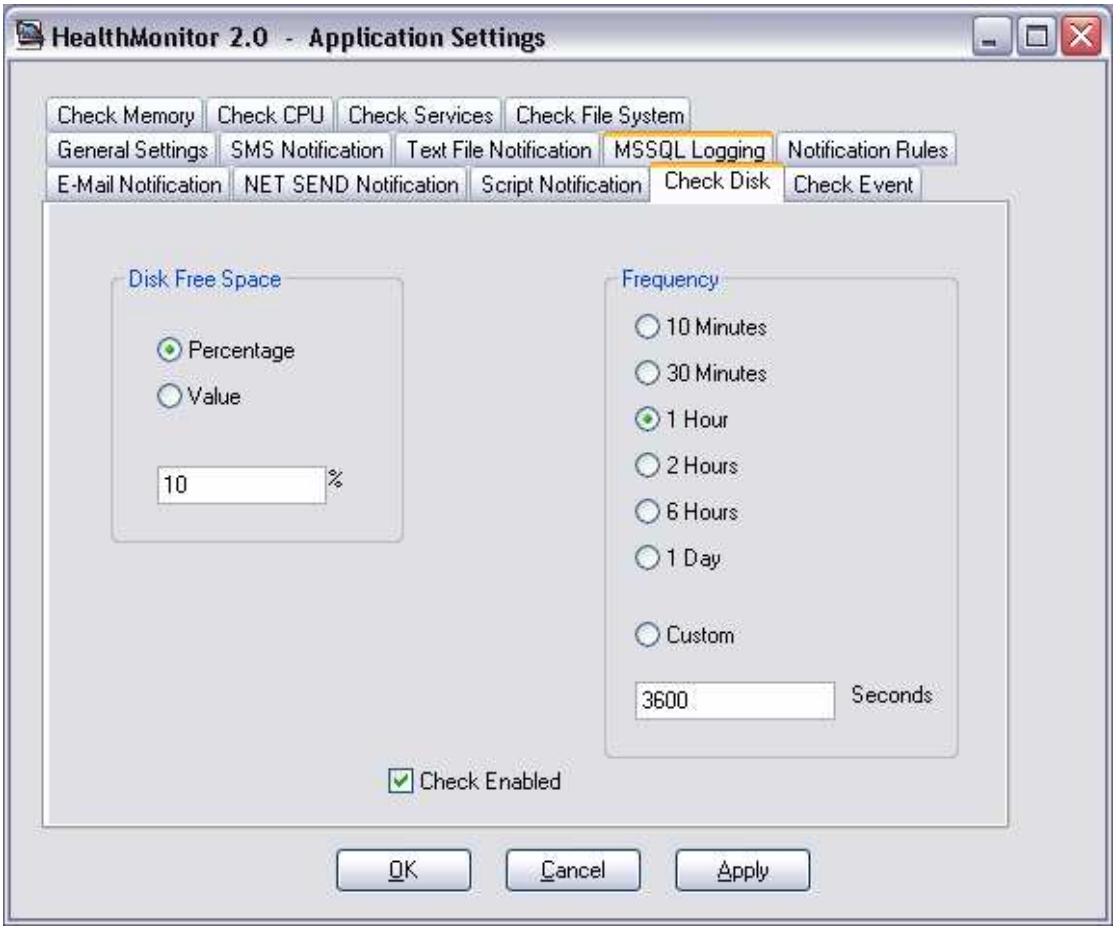
You can enable/disable this notification using the specific checkbox.

Healthmonitor use an opensource library for GMS called GSM-Link, for further details see here: http://sourceforge.net/projects/gsm-link

This form set the text MSSQL logging parameters, in order to use it you should connect either to a SQL Server or to an MSDE.

Test Connection button check the database presence and structure, if needed it create the DB and the tables structure (for details see the forum).

You can enable/disable this feature using the specific checkbox



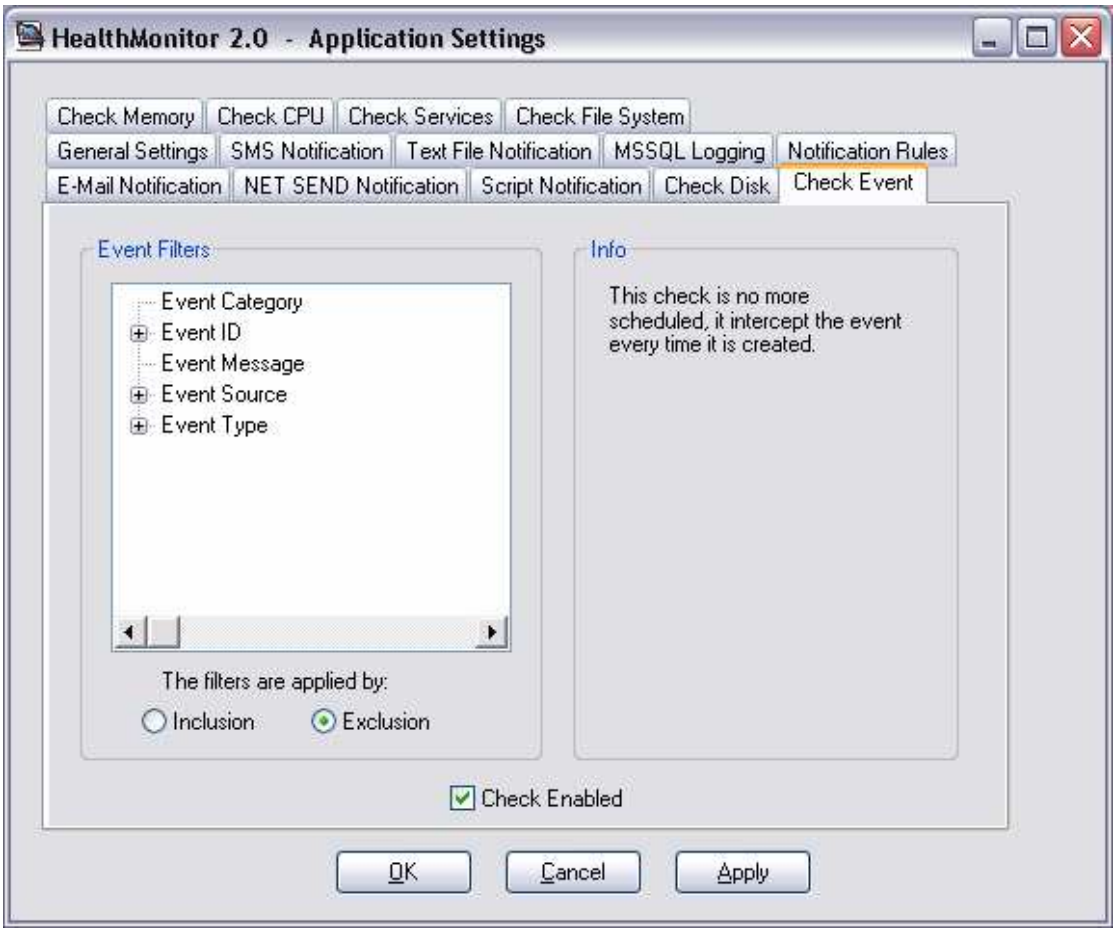
This form set the Check Disk parameters, this checks verify periodically (based on frequency parameter), if the Disk Space (for every logical volume) is greater than the value set in this form.

The value can be a percentage or a fixed value in MegaBytes.

The default configuration check every logical volume every 1 Hour and send the notification only if the free disk space is less than 10%.

Then minimum check frequency is 60 seconds.

You can also enable/disable the check using the specific checkbox

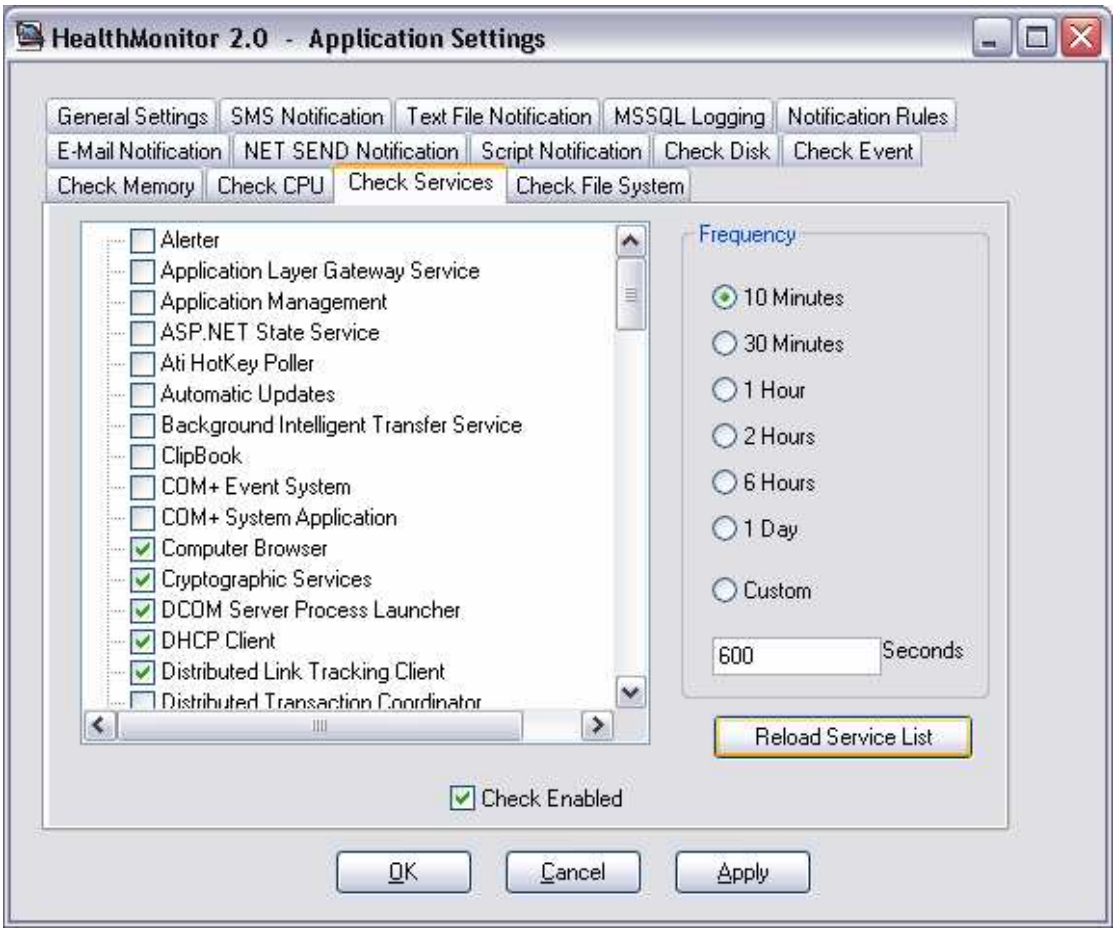


This form set the Check Event parameters, this check intercept event creation within the Windows Event Viewer.

By default all the events are notified, you can filter them excluding specific Event ID, Source, Category, Type.

The default configuration already contains some filters (e.g. Information events aren't notified).

You can also enable/disable the check using the specific checkbox



This form set the Check Services parameters, this checks verify periodically (based on frequency parameter), if the service status (for every service checked) is Running.

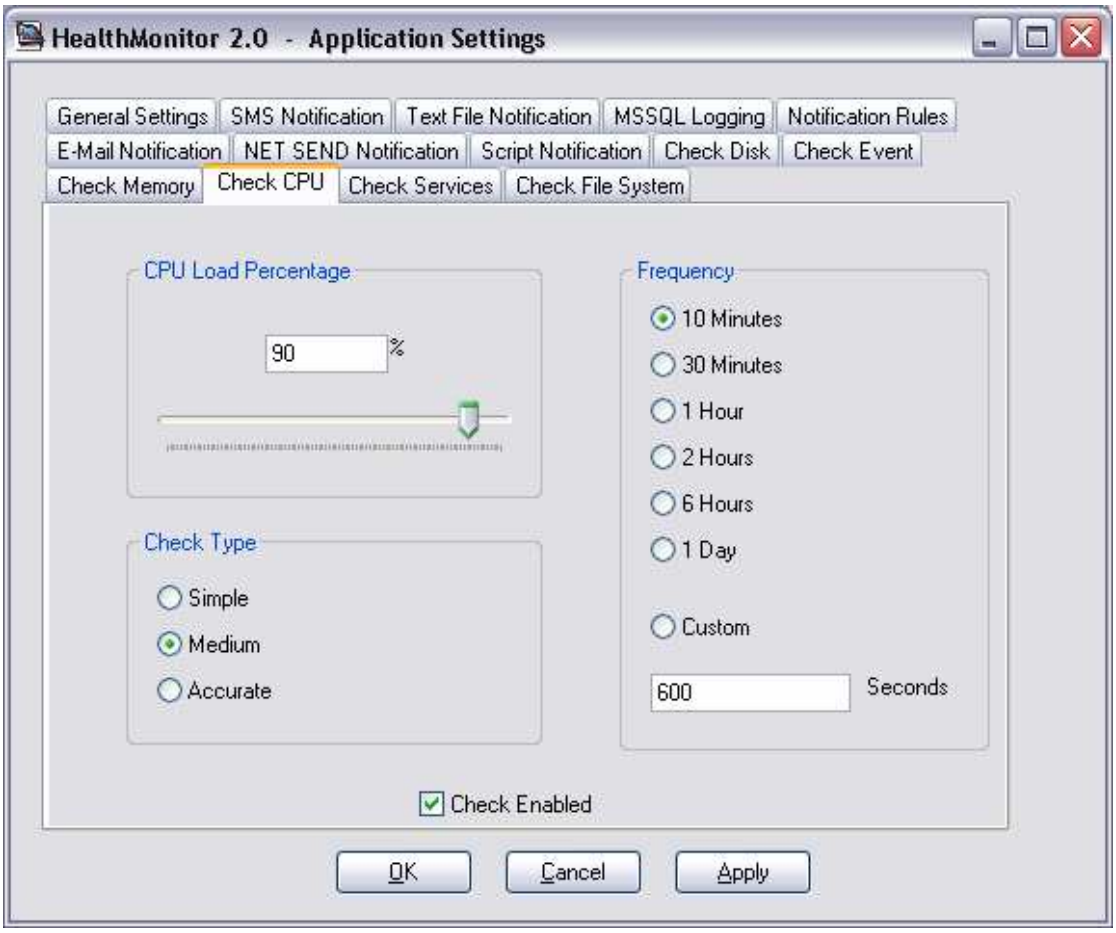
By default all the services that starts automatically at boot are checked.

If you install a new service and it's not displayed within the list, you should press the "Reload Service List" Button.

The default configuration check default all the services that starts automatically at boot every 10 minutes and send the notification only if the service status is different than "Running".

Then minimum check frequency is 60 seconds.

You can also enable/disable the check using the specific checkbox



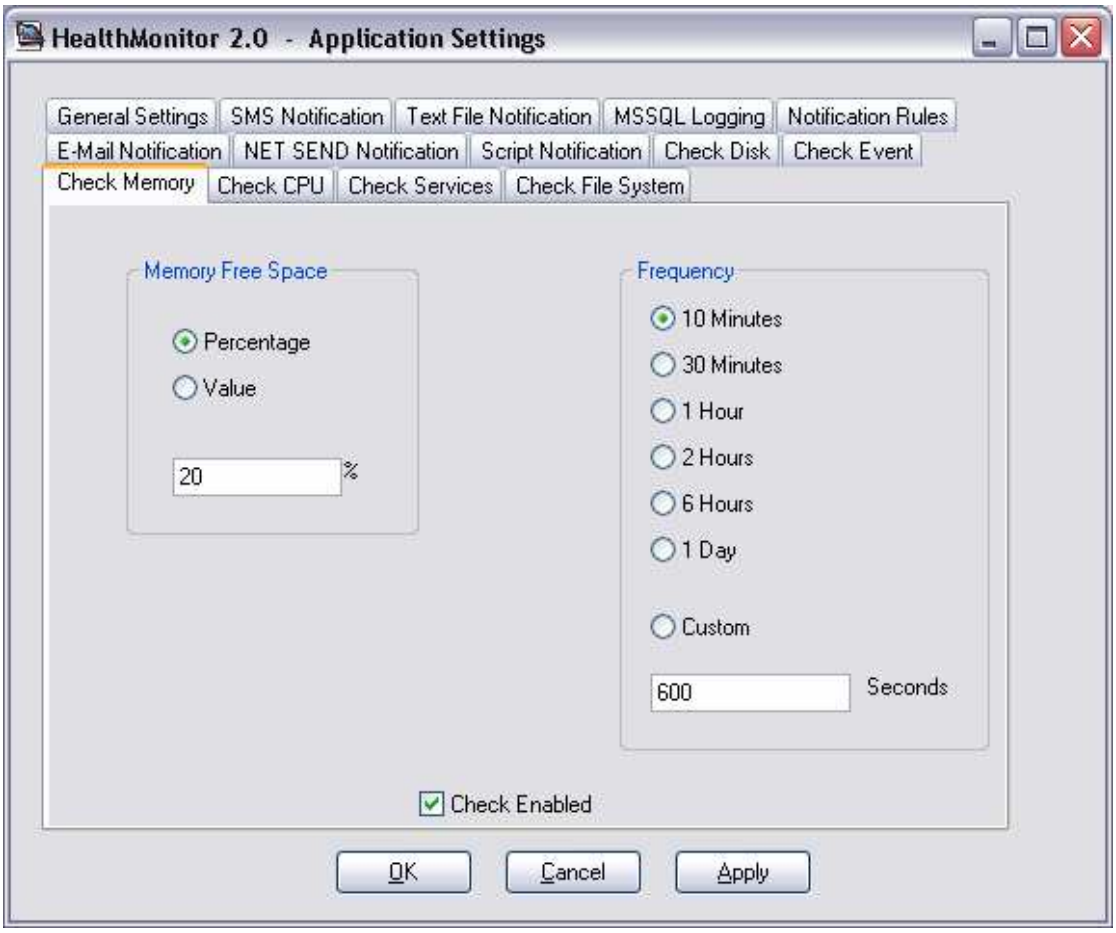
This form set the Check CPU parameters, this checks verify periodically (based on frequency parameter), if the CPU Loading Percentage pass the threshold.

You can select 3 kind of check: "Simple" send the notification if the CPU Load is greater than the threshold, "Medium" check 2 times (within 5 seconds) before send the notification, "Accurate" check 3 times (within 10 seconds) before send the notification,

The default configuration check the CPU Load every 10 minutes (600 seconds) with the "medium" check type.

Then minimum check frequency is 60 seconds.

You can also enable/disable the check using the specific checkbox



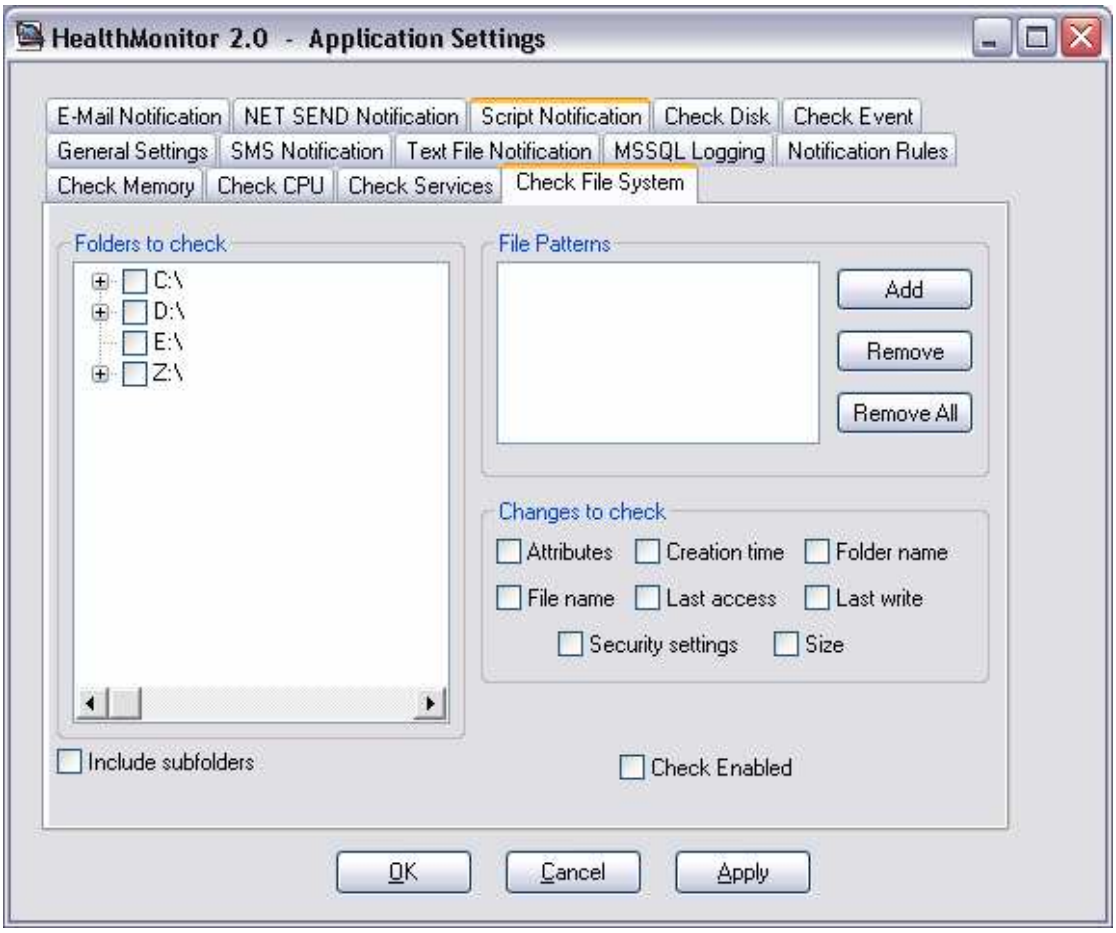
This form set the Check Memory parameters, this checks verify periodically (based on frequency parameter), if the Free memory is greater than the value set in this form.

The value can be a percentage or a fixed value in MegaBytes.

The default configuration check every logical volume every 10 Minutes and send the notification only if the free memory is less than 20%.

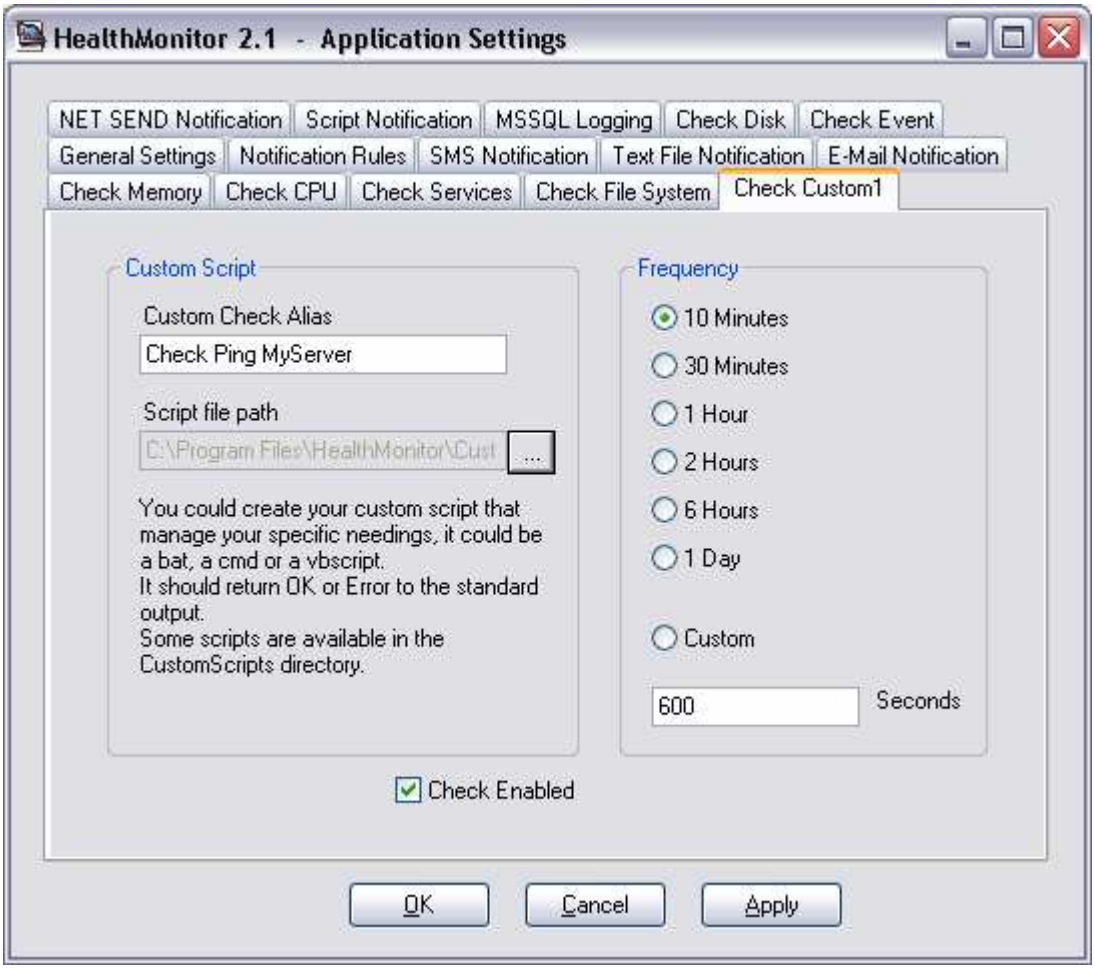
Then minimum check frequency is 60 seconds.

You can also enable/disable the check using the specific checkbox



This form set the Check File System parameters, this checks intercept changes on file system based on the selected path, file patterns and change type (size, name, modified..).

You can also enable/disable the check using the specific checkbox



This form set the Check Custom1 parameters, this checks verify periodically (based on frequency parameter) using a custom script that manage your specific needings.

The CustomScripts directory contains some useful scripts (check ping, check HTTP, check N° of processes…), everyone can create a script (batch, vbs, executable..) that generate result in the standard output, if the return value is not OK then a notification will be generated.

If you want to simulate a test or get a template, you can use SimulateError.bat or SimulateOK.bat located in the CustomScritps directory.

Then minimum check frequency is 60 seconds.

You can also enable/disable the check using the specific checkbox

4. Support

Forum

There are many forums for HealthMonitor Project on Sourceforge, click on this link for details http://sourceforge.net/projects/healthmonitor

FAQ

Q: I'm not able to install HealthMonitor 1.1 and earlier on my system.

A: Version 1.1 and earlier needs WSH (Windows Scripting Host) 5.2 or greater, please install a newer version or upgrade your WSH from the Microsoft Site.

Q: I'm not receiving e-mail and I'm not sure that my SMTP is working properly with HealthMonitor, how can I check if it's ok ?

A: Checks the log.txt files on the HealthMonitor folder and look for SMTP error connection.

Q: I don't receive any e-mail even if there are many new events in the event viewer.

A: Verify the Windows Registry Key HKLM\SOFTWARE\HealthMonitor\CheckEvent\EventCheckLastLog, it should have the following format: YYYYMMDDhhmm.xxxxxx-xxx

Q: What are the best settings for event filters ?

A: I suggest you to filter by default only event type "information", all the other filters depends from the server configuration.

Q: I'm unable to start the service from the interface, how can I do ?

A: If you don't set parameters on the first tme, the service startup type is set to disabled so you can't start manually and you should change its startup type from services.msc

Q: What should I do to upgrade to a newer version ?

A: You should uninstall the previous version (from Add/Remove Programs in Control Panel) and then install the new version

Q: Can I only substitutes the executables during version upgrade ?

A: Yes, but it's not sure that everything works properly (for details post a message on the Sourceforge forum)

Q: Why do I sometimes lose my parameters ?

A: When you install the new version, default parameters are saved, if you want to mantain them, export HKLM\Software\HealthMonitor Key from the registry before upgrading and reapply after installation

Q: What is the Database table structure ?

A: See the Healthmonitor Forum

Q: I would like to become a beta tester, what should I do ?

A: You must install the last beta version, notify eventual bug on the forum and eventually send the Log file present in C:\Program Files\HealthMonitor folder to the support group.

Q: I would like to join the project actively, what should I do ?

A: You must register on SourceForge site and then throught HealthMonitor site join the project

Q: Is there a mailing list that I can be on?

A: Some mailing lists are available on http://sourceforge.net/mail/?group_id=88973

Q: How can I be notified when a new release is out?

A: You should enable this feature within HealthMonitor interface of login to the sourceforge site and monitor a package.

Q: How can I got a custom script with my needings ?

A: You can develop it by yourself or post a message to the sourceforge forum http://sourceforge.net/forum/forum.php?forum_id=434370 .

5. History

Version 2.1

NEW FEATURES

- Added Custom Check using an external script/program

- Added many custom scripts (check ping, http, number of processes, folder size, TS Sessions...)

- Added Mail FROM field

- Added link to Mail Event Notification

CHANGES

- Added MS SQL Logging on Check File System

BUG FIX

- Check file system try to explore floppy drive

- Changes on Check Services treeview doesn't affect the "Apply" button

- NotificationSenderName parameter is not exported into XML

- Failed to delete parameter

- Run GUI at Startup (general tab)