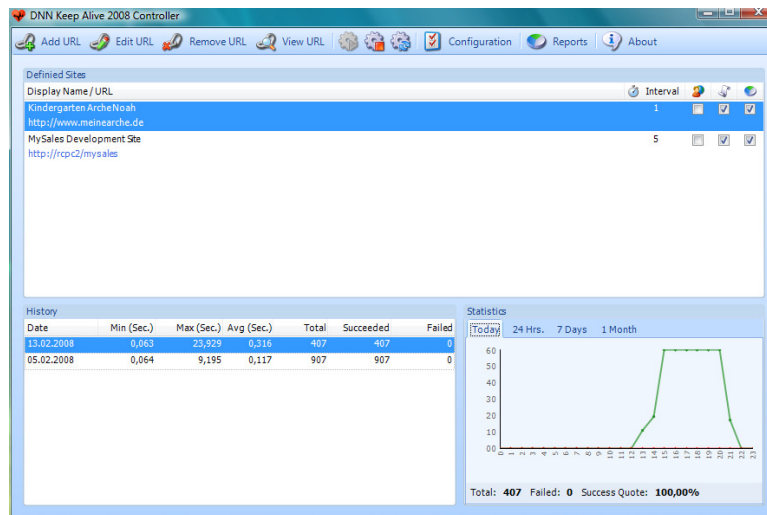


# DNN KeepAlive 2008 Windows Service

by Rosenthal Consulting



keep it beat



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## Introduction

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DNN Keep Alive is a 32 Bit Windows Service Application designed to prevent dynamic ASP (Active Server Page) Websites from unloading. To improve server performance IIS (Internet Information Server) frees resources of unrequested sites after some time. The result is that these resources (e.g. the .NET Runtime Environment) have to be loaded first when the page is requested after a longer time of inactivity. The typical result is a 20-30 sec. delay before the processing of the requested page has finished and the page is submitted to the visitor.

DNN KeepAlive eliminates this problem by requesting your favourite sites periodically – the runtime remains loaded and the sites are kept responsive.

Additional DNN KeepAlive is a great site monitoring tool which logs every request – equal whether the call was successful or failed – including the response time. A daily status report is send by email to an administrator or webmaster. She/he now has complete control over her/his sites simply by opening the attached pdf-file.

A modern Controller Application makes it comfortable to add, edit and remove sites, set configuration settings or view charts visualizing the logged activity.

The Installation Package (MSI) contains the Service Program and the Service Controller Application which can be accessed by an Icon in the System Tray Area of the Windows Taskbar or the Windows Start Menu.

This program has been verified to install and run under the following operating systems:

- Windows 2000 Professional (32 Bit)
- Windows 2000 Server (32 Bit)
- Windows 2003 Server (32 Bit)
- Windows XP Professional (32 Bit)
- Windows XP Professional (64 Bit - WOW)
- Windows Vista (32 Bit)
- Windows Vista (64 Bit - WOW)

If you have further questions or need support please visit us at <http://www.dnnportal.eu> - or contact us directly via E-Mail: [keepalive@dnnportal.eu](mailto:keepalive@dnnportal.eu).

### KEEP IT BEAT!

Stefan Rosenthal  
Rosenthal Consulting  
<http://www.dnnportal.eu>



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## What's new in the April 2008 Version

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In April 2008 we have released Version 2.1 of DNN Keep Alive 2008. This version includes minor Bug Fixes and some Program Enhancements.

### Fixed Bugs:

Using US Regional Settings the Delivery Time of the daily Status Report could not be changed. An Error indicating a too small field size occurred when trying to save a custom execution time in the Configuration Dialog.

The default (and not configurable) Request Timeout was set to 15 seconds – too short for many users having small bandwidth internet connections. The time is now configurable – see below.

The Setup Program (Uninstaller) removed the Keep Alive Database File when uninstalling the Service. Now the Database file keeps on your Hard disk – so updates can be processed easier in the future.

### New in this Release:

You can now configure the time until when a Request runs into a Timeout and is treated as failed. In the Configuration Dialog select the new "Failure" Tab and change the Timeout e.g. to 45 seconds.

Often requested was the feature to be informed, if one of the monitored sites is not accessible for some time. Also located on the new "Failure" Tab in the Configuration Dialog you can now define, after how many unsuccessful requests you like to receive an "Alert E-Mail". Just try it out!



## Upgrading from a previous Version

If you have a previous version of DNN KeepAlive (versions 1.0 to 1.5) running please follow these steps to preserve your already entered sites.

All previous DNN KeepAlive versions were installed to the folder  
**\Program Files\Rosenthal Consulting\DNNKeepAliveService**

- In this folder you should find a file named “sites.xml”. Please copy this file to a secure location (backup).
- Uninstall the previous version using Windows “Add/Remove Programs” feature.

**Note:** *If there are many sites with short request intervals defined in version 1.x it may be that the service can not be stopped in acceptable time resulting in a timeout error. If this is the case please end the service and controller tasks using Windows Task Manager before uninstalling the software.*

- Verify that the service was uninstalled by selecting Services in Control Panes => Administrative Tasks. There should be not entry for “DNN KeepAlive”.
- Install the new DNN KeepAlive Service 2008 using the Setup Program as described in the next chapter.
- Copy the saved file “sites.xml” to the folder to which the program was installed - default this is **\Program Files\DNN Keep Alive 2008** using Windows Explorer.
- Start a Command Prompt Window – e.g. by Start -> Run -> “cmd” -> OK. Navigate to the folder where the software was installed and your “sites.xml” was copied to. Enter the following statement: **DNNKeepAlive2008.exe -UPDATE**
- This will show a window importing your “sites.xml” to the new database. Please ensure to do this update process only once – there is no check whether your pages have been imported already.

You are finished and can open the Controller Application by pointing to Start -> Programs -> DNN Keep Alive 2008. Start the service and “keep it beat”...



## Installing DNN KeepAlive 2008

Before you continue make sure that the Microsoft .NET Framework 2.0 Runtime and all available Updates are installed. You can find the redistributable package here:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=0856eacb-4362-4b0d-8edd-aab15c5e04f5&displaylang=en>

Double Click the **SETUP.EXE** Program to start the Windows Installer, which guides you through the Setup Process.

### Welcome

The "Welcome Screen" appears - click NEXT.



### License Agreement

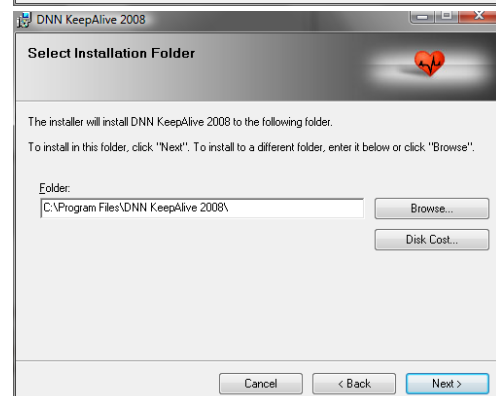
Agree to the licence agreement – click NEXT.



### Select Installation Folder

Select the folder you like the software be installed into – click NEXT.

We recommend that you install into the default folder as suggested.





## Confirm Installation

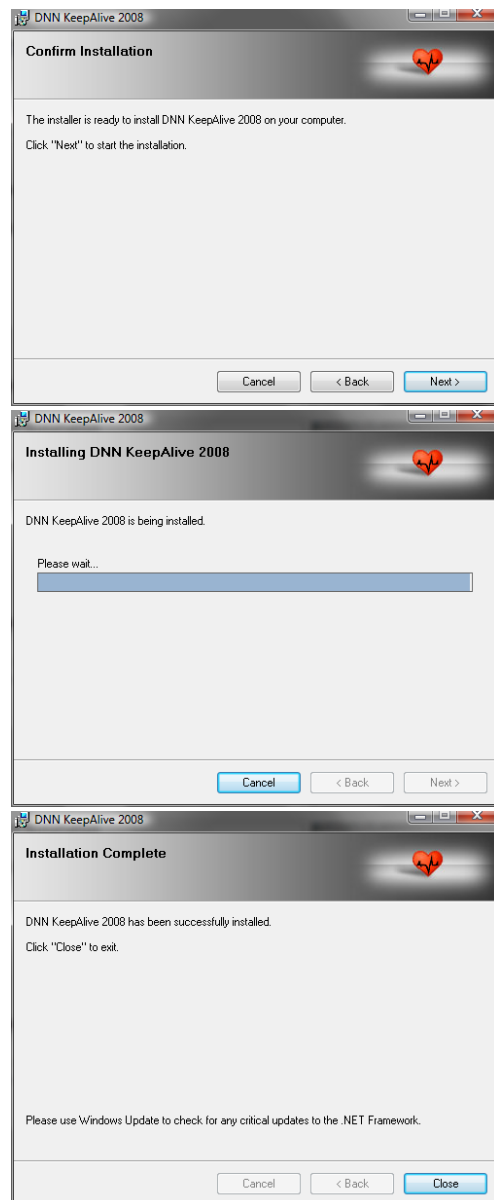
Click NEXT to start installing files.

## Installing DNN KeepAlive 2008

During Installation the progress is reflected on the Screen – after installation has finished click CLOSE.

## Installation Complete

Setup has finished!



The program is now installed. In the Windows Start Menu you'll find a new Shortcut pointing to the DNN KeepAlive Service Controller.



## Getting started

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After installation nor the service neither the controller application are started automatically. Restarting your computer will start the service and the controller application – and the “heart beat” icon will be found in the SysTray and will act as the Control Panel for the Service. You can start the controller yourself after installation by selecting the Shortcut in the Start Menu. In the Controller Application itself you can start, stop and restart the service. Further more you can start, stop and configure the Service using the Context Menu of the System Tray Icon (requires Reboot or start of the Controller using the Shortcut in the Start Menu).

The Service can also be administered by using the Windows Service Snap In which you can start by selecting Start -> Control Panel -> Administrative Tools -> Services. Additionally here you can change the User Account the service runs under. This is necessary if you like to use integrated security to log on e.g. to intranet sites. The service will impersonate itself by the account defined in the service Snap In.

### So it's on you now:

Restart your computer or simple choose the “Heart Beat” Icon in your Start Menu Program Folder.

**Remark:** The first time the Service Application starts it will need some seconds to compile. This is due to .NET architecture.

*If you are a “Power User” and don't need information how to start and stop the service or how to add and edit sites **please continue reading how to configure the service.***



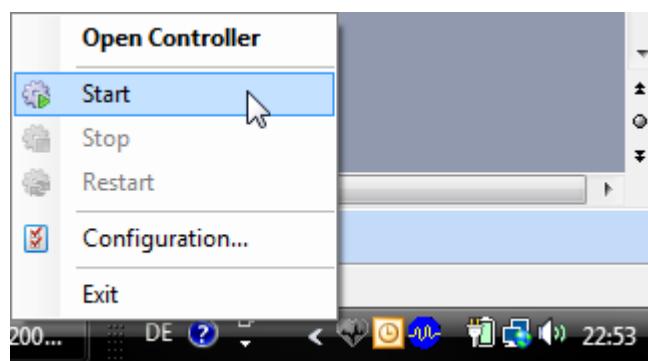


## Starting and Stopping the Service

The DNN KeepAlive Service can be started and stopped using different approaches:

### Using the “Heart Beat” Icon in the System Tray

Right Click on the “Heart” in the System Tray. (The heart may be greyed if the service is stopped or red if the service is running. This is true if you have restarted your computer after Setup.)



Depending on the current state of the service you can start, stop or restart the service.

### Using the Controller Application

The Controller Application can be started by choosing the appropriate icon in the Windows Start Menu, double clicking the “Heart” in the System Tray or selecting the “Open Controller” command on the System Tray context menu.

In the middle of the Controller Application Windows toolbar there are three intuitive “gear” icons to start, stop and restart the service.



**Remark:** If you have changed options regarding an existing service – e.g. the interval – or the entire configuration you must restart the service to apply this change – the running service does not recognize your changes until it is restarted.

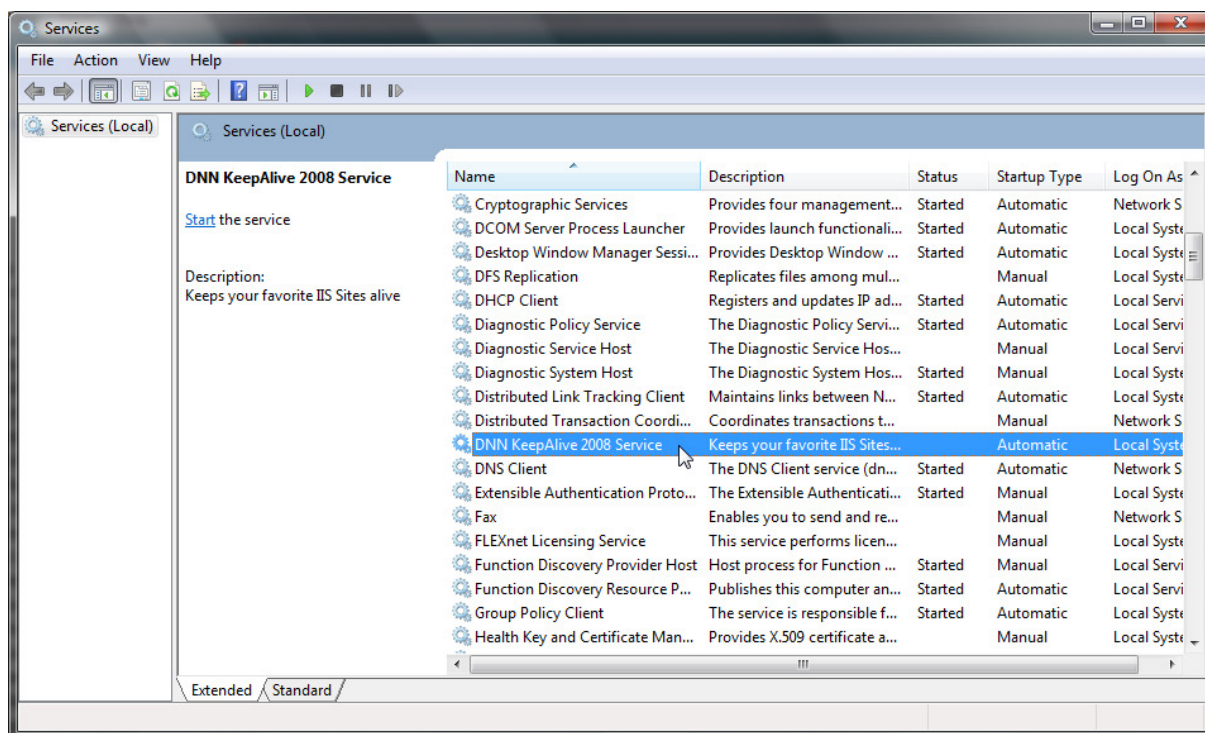


### Using Windows Control Panel

The most known way to start or stop a service is the Windows Control Panel. Just open it by selecting Start => Settings => Control Panel => Administrative Tools => Services.



The Services Window appears:

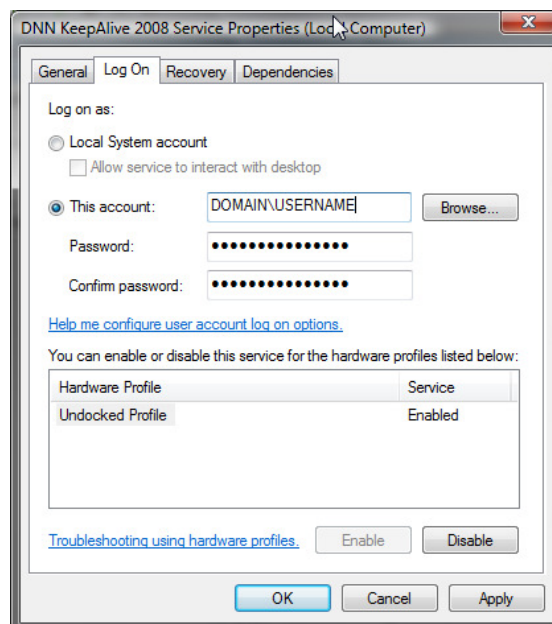


Right click on the “DNN KeepAlive 2008 Service” entry to get the context menu shown up or simply choose the “Start Service Button” on the toolbar. All common service actions are available here.

By default the service runs under the special “Local System” service account. This account impersonates itself to your websites as “anonymous”. If your websites require “Integrated Security” you must tell your service to log on a dedicated (e.g. Active Directory) user. So you have to change the account the service runs under.

This can be done by double clicking the service entry and specify e.g. a domain account the service runs under. This account also must have the rights to “Log on as a service”.

Your sites will be visited as the user you choose here.





## Adding, Editing and Removing Sites

Please start the Service Controller Application either using the Shortcut in the Start Menu or by double clicking the “Heart Beat” icon in the System Tray.

A common known user interface will be presented to you – including a toolbar giving you all the commands needed to define the sites to be monitored.



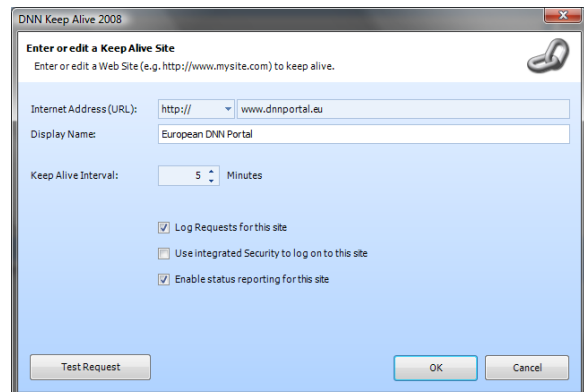
The first four “Link-Icons” are responsible for site management:

- |                   |                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------|
| <b>Add URL</b>    | Opens a dialog where you can define a new site to be kept alive.                             |
| <b>Edit URL</b>   | Opens the dialog to edit the options you can set for a site to be kept alive.                |
| <b>Remove URL</b> | Removes a site from the list of sites to be kept alive.<br>All history data will be deleted. |
| <b>View URL</b>   | Opens the selected site in your registered browser.                                          |

### Adding/Editing a new URL

If you select the ‘Add URL’ or ‘Edit URL’ command the site configuration dialog appears. In this dialog you set site specific configuration data like the URL of the site, the keep alive interval etc.

The first field “Internet Address (URL)” contains the URL of the site to be monitored. Please be sure to select the appropriate protocol (http or https). You can not only enter the base URL of the site but also any specific page - e.g. ‘www.mydomain.com/pages/contact.aspx’.



The “Display Name” is a text field you can use to give your site a description. This field is also good as a “sort field” (in the Controller Application you can sort the columns by clicking on the column header). Give you site description a prefix (e.g. a customer number) and keep related sites together in view.

The “Keep Alive Interval” is the time span in minutes the site will be requested. A good value is 5 minutes so the site will be monitored 12 times an hour.



The Option “Log Requests for this site” should be checked so the each request and the time it needs is logged to the database. If you uncheck this box no reporting is possible for this site.

“Use integrated Security to log on to this site” is useful in intranet scenarios where users are authenticated by their Windows Identity (Domain Username). If your site requires Windows Authentication please check this box – the site will be requested using the service account to authenticate to the website. Ensure also that the service account has access to your website.

“Enable status reporting for this site” is checked by default. Sites having this flag set will be included in the daily status report which is delivered by e-mail.

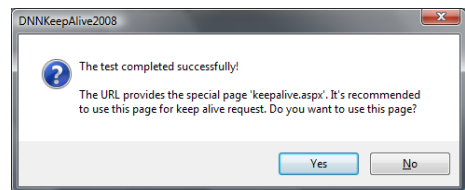
And now: test whether all data are filled in correctly by clicking “**Test request**”.

**Remark: We recommend that you always test the availability of your site before closing this dialog. A wrong configured site or a site which is permanent unavailable uses valuable computer resources if requested every 5 minutes!**



## Using the special page “KeepAlive.aspx”

If you enter a site and click “Test request” the site is analyzed. If DNN KeepAlive detects that the special page “KeepAlive.aspx” is available in the root directory of the site (this is true e.g. for DotNetNuke Portals) it suggests to use this page.



The benefit is that requests to this special page will not be logged by the portal and your portal reports stay accurate.

By choosing “Yes” the “keepalive.aspx” page is added to the URL. Please verify by clicking “Test request” again that the changed URL works.

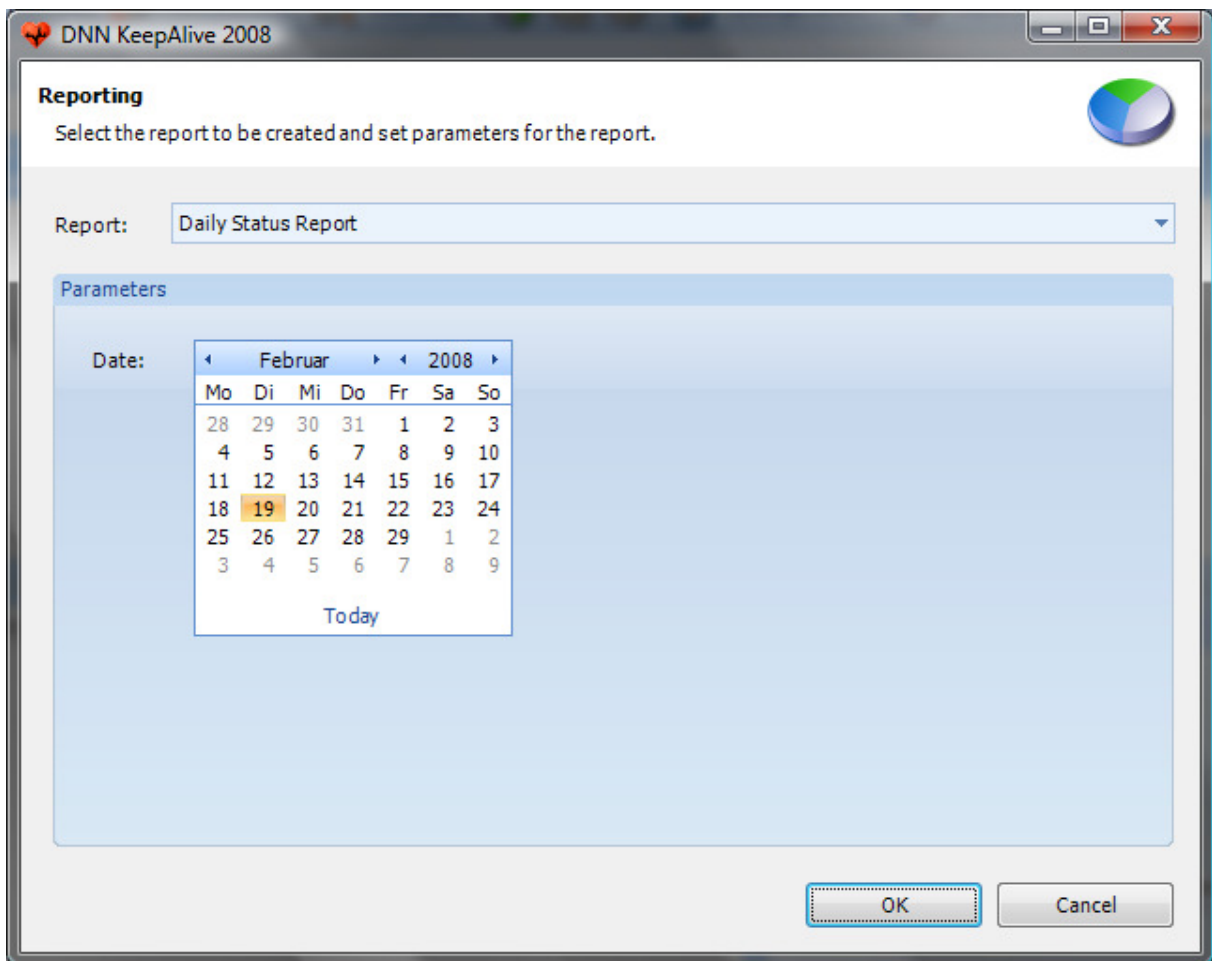


## AdHoc Reporting

You can manually run the Daily Status Report by selecting the “Reports” command in the toolbar.



In the appearing dialog please select the date for which the report should be executed.



Since you click “OK” the report is generated and delivered to you by e-mail.

**Remark:** At the moment the Standard Edition of this program offers only the Daily Status Report.



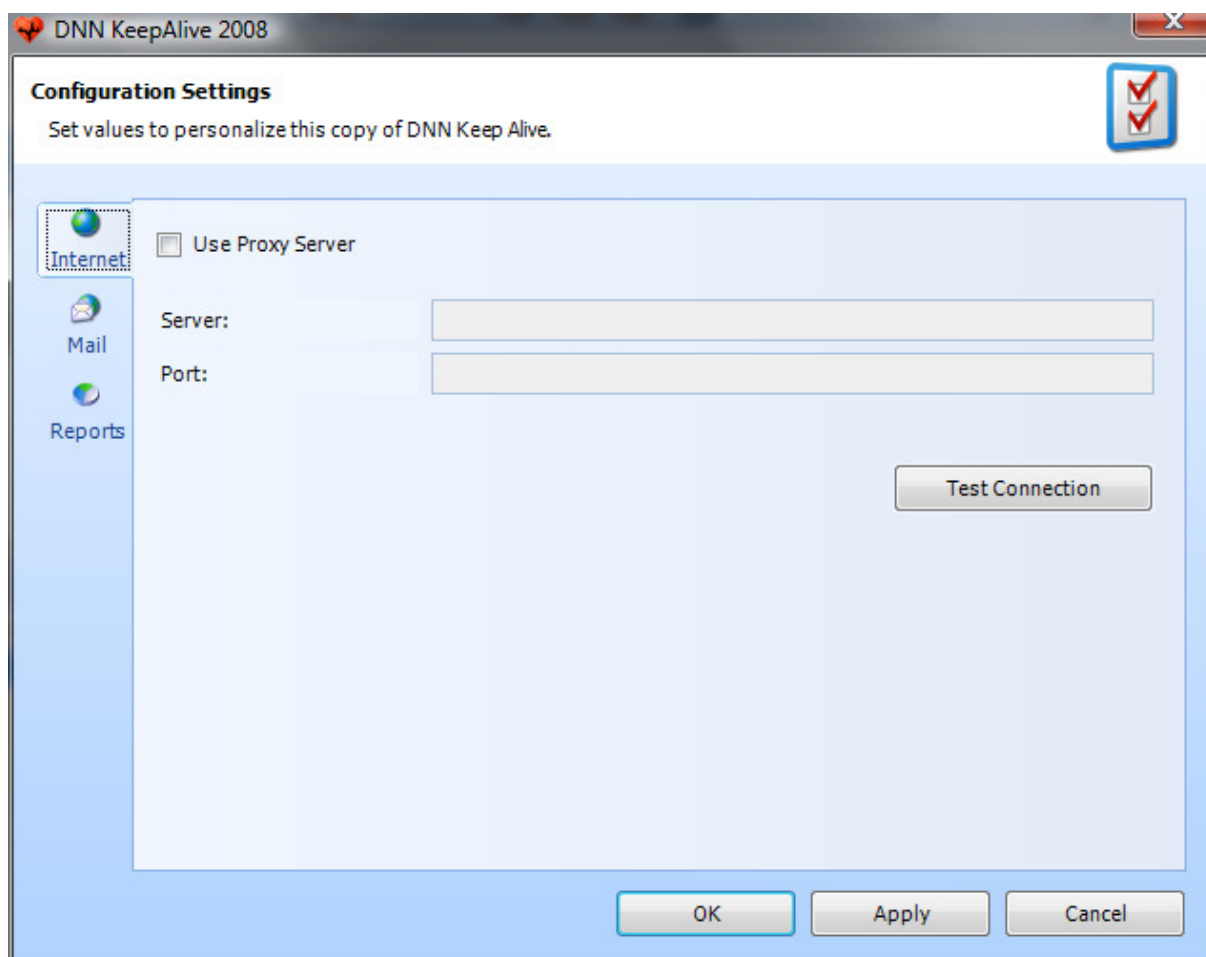
## Configuring DNN KeepAlive

To use DNN KeepAlive you have to configure some settings which are responsible for email sending, internet access...



Please choose the “Configuration” command on the toolbar. The “**Configuration Settings**” Dialog will appear.

On the first tab you can define a Proxy Server which will be used to access the internet. In most cases no entry is necessary and the “Use Proxy Server” CheckBox remains empty.



**Remarks:** If you choose to define a Proxy Server then both the Server and the Port have to be filled out. For internal addresses the proxy will be bypassed.

*We kindly recommend that you use the command “**Test Connection**” to see whether the entered settings work every time you make a change to the proxy settings.*





More interesting to most users is the second tab where you can **configure mail**. The fields are self explaining. Just enter your SMTP Mail Server you are authorized to send mails with. If authentication is required fill in the username and password.

The Sender email is defined by an alias name which is displayed to the recipient of the mail and the underlying email address which is used to send the mail. So you can give your administrative stuff a convenient sender like "Site Monitoring Admin".

The screenshot shows the 'Configuration Settings' dialog box for DNN KeepAlive 2008, with the 'Mail' tab selected. The dialog has a title bar with the application name and a close button. Below the title bar, it says 'Configuration Settings' and 'Set values to personalize this copy of DNN Keep Alive.' There is a small icon with two checkmarks in the top right corner. On the left side, there is a navigation pane with three items: 'Internet', 'Mail' (which is selected and highlighted with a dashed border), and 'Reports'. The main area contains several input fields and a checkbox:

- SMTP Server: 192.168.0.10
- SMTP Port: 25
- This SMTP Server requires Authentication
- Username: (empty field)
- Password: (empty field)
- Sender (E-Mail): dnnkeepalive@yourdomain.com
- Sender (Display Name): DNN KeepAlive Service
- Recipient (E-Mail): srosenthal@rosenthal-consulting.de

At the bottom right of the main area is a 'Send Test Mail' button. At the bottom of the dialog are three buttons: 'OK', 'Apply', and 'Cancel'.

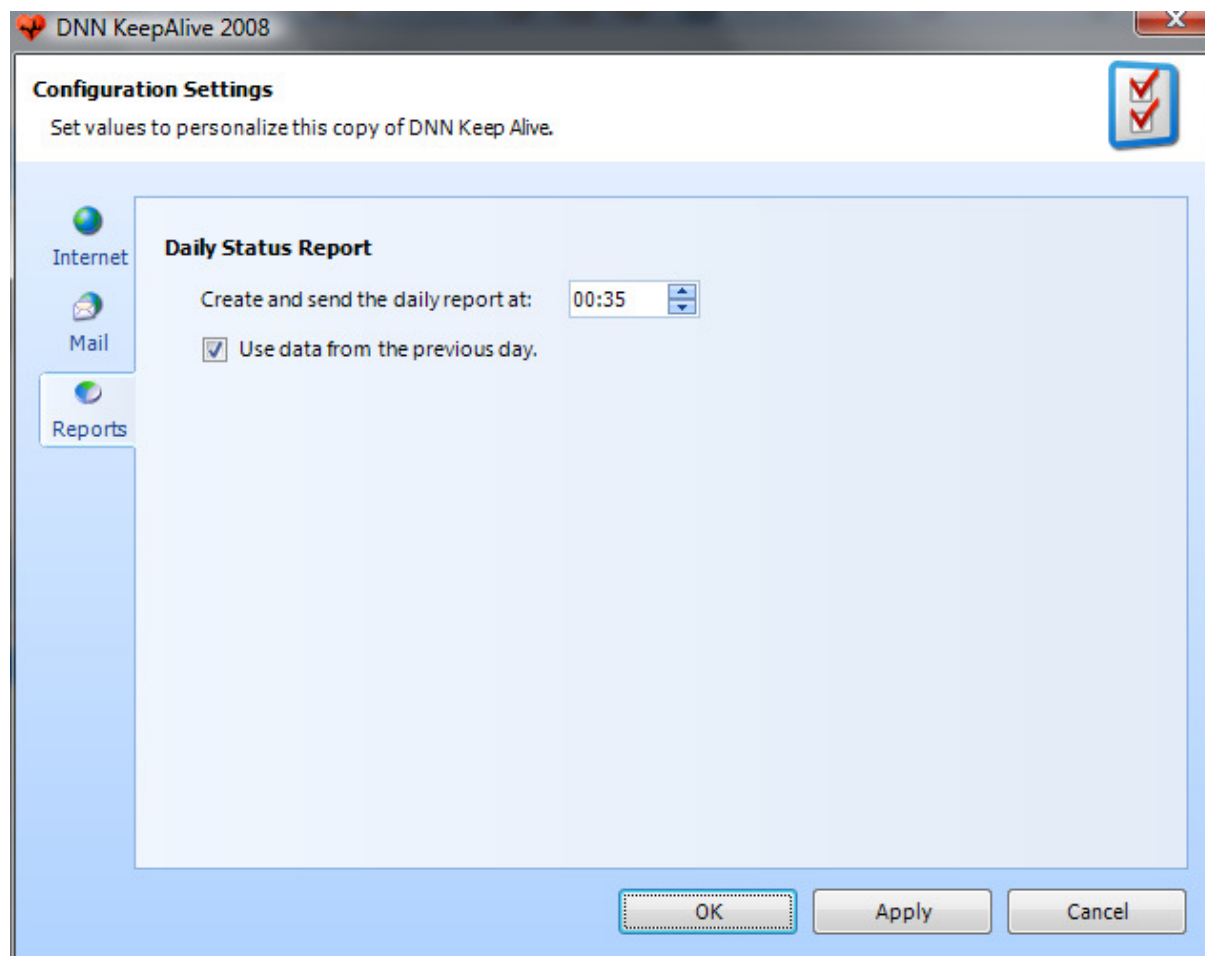
Again we kindly recommend that you use the command "**Send Test Mail**" to verify that the entered settings work. The Recipient should receive the test email in a few seconds. If not: please check the settings supplied.



If the test email fails the daily status report will not be delivered and an entry in the Windows Event Log will be generated each day.



On the “**Reports**” tab you can configure when and what status information will be send to the previously defined email recipient.



At the selected time the daily status report will be generated. The data used for this report is from the current day or the day before. Please use the checkmark according to the selected time.

The default setting is to send the report at 1:00 a.m. with the status data of the previous day. So you will be informed about site activity of the previous day early in the morning. Enjoy your “early morning” coffee!



The “**Failure**” Tab lets you configure how long a request can need before it is treated as failed. Further more you can define, after how many unsuccessful attempts you like to receive an “**Alert E-Mail**” – informing you, that your site is not accessible at the moment.



## The Controller Application

Display Name / URL	Interval
Kindergarten ArcheNoah http://www.meinearche.de	1
MySales Development Site http://rcpc2/mysales	5

Date	Min (Sec.)	Max (Sec.)	Avg (Sec.)	Total	Succeeded	Failed
13.02.2008	0,063	23,929	0,316	407	407	0
05.02.2008	0,064	9,195	0,117	907	907	0

Total: 407 Failed: 0 Success Quote: 100,00%

Below the toolbar the list of sites which are kept alive is displayed. To change the sort order of the list just click on the column header (as known from Windows Explorer).

Display Name / URL	Interval
European DNN Portal http://www.dnnportal.eu/keepalive.aspx	5

The icons visualize the options configurable at site level: 'Use Integrated Security', 'Log Requests' and 'Enable Reporting'.

The history list displays the statistic data for the selected site (max: 90 days). In addition to the emailed "Daily Status Report" the minimum and maximum request durations are show here.



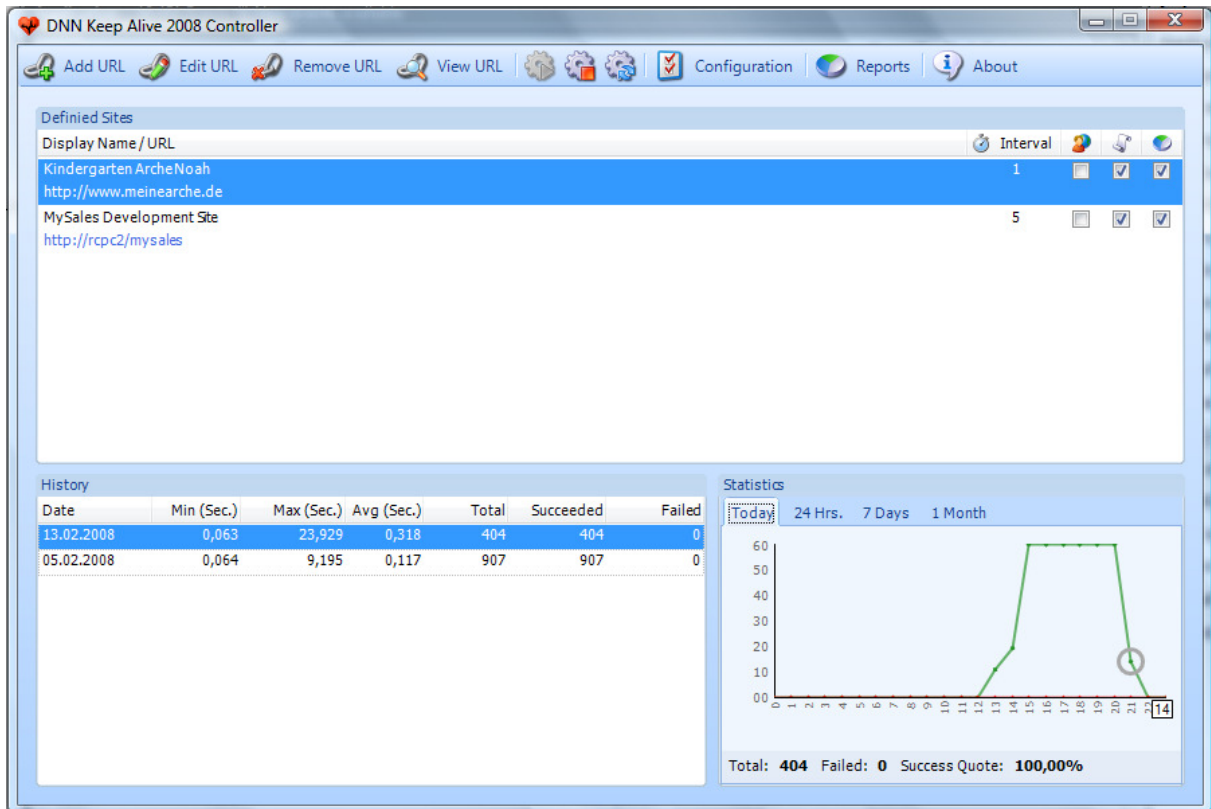
## The Charts

There are some charts in the Controller Application that visualize the historical site request performance.

The charts are available for

- today
- the last 24 hours
- the last 7 days
- the last month

Each chart shows a green line indicating the successful requests and a red line for the failed attempts.



If you hover over a bullet on the line a tooltip with the value of this hour (day etc.) is displayed. Just try it out.




## Daily Status Report

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At the moment there is only one report which is delivered to you by mail on a daily base: the Daily Status Report. (In future versions may be we additional reports – please tell us what kind of reports you like to see.)

You're daily email will look like this:

**Your daily KeepAlive Status Report**  
DNN KeepAlive Service [dnnkeepalive@yourdomain.com]  
An: Stefan Rosenthal  
Anlagen:  DailyStatusReport.pdf (6 KB)

---

Attached please find the daily status report for your monitored URLs.

Daily Summary:  
-----

Total Requests: 1728  
Succeeded: 1728  
Failed: 0

Min. Duration: 0,016 sec.  
Max. Duration: 24,472 sec.  
Avg. Duration: 0,139 sec.

=====

Success Rate: 100,00 %

=====

DNN Keep Alive Windows Service  
(c)2008 by Rosenthal Consulting

Visit us on the Web:  
<http://www.dnnportal.eu>

You will be informed about the requests, the duration of the requests and the resulting success rate.

Please open the attached pdf-file. In this document you'll find a detailed report for each monitored site (which is configured for daily reporting). You can examine which sites caused problems and which sites have been up all over the day.

The Daily Status Report looks like this:



Daily KeepAlive Status Report as of Sunday, February 17, 2008

URL to keep alive	Total Failed	Avg (sec)	Success Quote
MySales Development Site <a href="http://rcpc2/mysales">http://rcpc2/mysales</a>	288 0	0,198	100,00 %
Kindergarten Arche Noah <a href="http://www.meinearche.de">http://www.meinearche.de</a>	1.440 0	0,128	100,00 %

As you can see our sites have been requested up to 1,440 times (every minute) this day and the average response time was less then 0.2 seconds.

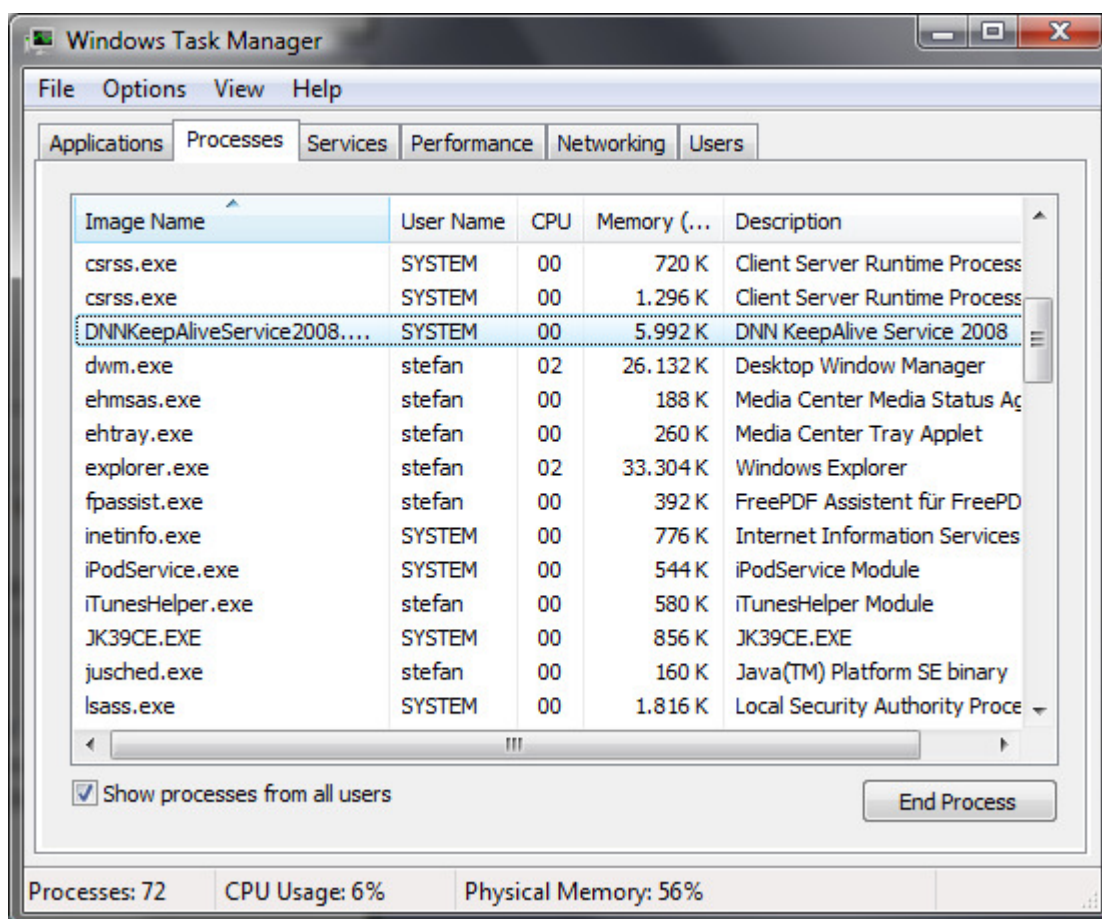


## Memory Usage / Multi Threading / Stability

In this version we have taken great affords to keep the memory usage as less as possible. The service itself consumes only about 6-7 MB (up to 15 MB in our “heavy load” tests).

Each site monitored is requested in a different thread. So your computer – especially if it is a server – remains responsible. A great benefit compared to our competitors and our previous versions where the requests were serialized on one single thread.

We have worked hard on the stability of the service. Knowing that most of our customers run the service on a server stability and tuned memory and processor usage have been essential design goals. We have optimized the code to run stable and using as less of valuable resources as needed.



As you can see we have taken all steps to give you a great product at a fair low price. If you have any questions please don't hesitate to contact us at [keepalive@dnnportal.eu](mailto:keepalive@dnnportal.eu).

**Thank you for your purchase!**