

StatCenter Module Administrator's Manual

Author: Sitecore Corporation
Date: Monday, 12 May 2008
Release: Rev. 1.2
Language: English

Sitecore® is a registered trademark. All other brand and product names are the property of their respective holders.

*The contents of this document are the property of Sitecore.
Copyright © 2001-2008 Sitecore. All rights reserved.*

Contents

Chapter 1	Introduction	3
1.1	General Introduction.	3
1.2	Hardware and Software Requirements	3
1.3	Prerequisites	3
Chapter 2	Installation and Configuration Instructions	4
2.1	Installation and Configuration of the Sitecore Package	4
2.1.1	Windows Vista and the IIS UI	4
2.1.2	Setup logfiles in the Internet Information Server	4
2.1.3	Configuring Extended Properties.	5
2.1.4	Install the package	6
2.1.5	Web.config changes	6
2.1.6	Further configuration	7
2.1.7	Use of MSDE 2000	7
2.1.8	SECURITY WARNING!	8
2.2	Installation and configuration of the StatCenter Database.	8
2.2.1	Installation	8
2.2.2	Configuration of the Database Installation	9
2.2.3	Scheduled tasks	13
2.2.4	View status	15
2.2.5	Whols	15
2.3	Deleting IIS Log Files from the StatCenter database	16

Chapter 1

Introduction

StatCenter 3.3.0 for Sitecore CMS is a module developed to display web statistics from within Sitecore. The module uses the IIS log files and stores data structured in a Microsoft SQL Server database (or MSDE). This chapter is an introduction to the module containing features, confirmations, prerequisites and an introduction.

1.1 General Introduction.

One of the most prominent features of StatCenter is its absolute integration with Sitecore, which makes it possible to generate statistics based on friendly URLs, id-based URLs etc. (this is performed invisible to the end-user). StatCenter provides much needed functionality for administrators and editors, though it does not support the data mining functions provided by products like WebTrends.

1.2 Hardware and Software Requirements

StatCenter requires the same hardware and software as Sitecore CMS. Furthermore StatCenter can be run on either Microsoft SQL Server or MSDE (a free version of SQL Server). StatCenter 3.3.0 is built for the .Net framework 2.0.

1.3 Prerequisites

Sitecore CMS: Sitecore CMS V5.3.1 or later.

License: The module conforms to the general Sitecore license interface.

Multilingual: The module implements the functionality for multiple languages and is translated into Danish and English.

Design: This module uses the same design guidelines as other ISV modules for Sitecore. This design has been validated by Sitecore.

Package: The module is packaged for Sitecore CMS.

Configuration: The module is configured partly in web.config and partly through an interface in the client.

Note: MSDE is not included in the package due to size. If you need to use MSDE please read the relevant section in this document on how to download MSDE.

Chapter 2

Installation and Configuration Instructions

This chapter deals with the instructions necessary to Install and configure StatCenter.

2.1 Installation and Configuration of the Sitecore Package

To install StatCenter follow the steps described below.

2.1.1 Windows Vista and the IIS UI

2.1.1.1 *Symptoms*

Windows Vista did not ship with a user interface to configure logging in the IIS Server Manager.

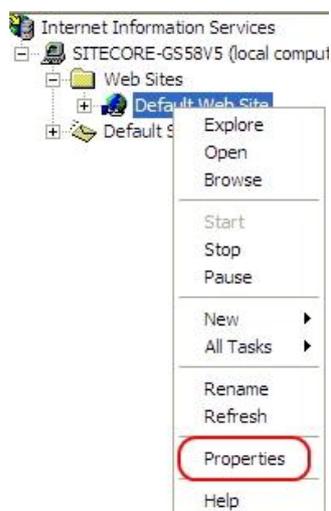
2.1.1.2 *Resolution*

This download provides source code and binaries to provide you with the configuration interface you need: <http://www.iis.net/downloads/default.aspx?tabid=34&i=1328&q=6>

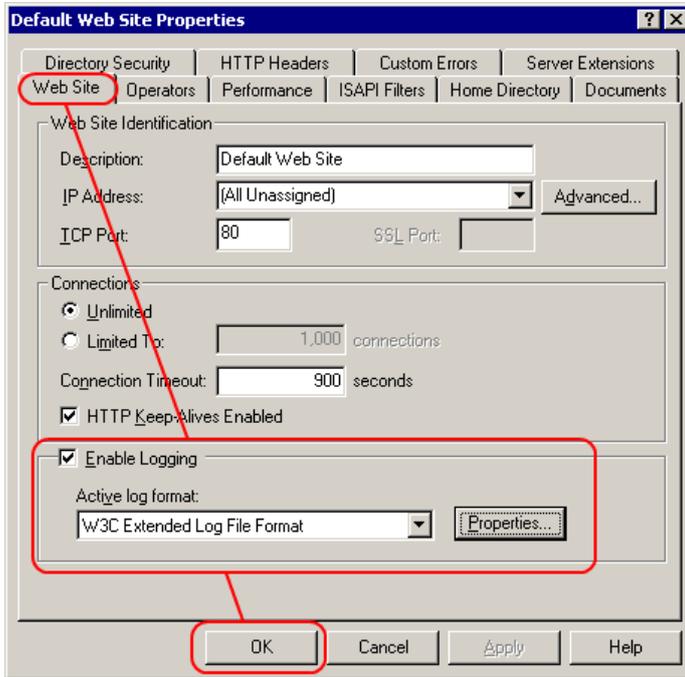
Important: to avoid corruption of the log file please see the following link: [Internet Information Services 7.0 removes custom values in the Web.config file.](#)

2.1.2 Setup logfiles in the Internet Information Server

To setup the log-files you must open the IIS-manager and open the properties for the Default Web Site (shown below).



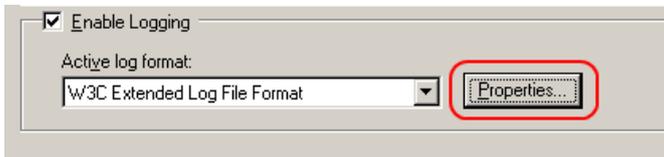
Under the Web Site tab make sure the Enable Logging checkbox is checked then in the drop down list labelled Active log format select W3C Extended Log File Format then click OK (as shown below).



Note: The W3C-format is the only format supported by StatCenter.

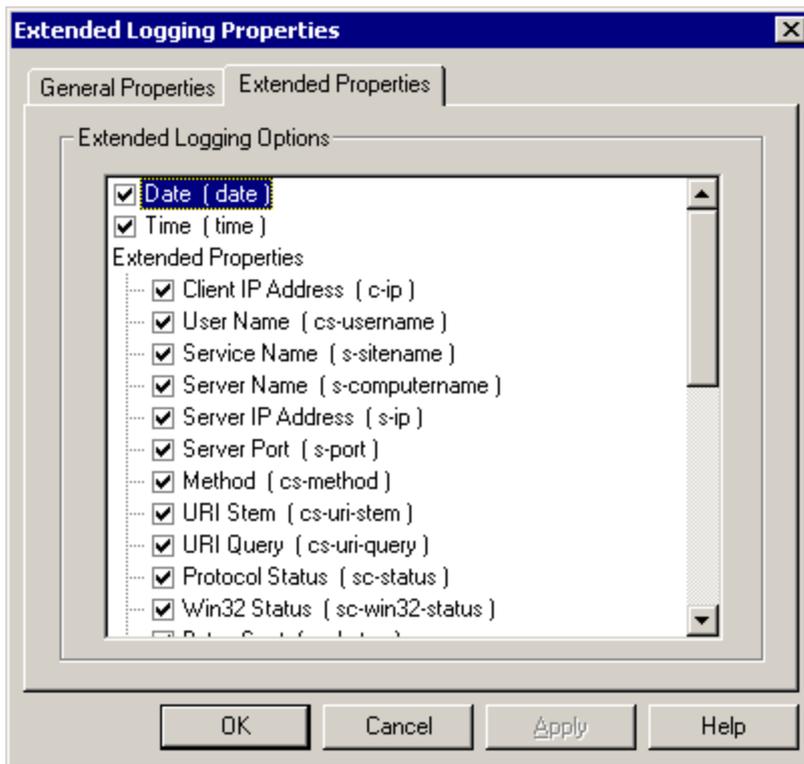
2.1.3 Configuring Extended Properties.

Select the Properties button in the Enable Logging section (as shown below)



Select the Extended Properties tab and make sure the settings conform to the following table.

Item	Description	Exact name
Date & time	used for period based searches	date; time
Client IP Address	used for tracking users host-name	c-ip
URI Stem	used for identifying the page visited	cs-uri-stem
URI Query	used for identifying the parameters transferred to the page	cs-uri-query
Host	used for multisites	cs-host
Cookie	used for identifying user and integration towards mailing list	cs(Cookie)
Referrer	used in later version for identifying most popular referrer	cs(Referrer)
User-Agent	used in later versions for identifying most popular browsers	cs(User-Agent)



2.1.4 Install the package

Install the Sitecore-package for StatCenter. The package will install assemblies and the module used to present statistical data within the Sitecore client.

2.1.5 Web.config changes

In the web.config several settings must be changed.

- The following should be added to the </references> section:

```
<reference>/bin/StatCenter.Frontend.dll</reference>
```
- The following should be added to the <controlSources> section:

```
<source mode="on" namespace="Sitecore.Web.UI.XmlControls" folder="/Sitecore modules/shell" deep="true"/>
```
- You need to check that the frequency for checking scheduled tasks and the interval for checking scheduled tasks in the core database are as a minimum to the same values as the interval for scanning and DNS lookup (see the Scheduled Task section).

```
<frequency>00:01:00</frequency>
<!-- Agent to process schedules embedded as items in a database -->
<agent type="Sitecore.Tasks.DatabaseAgent" method="Run"
interval="00:01:00">
<param desc="database">core</param>
<param desc="schedule root">/Sitecore/system/tasks/schedules</param>
<LogActivity>true</LogActivity>
</agent>
```
- The following task should be added to the <scheduling> section.

```
<agent type="Sitecore.Tasks.CleanupAgent" method="Run" interval="01:00:00">
<files hint="raw:AddCommand"> section (removes temporary graphs):
```

```
<remove folder="/Sitecore modules/shell/statcenter/images" pattern="*.*"
maxAge="00:01:00" />
```

- The following task should also be added to the <scheduling> section.

```
<agent type="Sitecore.Tasks.CleanupAgent" method="Run" interval="01:00:00">
<files hint="raw:AddCommand"> section (removes StatCenter's own log files):
```

```
<remove folder="/Sitecore modules/shell/statcenter/logfiles" pattern="*.*"
maxCount="5" minAge="01:00:00"/>
```

- The following tag should be added to the <httpModules> section if support for user recognition is desired:

```
<add type="StatCenter.Frontend.StatCenterModule, StatCenter.Frontend"
name="StatCenterPersonalizer" />
```

2.1.6 Further configuration

After the package installation you should grant write access rights for `_Sitecore_root_path/Sitecore modules/shell/StatCenter/` folder to the ASPNET user if you use IIS 5.0 (Windows XP), or to the NETWORK SERVICE user if you use IIS 6.0.

Furthermore you should enable the Sitecore KeepAlive function (a scheduled task) if you want to perform scans on old log files which might be a time consuming process

[Install the StatCenter database](#), via the install dialog in the File menu.

[Configure StatCenter](#), via the Configuration dialog in the File menu.

2.1.7 Use of MSDE 2000

Please follow the instructions below if you want to install and use MSDE 2000 with StatCenter.

- 1) Download the newest version of MSDE 2000 from <http://www.microsoft.com/sql/msde/downloads/download.asp>
- 2) Double click on the downloaded file to extract the installation files. You will be asked for a directory to place the installation files.
- 3) Go to the directory where you specified the installation files to be placed. Open the file 'setup.ini' and add the following to it:

```
INSTANCENAME=StatCenter
DISABLENETWORKPROTOCOLS=0
SECURITYMODE=SQL
SAPWD=<aStrongPassword>
```

Please read the following before continuing to the next step:

INSTANCENAME	Specify the name of the MSDE instance. You can replace 'StatCenter' with any name you want.
DISABLENET- WORKPROTOCOLS	Specifies whether the instance will accept network connections from applications running on other computers. '0' will enable this. '1' will disable this
SECURITYMODE	Specifies that the instance be installed in Mixed Mode, where the instance supports both Windows Authentication and SQL Authentication logins. Remove this line if you do not want to support SQL Authentication logins.

SAPWD	Specifies a strong password to be assigned to the sa administrator login. You need to replace <aStrongPassword> with a password of your own. Save 'setup.ini' after you have modified it properly.
-------	--

- 4) Double click on 'setup.exe' and follow the installation procedure.
- 5) After installation your instance of MSDE 2000 will have the name <server>\<instance name>, where <server> is the name of your server and <instance name> is the name of the instance you specified in 'setup.ini'.

Please refer to the Readme file in the same directory for more information on installing MSDE 2000.

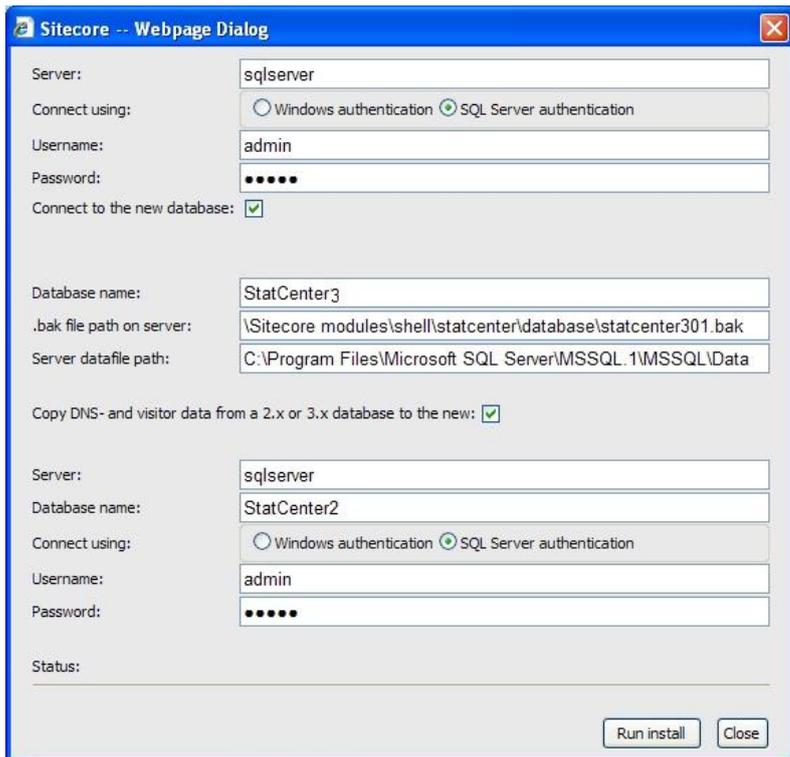
2.1.8 SECURITY WARNING!

You should remove the line SAPWD=<aStrongPassword> from the 'setup.ini' file after installation. Otherwise your password will be exposed in the file!

2.2 Installation and configuration of the StatCenter Database.

2.2.1 Installation

Start StatCenter, close the popup saying that StatCenter is not configured, and open the dialog File » Database administration » Install. Fill and run it.



- 1) First fill the connection fields to the sqlserver (Server, Connect Using, Username and Password), where you want to install the database.
- 2) Mark Connect to the new database if you want StatCenter to connect to the new database immediately.
- 3) Database name gives the name of the new database.
Note: If the database already exists it will be overwritten!
- 4) Put the database backup file

\\Sitecore modules\shell\statcenter\database\statcenter301.bak

in a folder on the sqlserver, and set the path in .bak file path on server.

- 5) To copy DNS- and visitor data from an old StatCenter database, check the Copy DNS- and visitor data from a 2.x or 3.x database to the new checkbox, and fill in the connection fields to point the source database.
- 6) Click Run Install.

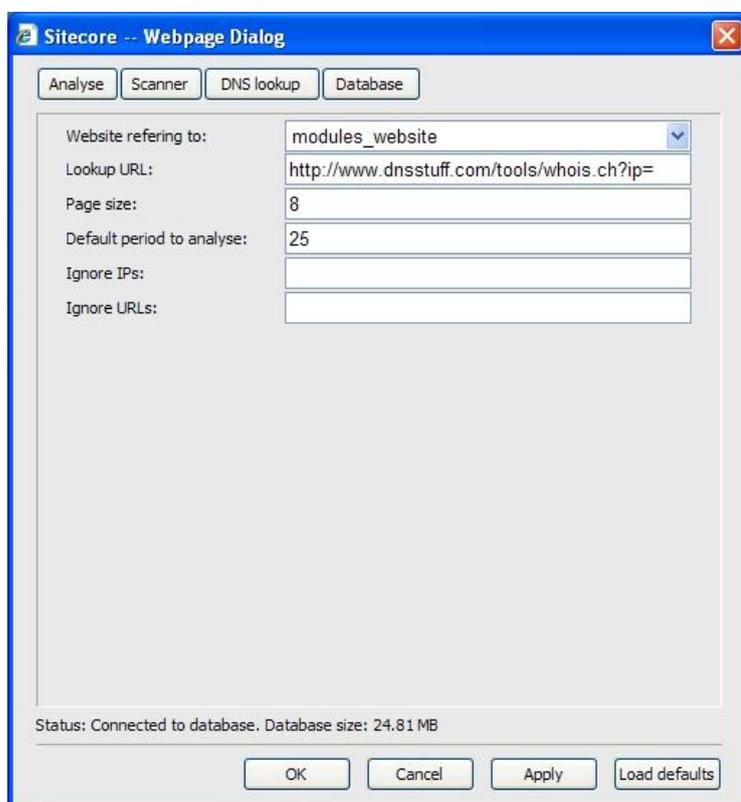
2.2.2 Configuration of the Database Installation

Open the configuration dialog from the File menu.

In the status area you will be able to see whether the database connection could be established and if so how much space it currently takes up (this is useful for MSDE users).

If StatCenter has just been installed, the default configuration is a good starting point. Load it by clicking the Load defaults button at the bottom of the dialog box.

Under Analyse you can administer the following settings:



- Website referring to.
 - This is used when a Sitecore solution goes from a single site to a multisite configuration. Before there was only one site, namely the website, but now more sites are added, and in order to keep using the website data different possibilities arise. The site from the single site is named website in the multisite solution. The following options exist in relation to specifying the behavior of website when using a multisite solution:
 - No site: website is not used in the solution at all (the data is scanned, but it is not showed in the statistical views) and the site is not appearing to the user.
 - Website: It is used as a single separate site.

- All other items are the sites in the current solution. If one of these is chosen, website will be counted as part of the chosen site.
- **Lookup URL.**
This specifies the path to a service which can be used for the Lookup externally function.
- **Page size.**
This is the default value defining how many items to display in lists viewed by the users.
- **Default period to analyze.**
This is used to define the default number of days to perform statistical searches for
- **Ignore IPs.**
IP-addresses that will be ignored when searching. This can be used for ignoring hits from googlebots etc. Separate with pipes “|”. Note that each user can add their own IPs to ignore, but the values here are ignored globally.
- **Ignore URLs.**
URLs that will be ignored when searching. This can be used for ignoring hits from googlebots etc. Separate with pipes “|”. Note that each user can add their own URLs to ignore, but the values here are ignored globally.

Under Scanner you can administer the following settings:



- **Run Scanner.**
Turn off the scanner by unchecking this field.
- **Log files placement.**
The full paths to the folders of the log files that are to be scanned. If you are not sure where they have been placed look in the IIS Manager at the properties for log files.
Note: It is possible to state more than one folder for log files, just separate the paths with pipes “|”.

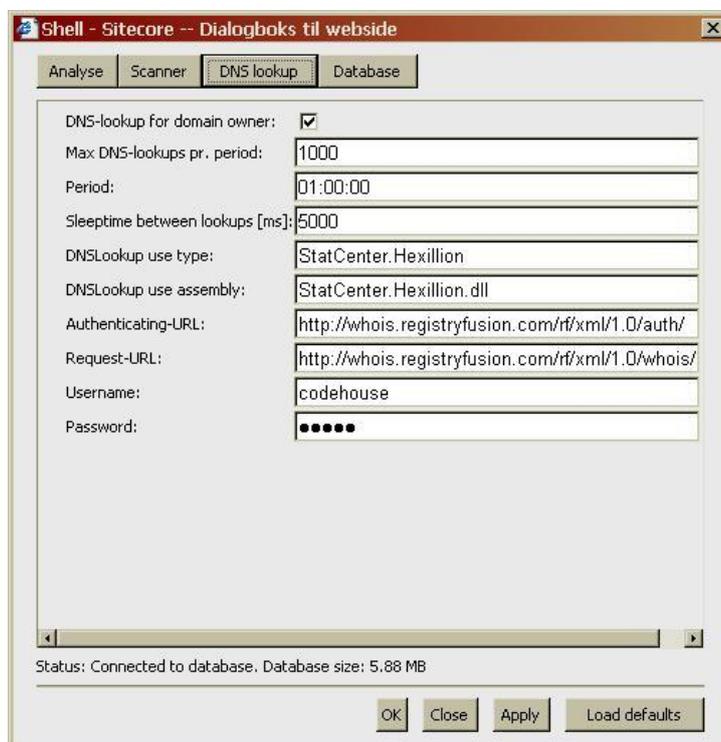
- Ignore paths.
Paths that will be ignored when searching. We recommend that you ignore /Sitecore, /data and /Sitecore modules. Separate paths with pipes “|”.
- Query string keys.
In some Sitecore solutions different query variables are used to find the specified page to load. If the solution e.g. differentiate pages the following way: /default.aspx?article={41B4958B-E25A-4224-A7FF-7ABCE477CAF0} then the page entered is not default.aspx, but the page with the GUID equal to the value of the article. Different query variables can be used, e.g. article, post etc.. Note the following precedence when deciding which Sitecore item to map the entries to:
 - First the variables written in the textbox in the order from left to right, as in “queryVar1|queryVar2|.....|queryVarX”.
 - Then per default the queryVariable “path” (is used no matter if you write it or not!)
 - Finally the path used to access the page (e.g. default.aspx above).
- Logging level
Set the level of logging:

Low: Start, files scanned and end are logged.

Medium: Same as Low but including the line scanned and time between each scanner status is logged.

High: Same as Medium but including the time used for DB, the file calls, and the longest DB call are logged.

Under DNS lookup you can administer the following settings:



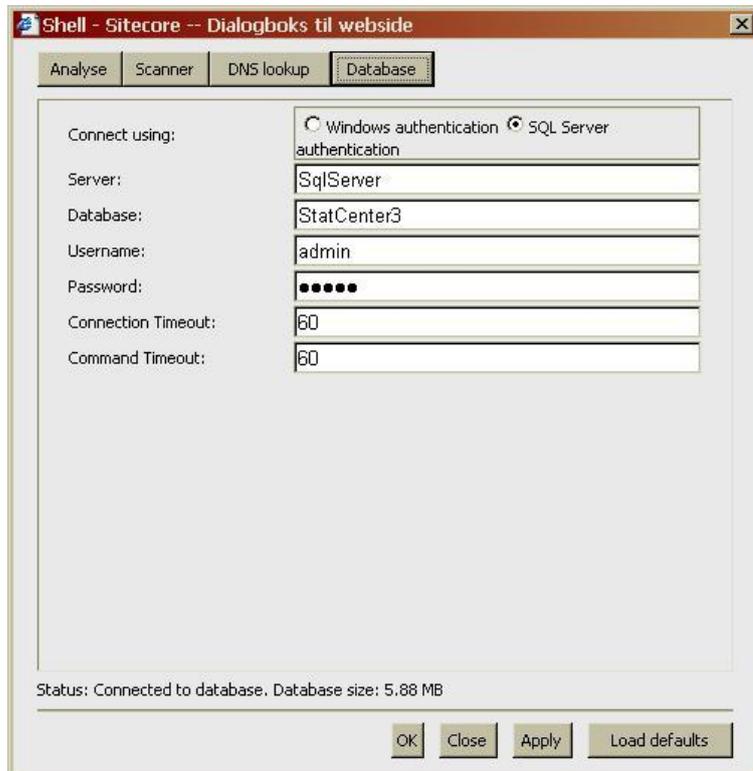
- DNS-lookup for domain owner
Whether or not to look up the owners name using reverse DNS. This might be very time consuming for the scanner and thus may decrease performance dramatically. Since the

various whois-servers around the world have set boundaries as to how many request a specific IP-address may perform per day we propose following setup. Please read the [Whois](#) section for information on using Hexillion.

- Max. DNS-lookups pr. Period
Set how many DNS lookups can be performed in the time span given in Period.
- Period
How long time a DNS lookup session is allowed to run.
- Sleptime between lookups [ms]
The amount of time between DNS lookup sessions in milliseconds. Must be set to at least 2000 to work properly.
- DNSLookup use type
The class to use for DNS lookups. StatCenter.Hexillion is the standard class.
- DNSLookup use assembly
The assembly to use for DNS lookups. StatCenter.Hexillion.dll is the standard assembly.
- Authentication-URL
<http://whois.registryfusion.com/rf/xml/1.0/auth/> is the standard.
- Request-URL
<http://whois.registryfusion.com/rf/xml/1.0/whois/> is the standard.
- Username
The username given by the provider.
- Password
The password given by the provider.

NOTE: It is recommended that you set up the ReverseDns task only after having scanned all existing log-files. The reason for this is that Sitecore's scheduler will otherwise instantiate multiple threads because attempting to perform reverse DNS resulting in DNSLookupTime is being overruled. When the log-files have been scanned you should go to the status page and perform and calculate the preliminary frequency. If totalDNS saved is 12.000 and DNSLookupTime is 2.000 you should allocate approximately 7 hours in frequency. After the first scan has been performed you can set the frequency to a more appropriate period – for instance every five minutes.

Under Database you can administer the following settings:

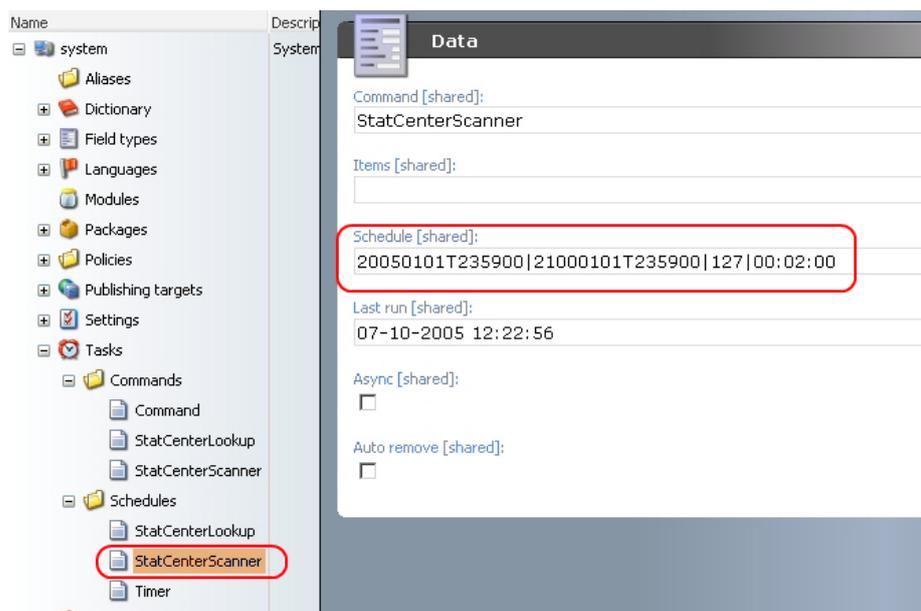


- **Connect using**
Choose if the database connection is made through Windows authentication or SQL Server authentication.
- **Server**
The name of the server instance.
- **Database**
The name of the database.
- **Username**
The username to use for accessing the database.
- **Password**
The password for the specified user.
- **Connection Timeout**
Sets the time before timeout when StatCenter connects to the database.
- **Command Timeout**
Sets the time before timeout for SQL procedures. If you have large amounts of data and experience problems when trying to view the statistics, try increasing the value of this setting.

2.2.3 Scheduled tasks

StatCenter uses two scheduled tasks to perform scanning of log-files and DNS lookups. These are located under `/core/sitecore/system/Tasks/Schedules` in the Sitecore client and are automatically installed with the StatCenter package.

Note: `/core` is not a node; it is the name of the database. The root item in Sitecore content is `/sitecore`. If you can see any other items (e.g. master, core, web etc), it is a database name.



The scheduled tasks are configured by a pipe separated string as shown in the above image:

20050101T235900|21000101T235900|127|00:02:00

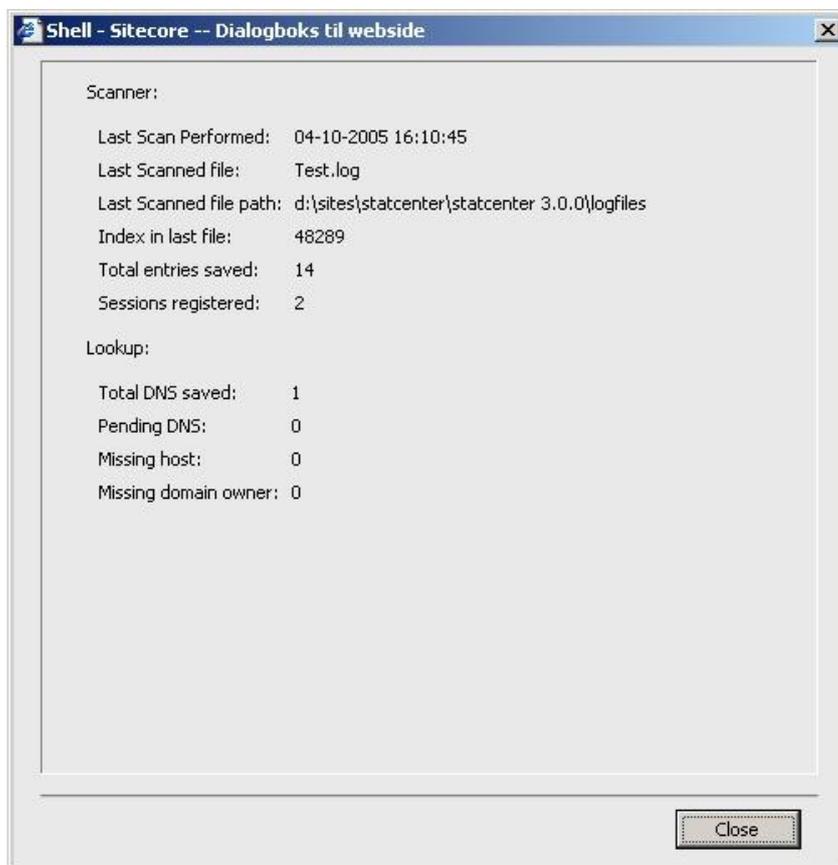
The first value is the start date for the scheduled task and the next value is the end date for the scheduled task. By default these dates are set so StatCenter will begin to perform scans and DNS lookups immediately after being configured and will continue indefinitely.

The value 127 implies that the task will be performed every day of the week and the last value indicates how often the task will be performed using the format HH:MM:SS.

Note: It is NOT recommended to set how often the task will be performed to less than 00:01:00 (1 minute) for the StatCenterScanner task and 00:02:00 (2 minutes) for the StatCenterLookup task.

2.2.4 View status

Use the application status window to see how the application is running. This is opened from the File menu.



2.2.5 Whols

The use of Whols is integrated into StatCenter. This is setup in the Lookup task as described under Configuration.

Note: Performing Whols may be rather unpredictable since the Whols-service owners may block your IP if you are performing mass lookups.

This can be avoided by having a managed relationship with one or more of the Whols providers. This is rather difficult. Thus we have entered a partnership with the Whols-provider, Hexillion, and by simply buying a ticket book and registering your user name and password you will be able to use their functionality. Should you, however, wish to implement your own Whols service with your own functionality or integration to another Whols-provider this is also possible.

2.2.5.1 Using Hexillion

The RegistryFusion service from Hexillion [<http://www.Hexillion.com/>] is an advanced interface to the Whols system. It enhances the value of your statistics by providing identity and location information about your site's visitors.

For each site visitor, the RegistryFusion service contacts the correct Whols server, obtains a record, and distils the record into a useful form.

To sign up for the RegistryFusion service, please visit <http://www.Hexillion.com/whois/order/> . Hexillion will provide you with a username and password for accessing the system.

2.2.5.2 Using you own class

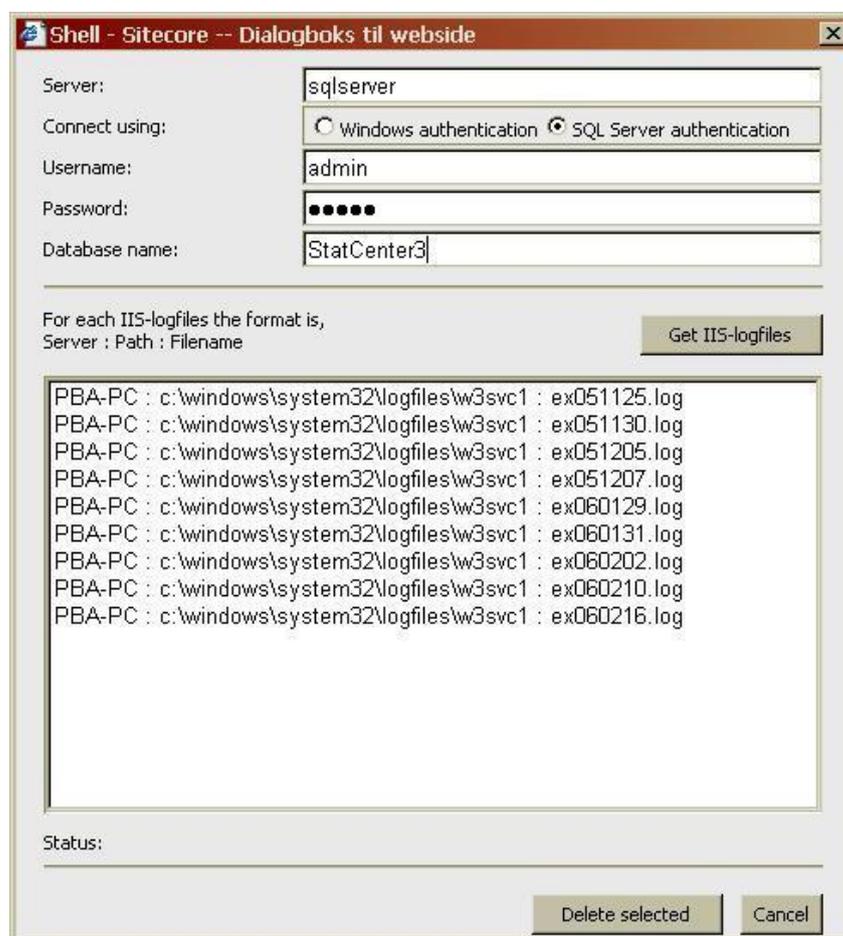
- 1) Create a new class and let it implement the interface StatCenter.IWhols
- 2) Make sure that Authenticated() returns true
- 3) In the function GetInformationByIP() you can write the code that return information about a domain. You should return the information in an instance of a StatCenter.WholsInformation object.

2.3 Deleting IIS Log Files from the StatCenter database

It is possible to delete IIS-Logfiles that are in the database. All entries in the database from the deleted IIS-Logfiles, are deleted in the same operation, so it will shrink the size of the database considerably.

It is done via the dialog File » Database management » Delete IIS-Logfiles.

StatCenter will scan the deleted IIS-Logfiles again, if these are not removed from the logfile folder specified in the configuration. It is advised to compress the IIS-Logfiles files and keep them for later usage.



Do the following to delete IIS-Logfiles:

- 1) Point to the StatCenter database.
- 2) Select the IIS-Logfiles to be deleted.
- 3) Click the Delete selected button.